## LEPROSY IN BANGLADESH

Sir,

In January–February 1988 I had the opportunity to visit Bangladesh and to work in a leprosy hospital about 150 miles east of Dhaka. I thought it might be of interest to record some of my impressions for your readers.

Bangladesh is a delta region formed by the rivers Ganges and Brahmaputra. It is bounded by India on 3 sides and has a small boundary with Burma (Figure 1). The land is largely flat and fertile, the main crop being rice. Other crops include jute, tea and cotton. Eighty per cent of the population live in the rural areas and depend on agriculture for their livelihood. Most have a hand-to-mouth existence.

I was very apprehensive about heading off to Bangladesh on my own and standing in the crowded customs department of Zia International Airport, with no sign of the person who was to meet me, I thought my worse fears had been realized. But I soon got through the customs, saw the board held-up with my name on it and I was on my way through the crowds of beggars and taxi drivers, to a jeep bound for Dhaka. I had several days in Dhaka at the beginning of my elective, as it was not considered safe for me to travel the 150 miles by train to Kamalganj alone. There I visited the centre for rehabilitation of the paralysed which is run by an expatriate, Valerie Taylor, she set up the centre several years ago when she came to Bangladesh as a physiotherapist, and they now have around 100 patients in their care.

The centre is run by volunteers and they concentrate on making patients self-sufficient. They deal with medical problems such as bed sores, then using physiotherapy, occupational therapy and a lot of encouragement, set about the slow progress of rehabilitation, I found all the volunteer workers to be very dedicated and I was surprised to see how cheerful all of the patients were and how well they coped with their disabilities. Most of the patients are involved with handicrafts or painting, not just as a mode of occupational therapy, but as a way to earn a little money.

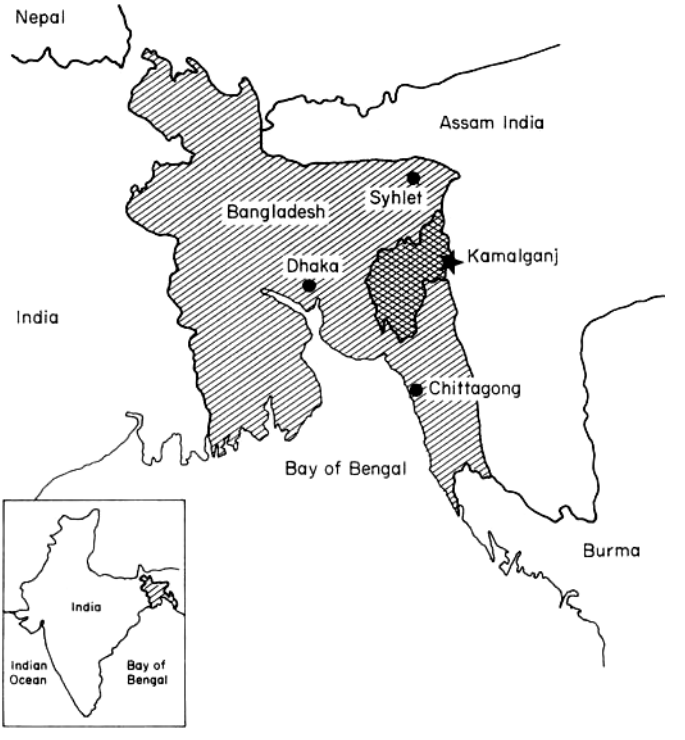


**Figure 1.**

I travelled to Kalmalganj on the Joyantika Express and we arrived in Kamalganj at 8.30 pm after a 40-minute jeep ride along a 6 mile dirt-track, which is the main road. While there I stayed in the HEED (Health, Education and Environmental Development) Guest House, situated to the rear of the hospital, a beautiful, peaceful place, surrounded by pineapple groves and Bamboo forests. I paid 145 Taka (£2.50) per day for full board.

Bangladesh is the most densely populated rural nation in the world with a population of approximately 100 million which is increasing rapidly. Bengali is the official language; English is spoken only among the educated. I found the language barrier at times very frustrating and often had to rely on paramedical workers to act as interpretors, but by the end of my elective I could carry out a short conversation and had acquired a limited vocabulary.

The life expectancy of the average Bangladeshi is 47 years, with only 1 doctor for every 8500 people. In Dhaka there is only 1 hospital bed for every 1500 patients. The infant mortality rate is 135 per 1000 live births.

Bangladesh is generally said to have a typical tropical monsoon climate. There is a wide variation in temperature. I was there during its winter months where the temperature ranged from 6°C at night to 27°C during the day. During the summer (April–September) the temperature can reach 40°C and the relative humidity is high 80–95%. The weather is very changeable with cyclones and monsoons resulting in flooding and extensive damage.

The HEED Leprosy Control Project and Hospital are located near Kamalganj, a sub-district or Upazula of Moulvibazar District. It is about 150 miles east of Dhaka on the main railway line to Sylhet. In 1976 the Government of Bangladesh gave HEED a mandate to conduct a Leprosy Control Programme in Kamalganj Upazula, using the existing facilities which had been established in 1968 as a leprosy sanatorium. A base hospital was built in 1979 and the leprosy work in the Tea

Gardens commenced in 1981. There are now 49 out-patient clinics which are visited on a monthly basis, most of them are in the tea gardens where leprosy remains a major problem.

In 1988 Teleopara out-station was opened, so allowing paramedical workers to stay permanently outside Kamalganj and provide a local service to the leprosy patients to the South of Moulvibazar District. The Leprosy Hospital is a modern building with 38 beds, most of which are reserved for leprosy patients, a small number being available to tuberculosis, and patients requiring minor surgery. The hospital has its own operating theatre, physiotherapy department, pharmacy, laboratory and out-patient area. There are also facilities for making shoes, wheelchairs and walking aids. The hospital staff consists of 2 medical officers, Dr Ian Cochrane and Dr Francoise Luthie. The remaining staff are Bangladeshis—12 paramedical workers, 5 nurses, 2 physiotherapists, shoemaker and orderly. Most of the staff are Christians and religion plays an important part in everyday life.

The prevalence of leprosy in Bangladesh is approximately 9 per 1000 population. The HEED Leprosy project is responsible for the care of 1400 patients. The vast majority of these being situated outside Kamalganj Upazula.

The main workload for the staff at Kamalganj centres on the use of multiple drug therapy, using dapsone, clofazimine and rifampicin, as recommended by WHO in 1982 (Technical Report Series 675). Finding defaulters and maintaining a review system after completion of treatment adds to the already stretched resources of the leprosy programme.

During my elective, I saw mainly leprosy patients and became familiar with their examination and charting of findings. I saw many disabilities associated with late detection and treatment. I also learned the procedure for taking skin smears, skin biopsies and how to stain them with the Ziehl–Neelsen method.

Health education is very important for leprosy patients and I watched paramedical workers teach the patients how to care for their feet, which are often involved with trophic ulcers.

The staff at Kamalganj said that attitudes to leprosy are improving. Patients coming earlier for treatment and that they are accepting that leprosy is not a curse from Allah. I was impressed by their dedication and their determination to keep the programme going.

There was an out-patient clinic every Monday where general medical patients would attend. The conditions included pulmonary and skin tuberculosis which are relatively common, as are skin disorders such as leucoderma, scabies and fungal infections. Pneumonia, asthma and bronchitis were frequently seen. Buerger's disease and peripheral vascular disease are common because of the high cigarette consumption.

I found all the signs to be much grosser and the diseases more advanced on presentation. Infectious diseases, especially the diarrhoeal diseases, were very common, including dysentry, cholera and typhoid. Another problem disease is malaria, especially chloroquine-resistant disease due to *P. falciparum*.

In Bangladesh the effects of a poor diet are constantly present, although I found it ironic that in Dhaka, which has become relatively Westernized, ischaemic heart disease, diabetes mellitus and obesity are becoming such a problem that dieting is fashionable amongst the affluent.

I feel my elective in Bangladesh was a very worthwhile experience—I met so many different people and learned at first hand about the problems they face in a poor developing country. I also saw leprosy and many other conditions which are rare in Britain and began to appreciate the extent to which socio-economic and cultural factors affect peoples lives and their patterns of illness.

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