

Seroprevalence of dengue infection in tertiary care hospital in Salem District

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ABSTRACT

Introduction: Dengue viruses (DENV) continue to circulate worldwide, resulting in a significant burden on human health. There are four antigenically distinct serotypes of DENV, an infection of which could result in a potentially life-threatening disease. Although one dengue vaccine is approved for dengue-immune individuals and has modest efficacy, there is still a need for therapeutics and vaccines that can reduce dengue morbidities and lower the infection burden. There have been recent advances in the development of promising drugs for the treatment of dengue. **Objective:** To determine the seroprevalence of Dengue infection in patients admitted to a tertiary care hospital and to identify the risk factors and clinical outcomes associated with Dengue infection in this population. **Materials and Method:** This is a cross-sectional study which involves 1173 patients. This study was conducted over a period of six months from January 2024 to June 2024. The serum samples were collected from patients presented to the OPD with the history of fever more than 3 days with retro orbital pain, bleeding gums and petechiae to GMKMCH at Salem. The serum samples were tested for IgM antibodies for Dengue infection by using IgM capture ELISA Kit, from NIV (National Institute of Virology) Pune and the ELISA was done as per the manufacturer's instructions. **Result:** In the present study out of 1173 suspected dengue cases, 117 (10%) were positive and 1056 (90%) were negative. Out of 117 confirmed positive cases, the demographic details showed that 72 (61.5%) were male and 45 (38.5%) were female. **Conclusion:** The findings of this study are expected to contribute to better patient outcomes through timely diagnosis and management of this potentially life-threatening condition.