

Snakebite Envenomation: Neglected Tropical Disease of Public Interest

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It is clear that in many parts of the Southeast Asian region, snake-bite is an important medical emergency and cause of hospital admission. It results in the death or chronic disability of many active younger people, especially those involved in farming and plantation work. However, the true scale of mortality and acute and chronic morbidity from snakebite remains uncertain because of inadequate reporting in almost every part of the region. To overcome this deficiency, it is strongly recommended that snakebite should be made a specific notifiable disease in all countries in the Southeast Asian region. Snake-bite is an occupational disease of farmers, plantation workers, herdsman, fishermen, snake restaurant workers and other food producers. It is therefore a medical problem that has important implications for the nutrition and economy of the countries where it occurs commonly. It is recommended that snakebite should be formally recognised as an important occupational disease in the South East Asian region.

The venomous snake fauna of the South East Asia Region is rich and diverse. It varies within and between countries. Widely distributed species of major medical importance, such as Russell's vipers, show geographical intra-species variation in their venom composition. In many countries, snakebite is an important medical emergency and cause of hospital admission, demanding urgent attention by adequately trained medical staff. It results in the death or chronic disability of tens of

thousands of active younger people. The true scale of mortality and acute and chronic morbidity from snakebite is only just beginning to be recognized, based on large well designed community-based studies.

Snakebite considered as a neglected health issue in Bangladesh. Although snakebite contributed significant workdays loss and out pocket expenditure among the Bangladeshi population. Annually a significant number of cattle and poultry are bitten by snakes, resulting a significant amount of economic loss in the country.

Annual incidence of Snakebite in Bangladesh was found 244.0/100,000 population and the rate of death was found 4.55/100,000 population in a recent study. Annually an estimated 399,653 people are bitten by snakes and among them around 7,447 are dying due to venomous snakebite in Bangladesh.

Among the snakebite victims 58.4% were male and 41.6% were female; 95% of the incidences were taken place in the rural areas (324/100,000 population). Higher rate of snakebite was found among the age category 35-44 years (348/100,000 population). The highest rate was found in Khulna division (616/100,000 population). Among all the bites, 24.2% were due venomous snake. Of all snakebite victims, 10.6% reported mild to moderate form of physical disability and 1.9%

were found to develop Post Traumatic Stress Disorder (PTSD). Now a days, the prevalence of snake bites including those caused by Russell's vipers, is notably heightened within the country. Russell's viper bite is treatable, and most of the patients recover using existing antivenom (AV). Early treatment by antivenom should be started in the first contact hospital (UZHC) if indicated before referral. Trained human resources, AV, and other logistics should be available 24/7 in all major hospitals. In medical colleges and hospitals one-stop 'Snakebite Clinic' should be arranged as

a priority. Bangladesh should have its own antivenom specific to the venom of RV of Bangladesh. Quick arrival to the hospital directly using a motorized vehicle with immobilization of limb only with immobilization pack without any ligature is important.

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