

# IDRC



# FEATURE

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## BANGLADESH COMBATS DIARRHEAL DISEASES

### WITH GRASS ROOTS MEDICINE

by Naomi Rock Novak

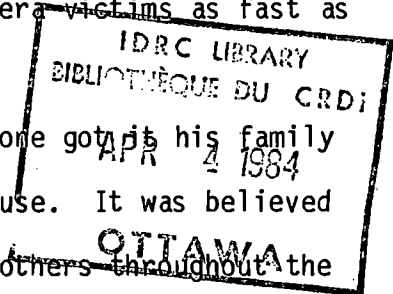
BANGLADESH, IDRC -- "During the winter months when I was a boy," recalled Ahmed Ali Sarder, an ageless man with a long white beard," we practically lived at the cemetery with our spades, trying to bury the cholera victims as fast as they died.

"In those days cholera was so feared that when someone got it his family was shunned, and no outsider would even walk near the house. It was believed that an evil spirit had descended. In this village and others throughout the countryside, hundreds died in each epidemic. Few cholera victims survived.

"Then, almost 20 years ago," continued Mr. Sarder, who was wearing the traditional white kurta and pyjamas (flowing long shirt and loose pants) of the Indian subcontinent, "they opened that cholera hospital at Matlab, about 20 miles (32 kilometres) from here by boat. From then on, during epidemics and mild outbreaks, cholera victims were taken to the hospital by land and by water -- and those who reached the hospital alive returned home alive.

"After a time, people stopped dreading the disease. Knowing it was curable, they abandoned their superstitions. Fifteen years ago that hospital saved my brother from cholera, when he was in his 70s.

"Last year, when I was 85, I thought about how kind God had been to me. I'm not a rich man, but I own three acres of land. My eight children and 24



grandchildren are well provided for. So, when the cholera hospital showed an interest in opening a small, community-run diarrheal diseases treatment centre here, I decided to donate about one-tenth of an acre here by the riverside, because most severely ill diarrheal victims are brought here by boat. Now I devote what time I have left in the world to supervising the centre."

Watching Mr. Sarder speak were two young men wearing western slacks and shirts, and two still younger women in pastel-colored saris. These four, plus two other men, are community volunteers who take turns staffing the Kalir Bazaar diarrheal diseases treatment centre, round-the-clock.

The volunteers were trained by the ICDDR,B (International Centre for Diarrheal Disease Research, Bangladesh) -- the only international institution in the world devoted entirely to studying the causes, preventives, treatments and cures for a host of diarrheal diseases. With cholera the most deadly and dreaded, these diseases annually claim an estimated five million lives worldwide, mostly very young children.

Established in 1960 as the Pakistan-SEATO Cholera Research Laboratory (locally called the "Cholera Hospital"), the ICDDR,B has its main treatment-cum-research centre in Dhaka, the capital of Bangladesh. However, it also operates a large research/treatment facility at Matlab, about 65 kilometres from Dhaka as the crow flies. But though this rural centre annually treats thousands of patients within its district (more than 11 000 in 1982), the area's rugged, water-dominated topography, poor communications and abject poverty make the centre virtually inaccessible to people living 40 or 50 kilometres away.

Thus, where possible, as part of its outreach effort, the ICDDR,B is trying to encourage communities to help themselves -- by establishing and running small, simple diarrheal diseases treatment centres. For experience shows that it is more effective to have simple, easy-access treatment centres dispersed over a large area, than a sophisticated hospital in a single place.

Over the past two years, three such centres have come into existence, run by volunteers whom the ICDDR,B trains and retrain in the diagnosis, prevention and treatment of a range of deadly, debilitating and contagious diarrheal diseases. Mainly transmitted by contaminated water and foods, due to poor sanitation and sanitary habits, these diseases are one of the biggest killers in developing countries.

Ironically, it is not the diarrhea itself that kills, but the dehydration it causes. The body is swiftly drained of essential fluids and minerals, sometimes leading to shock and then death, in a matter of hours.

But death can be prevented if a patient is quickly rehydrated, while the diarrhea runs its course, usually in four or five days. A severely dehydrated victim can be given an intravenous salt solution known as "Dhaka solution"; a mildly or moderately dehydrated person can be fed a simple salt/sugar/water solution, called ORS (oral rehydration solution), perfected over the past 15 years by ICDDR,B researchers.

Unfortunately, most people in the developing world do not have access to either therapy -- a shortcoming that the ICDDR,B, in collaboration with the World Health Organization Control Programme for Diarrheal Diseases, is striving to overcome in Bangladesh and the rest of the world.

In Bangladesh, part of this effort involves the community-run treatment centres, to which ICDDR,B provides a few critical medicines, ORS ready-made packets, beds and other simple equipment.

Since the Kalir Bazaar centre opened in June 1982 on Mr. Sarder's land and in a building paid for by the Australian Government, it has treated about 2200 diarrhea victims -- many of them during a cholera epidemic in the fall and early winter of 1982, when the centre saved hundreds of lives.

"Dozens of victims were arriving every day," recalls Mrs. Rasheda Ahkter, at age 18 the youngest of the Kalir Bazaar volunteers. "For weeks there were so

many patients that we barely had room to move between their cots. So many babies. It was so hard to watch. We worked very long hours, but we saved most lives.

"Now, at the end of 1983, the cholera season is about to start again. But we're ready thanks to the training we've received from the Cholera Hospital. Before that, like most people we know, we really had little idea about what to do for diarrhea. Basically, we were helpless when an epidemic struck."

Mrs. Ahkter is an unlikely "volunteer" in conservative, muslim Bangladesh, where girls of marriageable age and married women usually are protected from widespread contacts outside the family. Well educated (10 years' schooling) and relatively independent, Mrs. Akhter says she prefers to serve her community rather than remain at home doing housework.

Still, she would like to be paid more than the 200 taka (about CA\$11) she receives monthly -- a sum that barely covers daily travel and other expenses incurred during her 12-hour shifts, every other day.

But money is scarce, since most patients are treated for free, or pay only 20 taka if they can afford it. The money that comes in is administered by a community committee of which Mr. Sarder is vice-president, but it is never enough to meet all the centre's expenses, including the volunteers' services.

In the last analysis, however, it is not money that is motivating the volunteer staff. As Mr. Sarder says, "we no longer spend our winters digging graves."

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