Clinico-epidemiological study of dengue cases admitted in a tertiary level hospital of Bangladesh armed forces

Introduction: Dengue, a mosquito borne arboviral disease, is one of the febrile diseases in Bangladesh. With advanced modern facilities in the field of diagnosis and management the case fatality of dengue has reduced to a great extent. Still it is the cause of sufferings for the city dwellers. A considerable number of cases are encountered at Combined Military Hospital Dhaka.

Objectives: The study explored the susceptibility profile, sero-types and treatment outcome of the dengue patients attending Combined Military Hospital Dhaka.

Methods: Data were collected from the medical registry of all 736 clinically and/or serologically diagnosed dengue patients admitted into CMH Dhaka in the year 2016. Case series of descriptive epidemiological approach have been followed in this study.

Results: Among the 736 cases, 48.37 percent were soldiers by rank. About 87% were male and 13% were female. Majority (556=75.54%) of cases were in age group 19–49 years. Among this group 715 (97.15%) were from urban areas. Most of the cases (654=88.86%) attended the hospital during July to November 2016. Among the clinically diagnosed cases, sero-positivity was found 48.91%. Platelet concentrates were given to 1.49% cases. Antibiotics were administered in 40.76% cases, no steroid was used. Out of 736 cases, 317 (43.07%) were of classical dengue. 418 (56.79%) cases were in grade-I form of dengue hemorrhagic fever (DHF) and 1 (0.14%) case was of grade-IV form of DHF or dengue shock syndrome (DSS) who died during treatment. Case fatality rate was only 0.14%.

Conclusions: High number of dengue cases indicates that the living environment is conductive to vector breeding, and/or awareness about protective measures is inadequate. Moreover, dengue occurs mostly during rainy season especially from July to November with the peak in October which indicates the seasonal influence.

Biography

S M Motahar Hossain is a Director General of Medical Services at Bangladesh Armed Forces, has 34 years of experience in research, evaluation and teaching. He has expertise in Internal Medicine especially in Gastroenterology. He held important appointments in his long career including Personal Physician to Honorable Prime Minister (2000-2001), Personal Physician to Honorable President (2012-2016) of Peoples Republic of Bangladesh and Instructor of Medicine in Armed Forces Medical College, Bangladesh (2003-2004). He has number of publications in national and international medical journals. He also participated in UN Peace Keeping Mission in Rwanda (UNAMIR) and Bosnia & Herzegovina.

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