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## Editorial

### Dengue, diagnosis, and research: How prepared are we?

Dengue virus is a single-stranded RNA virus that is a member of the family Flaviviridae, genus Flavivirus. It is usually transmitted by the female *Aedes aegypti* mosquito.<sup>1,2</sup> The presenting features may range from asymptomatic to mild fever to dreaded complications such as haemorrhagic fever and shock. The most common symptoms are acute onset high fever, muscle and joint pain, cutaneous rash, hemorrhagic episodes, and circulatory shock.<sup>2</sup> The mortality rate of untreated dengue shock syndrome is more than 20%. The reported incidence has increased 30-fold for the past 50 years with an estimated 50 to 100 million dengue infections globally each year, which includes 22,000 deaths.<sup>1</sup> Early and accurate diagnosis is critical to reducing this mortality. Though dengue virus infections are usually self-limiting, dengue infection has come up as a public health challenge in the tropical and subtropical nations.<sup>2</sup>

The World Health Organization (WHO) classifies dengue as a neglected tropical disease (NTD) but whether dengue is neglected is still a question mark.<sup>3</sup> Several vaccine development approaches have been undertaken<sup>4</sup>. All these approaches regarding different types of vaccines are at different stages of development in different parts of the world.<sup>5-7</sup> There is insufficient or no spending on research and diagnosis of dengue control from a public health perspective.

During the last decade, dengue research in the Philippines has increased and evolved from simple descriptive studies.<sup>8</sup> Further increase in research spending is warranted to achieve improved dengue control with operational and implementation research while focusing on basic research, clinical research, and research on integrated surveillance.<sup>8</sup> Similarly, studies in India emphasize the need to initiate community-based cohort studies representing different geographic regions to generate reliable estimates of the age-specific incidence of dengue and studies to generate dengue seroprevalence data of the country.<sup>9</sup>

With the increasing trend of dengue cases in our country, we too need initiation for research studies that will put more emphasis on diagnosis and also vector control. We can identify several important areas for research work. Studies such as this can help raise awareness of the significance of the disease and the need for better treatment and preventive strategies.

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