Historical Vignette Epilepsy Pioneers and Current Educational Programs in Bangladesh

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The first pediatric epilepsy center was started in 1992 in a newly established Department of Pediatric Neurosciences at the Bangladesh Institute of Child Health, Dhaka Shishu (Children) Hospital (DSH) by Prof. Naila Zaman Khan (►**Fig. 1**). Within the child development center (CDC) of the department, a specialized epilepsy clinic was established. Taking advantage of the multidisciplinary nature of the CDC, all attending children were visited by physicians, developmental therapists and, when needed, psychologists. All children being treated for epilepsy, therefore, were also managed for their comorbidities.[1] To strengthen the epilepsy services, Dr. Selina Husna Banu (►**Fig. 2**) was sent for training to the Neurophysiology Unit at the Institute of Child Health (ICH), Great Ormond Street Hospital (GOSH), London, United Kingdom. On her return, she took advantage of a second-hand electroencephalography (EEG) machine donated by GOSH to establish the first pediatric EEG service in DSH.[2] Dr. Banu later went on to obtain a doctoral degree from ICH, United Kingdom, where her path-breaking work showed that monotherapy with phenobarbitone, a drug recommended by the World Health Organization (WHO), had the best

Fig. 1 Prof. Naila Zaman Khan.

Fig. 2 Dr. Selina Husna Banu.

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Fig. 3 Prof. Mahmood Ahmed Chowdhury.

outcomes for varied types of first-diagnosed childhood epilepsies.[3] The publication of this paper in the British Medical Journal (BMJ) was commended in the editorial of the same issue by Prof. Emilio Perucca.[4] This led to the remanufacturing of the drug by the local pharmaceutical industries of the country, thereby helping in establishing the rational and sustainable use of antiepileptic drugs for the treatment of childhood epilepsies in a country with limited resources.

From 1997 onward, departments of child neurology and neurodevelopment were gradually established in major national institutes across the country,[5] with epilepsy services, constituting a major part of their programs. These included the child neurology department including the autism and CDC of the Chattagram Ma O Shishu Hospital

Fig. 4 Prof. Muhammad Mizanur Rahman.

Fig. 5 Prof. Narayan Chandra Saha.

(CMOSH) with Prof. Mahmood Ahmed Chowdhury (►**Fig. 3**) at its helm; the Department of Neurology and Child Development under the Paediatrics Department of the Bangabondhu Sheikh Mujib Medical University (BSMMU) with Prof. Mohammad Mizanur Rahman (►**Fig. 4**) at its helm; the Paediatric Neurology Department of the National Institute of Neurosciences (NINS), with Prof. Narayan Chandra Saha (►**Fig. 5**) at its helm; and the Neurology Development and Rehabilitation Unit of the MR Khan Shishu Hospital (MRKSH) and the Institute of Child Health, with Dr. Banu at its helm. Since 2008, Prof. Khan has established 15 CDCs in major tertiary government medical college hospitals across Bangladesh as the National Coordinator for the Ministry of Health and Family Welfare, Government of Bangladesh, with the epilepsy clinic being one of the most attended services.[6]

In conformity with the merging of child neurology and neurodevelopment programs under one department across all major institutes of Bangladesh, postgraduate fellowship (FCPS) in "Child Neurology and Development" has been recognized by the Bangladesh College of Physicians (BCPS) and Surgeons since 2009 and MD degrees on the same subject by the BSMMU.

The way forward is to strengthen the pediatric epilepsy course curriculum and training within the undergraduate (MBBS) courses. In contrast to about 30 government medical college hospitals, there are over 90 nongovernment medical college hospitals across the country. All these services need strengthening. The Bangladesh Society of Child Neurology, Development and Disability (BSCNDD: bscndd.org) has played a central role in organizing teaching sessions, workshops, seminars, and national conferences on various subjected related to childhood epilepsies. The Bangladesh Clinical Neuro Electrophysiology Society (BCNEPS) also conducts regular modular courses for medical graduates and technologists, organizes workshops, seminars, and national conferences, and conducts outreach programs in critical care

units of various hospitals across the Dhaka city[7] and in remote populations of Bangladesh by visiting professionals who utilize portable EEG machines to assist them in diagnosis and management of children with varied types of seizure disorders.

Research in molecular genetics related to childhood neurodevelopmental disorders is just beginning, which has been helped by the network of established CDCs.[8] Research on the molecular genetics of childhood epilepsies is also being conducted and is awaiting publication.

Conflict of Interest
None declared.

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