

EDITORIAL

Burden of Epilepsy in Bangladesh: Current Approach

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Epilepsy is a neurological disorder characterized by recurrent unprovoked seizures which is transient with abnormal, excessive and synchronous neuronal activity in the brain¹. It is a common and chronic neurologic disorder worldwide. The prevalence of epilepsy varies among countries which may be 1.5 in developed countries to 18 per 1000 in Latin America². It has been estimated that 80.0% of 50 million people with epilepsy reside in developing countries³. The risk of having epilepsy at some point in average life span of any individual varies between 2.0% to 5.0%². Some hospital and community based studies from South East Asian countries (SEAR) have reported the incidence of epilepsy from 2 to 10 per thousand population⁴.

WHO estimates that there are at least 1.5 to 2.0 million people with epilepsy in Bangladesh². The incidence and prevalence of epilepsy being higher in poor areas which may be 49 to 225 per 100,000 people per year which poses a huge social and economic burden to the poor⁵. It is very interesting that about half of the total epilepsy population lives in Asia³. The annual mortality rate per 100,000 people from epilepsy in Bangladesh has decreased by 52.4% since 1990, an average of 2.3% a year⁵. Though this has been the trend overall, adjust the filters at the top of the visualization to see how the mortality rate for epilepsy has changed over time for men and women of specific age groups in Bangladesh; for men, the deadliness of epilepsy in Bangladesh peaks at age 80+. It kills men at the lowest rate at age 5 to 9 years. At 11.5 deaths per 100,000 men in 2013, the peak mortality rate for men was higher than that of women, which was 8.1 per 100,000 women. Women are killed at the highest rate from epilepsy in Bangladesh at age 75 to 79. It was least deadly to women at age 65-69 years.

Childhood epilepsy is a great concern to Neurologist. The incidence of epilepsy is high in childhood which decreases in adulthood and can rise again in older age. The first peak occurs in the childhood as well as the young adults; however, another peak age is in old age⁶. Epilepsy cases are reported higher in rural area than in urban area especially in developing countries⁷.

Epilepsy is a common health problem in Bangladesh and 30.0 to 40.0% of patients are still treated by traditional healer⁸. Superstitious belief is a stigma in the community. There are several causes of treatment failure include improper compliance, incorrect diagnosis, inappropriate drug, dose & duration, and lastly refractory epilepsy⁸. The most common cause of non-compliance is cost of drug; however, other causes for noncompliance include non-affordability of drugs, unavailability of drugs, inadequate knowledge and attitude, lack of counseling, adverse effects of drug, social factors⁸⁻¹¹; however, 50 to 60.0% patients remain symptoms free with 4 common drugs¹.

Though most of the anti-epileptic drugs (AEDs) are cheap, the volume of prescription and duration of treatment often makes the expenditure high enough for the poor. As the definition implies, epilepsy is a disorder of uncertainty and unpredictability. A seizure event can occur anytime, anywhere without warning; causing embarrassment, injury or even death of the person. This may have a disastrous effect on employment and independence. About 50% of the patients become seizure free with the first drug tried and can lead a normal life. Seizure can be controlled with monotherapy in majority of them.

This usually requires careful and rigid adherence to drug regimens, which involve taking tablets regularly, two or three times each day for many

years, sometimes for a lifetime. Physicians often judge the effectiveness of treatment by gross clinical response. There are wide variations in each person's response to treatment, and the plasma concentration of AEDs provides little information about a person's likelihood of reduction of seizures or side-effects. The available data on effectiveness of drugs are mostly from the western studies⁸. But the drug response and effectiveness may vary depending on the genetic, environmental, pharmacodynamic and pharmacokinetic interaction in different racial groups. Moreover, the cost of AEDs often poses a treatment gap in management of epilepsy, especially in least developed country like Bangladesh⁸.

Community awareness is needed to reduce the burden of the disease. Training of doctors is necessary for appropriate approach. National guideline for treatment of epilepsy is needed. Community based clinic needed to treat the epileptic patient in rural areas. International Epilepsy Day is a special event which promotes awareness of epilepsy in more than 120 countries each year. Every year on the second Monday of February people join together to celebrate and highlight the problems faced by people with epilepsy, their families and careers. This is a day for everyone, no matter where you are, no matter how small your group or large your area, no matter whether you focus on the medical or the social aspects of the disease. We want you to help us celebrate International Epilepsy Day! Let's speak with one global voice. The Day is a joint initiative by the International Bureau for Epilepsy (IBE) and the International League Against Epilepsy (ILAE).

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