Early Heroes of CRL

I would like to recall some of my memories of the Bangladeshi's who were the early heroes of the Cholera Research lab and provided the foundation for the future achievements of CRL/ICDDR,B.

Last year on the occasion of the meetings of the CRL alumni and Annual General meeting I described some of my personal and family recollections, so this year I would like to recall some of the enormous contributions to the success of the early Cholera Lab and hospital by the pioneering Bangladeshi laboratory, medical, and logistical staffs and hope you will forgive me not to remember by name so many of those who were important. The early local Bangladeshi (then East Pakistan) staff (all of them) initially set the standard for the now recognized global impact of what is ICDDR,B.

I arrived in Dhaka in July of 1962 as a young physician just after completing my senior residency at what is now the Brigham and Women's Hospital, a part of the Harvard Medical complex in Boston, Mass USA. I had prior to this completed a 2 year fellowship in hematology with Dr. E.D. Thomas at the Mary Imogene Bassett Hospital in Cooperstown NY where we had accomplished the first successful bone marrow transplants in the U.S. for victims of leukemia. I knew little about cholera. The other young physician in Dhaka at that time was Dr. Ross McIntire who was soon to be medically evacuated back to the U.S. due to hepatitis. He later became Chief of Hematology at the Dartmouth Medical School in Hanover new Hampshire

USA. We were both fulfilling our military draft requirements of the US Government as members of the US Public Health Service.

Initially we had to establish both the clinical and microbiology laboratories for care of patients and research. Dr. K.A. Monsur was an expert and very patient teacher for us as we learned how to isolate and recognize V. cholera on the medium he had devised “Monsur’s medium”. He enjoyed being in the lab although he was already a busy Director of the whole Institute of Public Health and Professor at Dhaka University. I remember both Iqbal and Anisa Saad as the early microbiology techs and Raisur Rahman who joined as the first immunologist. In the hematology lab Mr. Mofissudin helped set it up and run the clinical lab. He had been trained by the Pakistan military.

Before admitting the first cholera patients in early December I worked with Dr. Mahmud and his team to set up the animal research facility. He patiently and expertly taught me how to draw blood from the jugular veins of cattle (they were found to have unexplained (high antibody titers against V. cholera). Dr. Jack Craig was able to demonstrate a skin test in rabbits for the cholera toxin working with Dr. Mahmud and the staff of the animal house and we continued to use the rabbit testinal loop model described by Dr. S.N. De from his work in Calcutta as well. The early “animal house” staff became expert in both assays facilitating early research on cholea.

We began to admit cholera patients at the end of November 1962 and word spread rapidly in Dhaka that if patients came directly to the new Mohakhali cholera hospital they would survive. I was the only clinician caring for these catastrophically ill patients other than Dr. Robert S.

Gordon Jr. who was the Scientific Director and also a genius with electricity and medical equipment. I was rapidly overwhelmed night and day by the care of patients arriving with no pulse and no blood pressure. However I taught our first nurses how to perform initial intravenous hydration and monitor patients for relapses by using cholera cots with buckets underneath allowing rapid identification of patients with high fluid loss.

I believe our first nurse was Ms. Madhabi Ghosh who was later joined by Mrs. Pashi and Surathon Nessa they taught the nursing assistants how to manage patients by early intravenous resuscitation. They all became remarkably adept at both recognizing who needed IV fluids and compensating their losses to sustained our mortality rate of one percent and less. They set high standards often in the midst of epidemic chaos at times with our “pukka hospital” was extending into tents. They trained and supervised an excellent group of nursing assistants who also learned the necessary skills to safely manage these severely ill cholera victims.

Soon the government of East Pakistan deputed physicians to work with me and our clinical staff. They also had to learn the new methods of treatment of cholera with our intravenous cholera replacement intravenous solution which was made by ourselves in the hospital pharmacy (no other IV solutions were available locally). Drs. Rafiqul Islam and Rezia Laila Akbar joined along with several others and relieved me of some of the clinical load and they were led by Drs. Islam and later with Dr. Jamiul Alam. My respect and gratitude for their hard work and skill is enormous. Their presence allowed me to set up water transport and communication to our Mattlab Field area and hospital in 1963 and teach local Noaka majis the skills of outboard motors

and boats. Later the U.K. provided an early water jet boat (a Dowty Turbocraft). This fast boat allowed me to supply our anthropologists (Drs. Shirley and Robert glass) at their Shaithal outpost as well as setting up the Matlab field station and treatment center. Soon the jet boat was expertly piloted and maintained by Mr. Razzak and his team and I retired as a boatman..

One of the most important functions that allowed successful care of the severe volume depleted patients in both Dhaka and Mattlab was the pharmacy under the leadership of Mr. Bazlur Rahman. We had no pyrogenic reactions while using the primitive way of making our intravenous cholera replacement “5:4:1” solution thanks to their care and skill.

There are many more stories relating to the establishment of the Mattlab Field area and hospital but will I simply close this piece by underlining the indelible fact that we as foreigners to the East Pakistan were continually blessed with highly skilled and highly motivated Bangladeshi Technical, support staff who formed the foundation that has led to the enormous success of CRL and its successor ICDDR,B locally and globally.