

The impact of snakebite on house hold economy in Bangladesh

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Objectives: The amount of wealth loss due to mortality and morbidity from snakebite can hamper household economy. The present study aims to assess different types of costs for treatment of snakebite patient, quantify household economic impact and understand the coping mechanism to cover the costs of snakebite patients in Bangladesh. **Methods:** A total of 83 snakebite patients admitted from June 2006 to October 2006 for treatment in four tertiary level hospitals in Bangladesh in Dhaka, Chittagong, Khulna, and Rajshahi. The patients were interviewed using structured questionnaire documenting history, clinical features, treatment seeking behavior, health care related expenditures and the way in which the expenditures were covered. Cost related to snakebite included direct cost (service provider fees, drugs, diagnostic cost and others), indirect costs (transport, attendant cost, food cost etc.), and opportunity costs (wages loss). **Results:** Among the patients 71.1% were male, 54.2% of the snakebites were nonvenomous and 45.8% were venomous. Occupation of the patients were agricultural labor (18.1%), housewives (16.5%), business (15.7%) and service (14.5%). Snake bite occurred during walking on the way (22.9%) and during sleeping (16.9%). 68.7% of the patients have seen the snake and among them 22.9% could mention the name of the snake. Majority (65.1%) of the patients went to visit a traditional healer (Ohzas). A significant number (92.8%) of the patients used tight tourniquet after snakebite. Bite marks were visible in 60.2% of the patients (n=50). Among the patients 42.2% were given polyvalent antivenom. Total expenditure related to snakebite varies from BD Taka 442 (US I \$ = Taka 67)) to 153700 (US\$) with a mean of BD Taka 8305 and mean income loss was BD Taka 6244. Expenditure for venomous snakebite was (BD Taka 15479) is about 7 times higher than non venomous snakebite (BDTk.2248). Among the households with snakebite 61.4% lend money to meet up the cost of the treatment. A very few of them mortgaged land and business. 3.6% (n=3), sold ornaments and 4.8% (n=4) sold livestock to compensate the treatment cost. **Conclusion:** The treatment of snakebite patients causes a major economic burden in affected families especially in venomous snakebite cases. This may impoverished the family and affect the other household expenditure for education, food and nutrition. Appropriate measures should be launched for prevention and treatment of snakebite in vulnerable areas to prevent gained economic loss and valuable life.