

A Stubborn Killer of Refugees: Dysentery

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GOMA, Zaire, Aug. 4 — Even though hundreds of refugees from Rwanda still die each day, doctors here said today that the cholera epidemic that has killed tens of thousands appeared to be under control.

With clean water and increased medical care reducing the cholera risks, doctors are paying particular attention to shigella dysentery, which is thought to have killed many of the 500 refugees who died on Wednesday.

A severe health risk from shigella dysentery threatens the million refugees, who live in makeshift huts in the open air with little sanitation. The number of shigella cases is on the rise, and the general health of the refugees is expected to decline as malnutrition spreads, making the people even more vulnerable.

Shigella is a highly contagious form of dysentery and epidemics have struck central Africa for a decade. It takes longer to manifest itself and is deadlier than cholera, and is more difficult to treat because it resists many antibiotics.

'Run Its Natural Course'

Several factors have reduced the cholera deaths.

"It has run its natural course," said Philippe Biberson, the president of the medical agency Doctors Without Borders. "It was also helpful that there are now more doctors treating it more effectively."

Dr. Biberson described the epidemic, in which people died on the ground at the entrances to makeshift treatment centers, as "one of the most spectacular epidemics." But he declined to be more specific on its comparative scale until more epidemiological work had been completed.

Cholera first appeared in sub-Saharan Africa in 1970 and there have been periodic outbreaks ever since. Dr. Biberson said the deaths here were far higher than those in the epidemics that regularly swept through refugee camps in Malawi, where about a million Mozambicans lived in the late 1980's and early 1990's. The Malawi camps were better organized and medical staff were permanently on hand to treat the disease with rehydration or intravenous drips.

In Zaire, when there was no treat-

ment available, the mortality rate was 30 to 40 percent. Dr. Biberson said. In Malawi, the mortality rate was under 1 percent. Few experts here were prepared to give a definite figure on the number of people who have died so far, but the most common estimate is 20,000 to 30,000.

The vast difference in the death rates was caused by the total lack of preparation to deal with the sudden arrival of a million impoverished people into the hostile landscape. In Malawi there was relatively clean water and sanitation; here there was neither water nor sanitation when the cholera outbreak occurred.

There is still virtually no sanitation. Only in the last two days have two trench latrines been dug at Ki-

Cholera is beginning to wane in the Rwandan camps but life is still grim.

bumba, which has 200,000 to 250,000 refugees.

But the availability of water has improved dramatically with the installation of three water storage tanks at each end of the camp at Kibumba. The water, from Lake Kivu, is being filtered and chlorinated with a treatment plant brought in by the United States, then transported in tanker trucks supplied by Finland.

But despite this effort, the amount of water for each refugee is meager: about 7 quarts a day, one-third less than the 19 quarts or so that refugee specialists feel is enough for drinking and basic hygiene.

Better Medical Care

The health services in the camps are not models of organization, but a semblance of order has emerged.

At one of the two clinics run by Doctors Without Borders at Kibumba, the sharp decline in cholera was easy to see today. Instead of desperately sick patients lying on the ground with relatives holding infu-

sion drips, there is now a neat arrangement of 28 tents. Two of the tents for patients were actually empty today; two others were used for storage. Outside the tents, dozens of bags of intravenous infusions lay waiting for patients.

Five days ago, on the worst day of cholera at this clinic, there were 360 patients on intravenous drips, Dr. Noel McCarthy said. Today, there were only 70 patients by midafternoon; only about 20 had cholera.

But dysentery is on the increase. "Cholera comes in two weeks and goes," Dr. McCarthy said. "Dysentery spreads more slowly. In a month's time, when people get malnourished and people get dysentery, the deaths will mount."

One of the more poignant of the remaining cholera cases was 4-year-old Epiphane Nshimiyimana, who had been treated for cholera at the beginning of the epidemic and was brought back to the clinic six days ago by his mother. The boy lay on the tent floor motionless with post-infective diarrhea.

A Stubborn Disease

At the dispensary, a shabby tent that had served last week as the only place for cholera treatment, 160 people were given the antibiotic Negram, for shigella dysentery, on Wednesday. "It's what is available here, but it's not very effective," Dr. McCarthy said.

One reason that shigella dysentery presents such a danger is that the bacterium that causes it, *S. dysenteriae* type 1, has become largely resistant to antibiotics, including Negram, whose generic name is nalidixic acid.

So far there has not been an outbreak of measles, a common occurrence in chaotic refugee camps like these. The relatively well-organized public health system in Rwanda had inoculated up to 90 percent of the children against tetanus, polio and measles, medical officials said.

At a card table set up on a ridge of the volcanic fields of Kibumba, lines of mothers and children waited patiently today for a new round of such inoculations. Paramedics started the job on Wednesday; by this afternoon, two Unicef workers at one table had inoculated 550 children and given Vitamin A tablets to the children and their mothers.