on one patient he was treating, kneel down by the patient's bedside, which was very dirty, and say: "Allah what have I seen?"

Q: How has the programme performed since you left it?

A: I am very glad that there are no longer panicky reactions, leading to crippling restrictions on travel and trade on countries affected by cholera by their neighbours that we fought in the 1960s and 1970s. This is thanks to the availability of oral rehydration therapy that prevents death and, consequently, fear. Annual global mortality due to diarrhoea in children aged under five years was about five million in the 1950s and 1960s, while in the mid-1980s and 1990s it was around two million. Oral rehydration therapy may not be solely responsible for this improvement, but it certainly played a significant role in it. I left the programme in the very capable hands of Dr Michael Merson who did extremely well in promoting and implementing the activities for proper use of oral rehydration therapy. He deserves much of the credit for converting the "most important medical advance" of the 20th century into a household medicine worldwide. His premature departure from the programme and some other changes at WHO affected the continuation of support that was still needed. I hope recent efforts by WHO Director-General Dr Margaret Chan to revitalize primary health care will bear fruit and provide the essential support needed to ensure proper use of ORS. ■

Courtesy of D Mahalanabis

Dr Dilip Mahalanabis

Dr Dilip Mahalanabis studied cholera and other diarrhoeal diseases at the Johns Hopkins International Center for Medical Research and Training in the Indian city of Kolkata. His work at a refugee camp in Bangaon, in India near the border with Bangladesh, during a cholera epidemic in 1971 was instrumental in proving that untrained people could successfully administer ORS solution. From 1975 to 1979, he worked in cholera control for WHO in Afghanistan, Egypt and Yemen. During the 1980s, he worked as a WHO consultant on research on the management of bacterial diseases.

Q: The Bangladesh war of independence sparked an influx of refugees into Bangaon, why did you go there and what did you see?

A: In 1969 and 1970, I was working on research on diarrhoeal diseases in children at the infectious diseases hospital in Kolkata. When the cholera epidemic began in 1971, we had to leave our research and go out into the field to work with the refugees. The government was unprepared for the large numbers. There were many deaths from cholera, many horror stories. When I arrived, I was really taken aback. There were two rooms in the hospital in Bangaon that were filled with severely ill cholera patients lying on the floor. In order to treat these people with IV saline, you literally had to kneel down in their faeces and their vomit. Within 48 hours of arriving there, I realized we were losing the battle because there was not enough IV and only two members of my team were trained to give IV fluids.

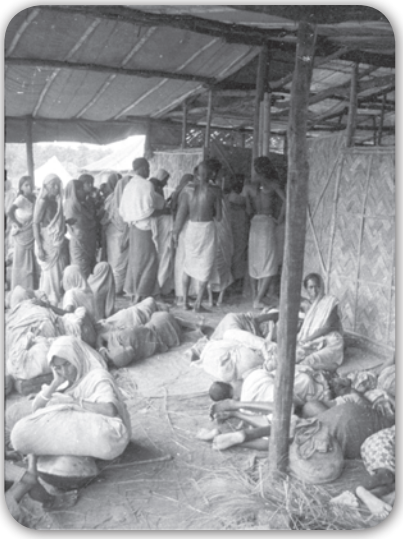
Q: That was when you decided to allow non-specialists to administer ORS – a decision that went against the prevailing wisdom of the time. Did you realize the risk you were taking?

A: I didn't have the privilege of consulting knowledgeable people at that time. I had to decide on my own what to do. I had no choice but to go ahead and use ORS to the maximum, hoping for the best. I was confident that it could work, but not necessarily in these circumstances. I also feared that if it didn't work, we would have no more options. It was a huge relief when we saw that it really did work.

> "We were just happy that it worked there and that we could help these people."
>
> *Dr Dilip Mahalanabis*

Q: Bangaon was a stunning victory for ORS. At what stage did you know that it was working?

A: Within two or three weeks, we realized that it was working and that it seemed to be all right in the hands of untrained people. However, people did need some supervision and persuasion that it really would work. People knew that IV saline was the treatment for cholera because cholera is endemic in the region. At that time we coined the term 'oral saline'. We told them that this was also saline, but that it was given by the mouth. At the time, we didn't know that it would become so well known and that people would take it up everywhere. We were just happy that it worked there and that we could help these people. We prepared pamphlets describing how to mix salt and glucose and distributed them along the border. The information was also broadcast on a clandestine Bangladeshi radio station. The cholera outbreak was not just among refugees, but also in Bangladesh itself. ■



D Mahalanabis

India, 1971. Refugees from former East Pakistan, now Bangladesh, seeking shelter, food and medical attention at the Bangaon refugee camp.