
Multimed 2025; 29: e3143

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Dengue: a challenge of these times

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Received: 13/02/2025

Adopted: 18/03/2025

Dengue, a viral disease transmitted by mosquitoes and well known by the medical community, has greatly increased its incidence in recent decades and currently can affect about half of the world's population at risk of contracting it, reporting between 100 and 400 million infections each year.⁽¹⁾

Although many HIV infections are asymptomatic or cause mild illness, severe, and sometimes fatal cases can occur.

A person can get dengue infections as many times as the number of



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virus serotypes (DENV-1, DENV-2, DENV-3 and DENV-4). Each serotype confers permanent, specific immunity against itself and short-term cross-immunity against the other three serotypes, which may last for a few months.^(2,3) The appearance or increase of a serotype that did not previously predominate in a region may lead to an increase in cases, due to the increased susceptibility of the population.⁽³⁾

Severe dengue affects most countries in Asia and Latin America and has become one of the leading causes of hospitalization and death among children in these regions.⁽⁴⁾

In children, dengue may occur more severely than in adults, with a higher risk of developing severe dengue, due to its lower capacity for hemodynamic compensation.⁽²⁾

Studies in infants show that fever is a common symptom, and that abdominal pain is common in severe cases.⁽²⁾ It is therefore of vital importance that every child who has these symptoms is closely monitored, without a proper diagnosis justifying it.

The presence of risk factors may aggravate the disease. A previous infection with dengue virus increases the risk of developing severe dengue.⁽¹⁻³⁾ Unplanned urbanization is associated with dengue transmission by environmental and social factors (population density, human mobility, water storage practices, etc). Community risks also depend on the knowledge, attitudes and practices of the population regarding this disease as exposure is closely related to behaviors such as water storage, plant maintenance and self-protection against mosquito bites.⁽¹⁾

As a dengue vaccine and specific antiviral treatment for its cure are not currently available, it is a challenge for the country and the health sector to strengthen all measures for the prevention and control of the disease, starting with health control strategies to eliminate the transmitting agent.



The knowledge of dengue in its different forms is of vital importance for physicians who have the responsibility to care for patients, either in offices or in guard bodies of primary or secondary care centers, specifically must prioritize the identification of warning signs, the time of hospitalization and full compliance with the protocols for action for all cases of suspected disease.

To achieve prevention and safe management of the epidemiological situation in areas identified as at risk, it is essential not only environmental hygiene, but also the continuous training of health workers and students and the entire adult population, relying on the media and social networks, to instruct them on what to do to prevent the disease, and on the measures to be applied both in communities and in a family and individual manner. There can be no shortage of training in identifying warning signs, which could lead to severity or death, especially in children, who are the most vulnerable.

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