

Snake bite- a devastating environmental occupational injury

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Snake bite is one of the medical emergencies causing significant mortality worldwide. It is a devastating environmental occupational injury, affecting poor rural communities like farmers, plantation workers and fishermen around the world.¹⁻³ It is also regarded as environmental poisoning.

Males are affected more than females in Bangladesh because of their profession outside.⁴ People of younger age group are affected in majority of cases. Most cases are between 20-40 years of age.^{5,6,7} Most of the cases occur in rural area as snakes are more prevalent in rural areas and thus people come in close contact due to their daily activities.⁴ Snake bites mainly occurred in rainy season.⁸ In most of the cases, snakes cannot be identified, or even misidentified.⁹

In Bangladesh, among the 82 species of snakes, 28 are venomous, 12 species of them are sea snakes.¹⁰ Bites by green pit vipers (*Cryptelytrops erythrurus* and other species), cobras (*Naja* species) and kraits (*Bungarus*) are the most commonly identified ones, whereas Russell's viper (*Daboia russelii*) appears to be rare and saw-scaled vipers (*Echis* species) non-existent.¹¹

Majority of snake bites (around 60%) are non-venomous and most of the venomous snake bites are of neurotoxic type.¹² Venomous snake bites usually present with neurological manifestations but may also produce haematotoxicities, myotoxicities, organ failure and local features.

First aid measures, immediate hospitalization, and use of antsnake venom and tetanus prophylaxis can save many lives in venomous snake bites. Reassurance and tetanus prophylaxis are all need to treat non-venomous snake bite.

In Bangladesh mortality rate is not known exactly; the reported mortality varies widely from 0.5% to 22%.¹³⁻¹⁵

Snake bite is a serious health problem and one of the life-threatening emergencies in Bangladesh. Delay in hospitalization is associated with increased mortality. Many patients are not aware of what to do instantly and not getting initial first aid management. This poor awareness of people increases the risk of morbidity and mortality due to snake bites. Health education is an important public health measure to reduce the mortality.

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