Editorial

DENGUE and its Prevalence

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A R T I C L E   I N F O

About 2.5 billion individuals worldwide are infected with the dengue virus (DENV), an important arthropod-borne viral disease, of which 975 million reside in both large and small cities in tropical and subtropical regions of Southeast Asia, the Pacific, and the America. Dengue is presently endemic in more than 100 countries as a result of a sharp increase in incidence over the past few decades [1]. Aedes genus mosquitoes, particularly Aedes aegypti or Aedes albopictus, which are infected females and transmit the dengue virus, which is a member of the Flaviviridae family, infect people. Primary infection and secondary infection are the two types of diseases brought on by the dengue virus. A complicated immune response clears dengue fever (DF), an acute febrile sickness brought on by a primary infection, in about seven days. Haemorrhagic fever (DHF) or dengue shock syndrome (DSS) are the effects of a secondary infection that is more severe. Pakistan is at a significant risk for dengue endemics because of its congested cities, contaminated water, poor sanitation, huge refugee population, and low immunisation rates [2].

Dengue fever (DF), as well as more severe DHF/DSS, can be brought on by the dengue virus. Within three to five days of an infection, DF might result in a fever, which is accompanied by thrombocytopenia, relative leucopenia, headache, joint discomfort, and skin rashes. Other etiologies, including non-dengue flavivirus infections, should be ruled out based on the patient's place of origin [3]. Dengue virus infection can be diagnosed in a lab by examining a specific virus, viral antigen, genomic sequence, and/or antibodies. Due to the four viral serotypes, there is currently no vaccination for the prevention of Dengue virus infection. In the most severe cases, dengue infection can result in patient death. To combat dengue virus infection, numerous antiviral compounds are being explored, but an effective, affordable, and secure vaccine that can neutralise all four dengue virus serotypes is still required. However, a patient with dengue fever can be saved with supportive care and therapy. Antipyretics like paracetamol can be used to treat fever. Drugs that reduce pain, such as analgesics, can be used to alleviate joint pain. Patients with DHF/DSS must be hospitalised. Oral rehydration therapy can reduce dehydration, and intravenous fluid replacement can reduce shock in infected individuals if oral intake is impossible. A platelet transfusion is advised if the patient's platelet count falls below 20,000 or if there is substantial bleeding. Aspirin, Brevrin, and non-steroidal anti-inflammatory drugs should be avoided as they may exacerbate the tendency to bleed [4].

R E F E R E N C E S

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