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Biology

## DISEASE BIOLOGY OF DENGUE INFECTION IN KATTANKUDY REGION OF BATTICALOA DISTRICT, SRI LANKA

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Dengue Viral Infection (DVI) is a significant mosquito born infection globally. Remarkable number of dengue cases is reported annually in Batticaloa district. Dengue Fever (DF) and Dengue Hemorrhagic Fever (DHF) have become endemic in Eastern Sri Lanka, with a high incidence in the capital city Batticaloa, since 2009. Therefore, this study was planned to determine certain aspects of disease biology of clinically suspected dengue cases in Kattankudy region of Batticaloa district. It was a hospital based cross sectional descriptive study. Data extracted from the dengue patient's registry of medical records maintenance division of Kattankudy Base Hospital (KBH) for the period of January, 2016 to December, 2018 with the prior official permission. Statistical software (SPSS 25.0) was used to analyze the data and pvalue < 0.05 was considered significant for all analyses. Ethical approval was obtained from Ethical Review Committee, Faculty of Health-Care Sciences, Eastern University, Sri Lanka, Records of 324 dengue cases were extracted for this investigation. Majority (63%) of dengue patients were female. DF was the most (78.4%) prevalent infection among various types of clinical forms of DVI while around quarter of patients were suffered by DHF. Kattankudy-6 Gram Niladhari division (GND) in Kattankudy Medical Officer of Health (MOH) area was the most vulnerable region resulted in almost one third of DVI reported. There was a significant association (Chi-square=12.674, p=0.002) between gender of patients and different clinical forms of DVI. It is proven the disparity of disease biology of different clinical forms of DVI with the context of gender of patients. Moreover, Kattankudy-6 GND was the most favourable area of DVI in Kattankudy region.

Keywords: Dengue Viral Infection, Kattankudy, Disease Biology, Epidemiology