

Diarrheal Diseases: Oral Rehydration Therapy



Cholera is a diarrheal disease caused by the bacterium *Vibrio cholerae*. Cholera can spread rapidly through contaminated water and food that may have come in contact with the feces of an infected person. Wherever access to clean water and sanitation is limited, cholera and other diarrheal diseases threaten lives, especially among babies and young children. Symptoms include abdominal pain, muscle cramps, vomiting, fever and diarrhea. The vomiting and severe diarrhea can lead to severe dehydration that can be fatal. (Above: Bacterium *Vivrio cholerae*, Courtesy CDC Public Health Image Library /Janice Carr)



Bangladesh is located in southern Asia. Most of the country is situated on the deltas of large rivers. The Ganges, Jamuna and Meghna rivers eventually empty into the Bay of Bengal. The Bay's warm and humid tropical climate also brings monsoons and floods that make cholera one of the major infectious diseases in Bangladesh.

Fazle Hasan Abed, a former accountant, founded the Bangladesh Rural Advancement Committee (BRAC) in 1972. BRAC was created to help the country after the Liberation War that resulted in the independence of Bangladesh from Pakistan. One of Abed's visions was to increase child survival in Bangladesh by preventing children's deaths due to dehydration caused by diarrheal diseases. Oral

rehydration solution is a mixture of salt, sugar and clean water that prevents death from fatal dehydration due to severe diarrhea. This is not only a life-saving treatment but also inexpensive to make. Abed tested the formula for oral rehydration solution through trial and error in his kitchen and perfected the measurements of mixing salt and molasses (sugar) with water. He also made the measurements into an easy-to-learn formula—one pinch of salt and one fist of molasses. (Above: F. H. Abed, Courtesy BRAC Bangladesh)

Bangladesh Rural Advancement Committee (BRAC) works to empower rural Bangladesh communities with the oral rehydration therapy that saves many lives from fatal dehydration due to diarrheal diseases. BRAC reaches a large proportion of the population by training local women to visit communities across the country. Women between the ages of 20 and 50 are recruited by BRAC to teach oral rehydration



therapy to mothers to prevent the deaths of their children from diarrheal dehydration. BRAC conducts not only health programs but also programs in economic and social development and education. The June 2007 issue of "BRAC At a

Glance" reported that BRAC is active in nearly 70,000 villages, has covered an estimated 110 million people, and has expanded its programs to other countries in Asia and Africa—Afghanistan, Sri Lanka, Uganda, Tanzania and Sudan.

(Above left: A BRAC worker gives a lesson, Courtesy BRAC Bangladesh; above right: BRAC workers traveling to communities, Courtesy BRAC Bangladesh)

