

Is Dengue fever becoming a growing threat day by day ?

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Dear Editor,

Dengue fever, having a significant escalating prevalence, is an arboviral infection affecting millions globally. With approximately 50-100 million infections reported annually, it is crucial to address this public health concern, particularly in India, where unplanned urbanization and population movement contribute to its rapid spread [1].

Dengue fever, caused by one of four serotypes of the Dengue virus, poses a substantial challenge. *Aedes Aegypti*, the primary vector, further complicates control efforts [2]. The initial infection might be asymptomatic or present with non-specific symptoms, making accurate diagnosis and patient care critical.

To shed light on the local situation, a prospective observational study was conducted in a tertiary care teaching hospital during the rainy season. Out of 50 confirmed Dengue cases studied between August and October 2021, a majority were males (76%), and the most affected age group was 18-20 years (30%). Symptoms included fever, body ache, headache, retro-orbital pain, myalgia, conjunctival injection, itching, abdominal pain, bradycardia, and skin rash.

Clinical findings revealed platelet counts below 100,000/mm³ in 62% of cases, dropping further during admission. Leukopenia was observed in 90%, while raised liver serum transaminases were noted in 50% of patients. Despite these challenges, there were no reported fatalities in the study.

The surge in Dengue cases has been attributed to factors such as increasing construction, inadequate sanitation, and drainage systems providing favourable conditions for mosquito breeding. Dengue virus interacts with host cells, causing cytokines to be released and immunologic processes to be stimulated, resulting in vascular endothelial alterations, mononuclear cell infiltration, and perivascular edema [3]. The age group most vulnerable to mosquito bites was 18-20, followed by 21-30. Fever was the predominant symptom, consistent with findings in India and Southeast Asia [4].

The study also noted conjunctival injection in 44% of patients, pleural effusion in 24%, and ascitic fluid in 18%. Bleeding manifestations, including epistaxis and melena, were seen in 8% of cases. Dengue's bleeding diathesis, attributed to thrombocytopenia, was evident, along with elevated liver transaminases in half of the patients.

While there were no fatalities in this study, the importance of timely diagnosis and treatment cannot be overstated. The findings underscore the need for increased public awareness, improved sanitation, and proactive mosquito control measures. Efforts should focus on educating communities, enhancing healthcare infrastructure, and implementing preventative measures to curb the rising Dengue menace.

In conclusion, Dengue fever demands urgent attention and coordinated efforts from healthcare authorities, policymakers, and the community. By addressing the root causes and implementing effective preventative strategies, we can mitigate the impact of this widespread and debilitating disease.

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