

Epidemiology of Clinically Suspected Dengue Fever and Dengue Haemorrhagic Fever (DF/DHF): A Retrospective Study in a Tertiary Care Hospital, Jaffna, Sri Lanka

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Abstract: The aim of the present study was to understand some aspects of epidemiology and clinical features of dengue fever (DF) and dengue haemorrhagic fever (DHF) cases admitted to Teaching Hospital (TH), Jaffna and to assess the accuracies of notification of DF/DHF to the Epidemiology Unit, Ministry of Health, Sri Lanka. This is a hospital based, descriptive retrospective study on DF/DHF cases admitted to TH, Jaffna. The data was collected from BHTs (Bed Head Ticket) of all patients presented to TH, Jaffna with clinically suspected DF/DHF from September 2009 to August 2010. A questionnaire was designed to extract specific information from BHTs. Variables categorized and analyzed using a basic statistical software (SPSS version 17). Differences in the mean between variables was considered significant when the p value was <0.05 with a CI of >95%. Details about the DF/DHF notification was obtained from the infection control nurse TH, Jaffna. Based on available records a total of 1085 DF/DHF were identified during the one year period. A seasonal trend was noted with highest number of cases occurring during January to March, 2010. Around half of the DF/DHF cases were males (n=535, 49.3%) and 640 (59%) were adults. Although all patients with DF/DHF presented with fever, fever spikes were reported only by 129 cases (11.9%: 95% CI: 10.1-13.9%). On average most of the DF/DHF cases were admitted to TH, Jaffna 8 days after the onset of symptoms (mean: 7.9, median: 8, range: 1-24) and the fever lasted for 4.5 days. Five hundred and forty eight (548) (50.5%) cases (range:47.5%-53.5%, CI:95%) were presented with vomiting. The other common symptoms reported were myalgia, haemorrhages, arthralgia, headache, flushing and retro orbital pain. Haemorrhagic manifestations were noted in 266 (24.5%) patients. Of which gum bleeding (37.2%) was the most common manifestation. Low counts of WBC and platelet were noted in 294 cases, 27.1% and 85.6%, respectively. Platelet count lower than 20,000 was observed in 7.4% of cases. Out of 1086 DF/DHF suspected cases, 24(2.2%) were screened for Dengue IgM/IgG antibodies and only 458 cases (42.2%) notified to health authority for the one year study period. Unavailability of laboratory diagnostic tests for DF/DHF is the major drawback noted in this study. More than half of DF/DHF cases were not notified to the Epidemiology Unit, Ministry of Health based on the current study. This is an important message to the public health authorities to consider in the future.

Keywords: DF/DHF Clinical Features, Retrospective Descriptive Study, Jaffna Teaching Hospital