

## Editorial

### Dengue outbreak: A public health crisis in Bangladesh

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During the few months of 2019, Bangladesh has been affected by major dengue fever outbreaks. Although this arbovirus has been a focus of many awareness campaigns, very little information is available about beliefs, attitudes and behaviors regarding vector-borne diseases among the population of Bangladesh.<sup>1</sup>

Dengue fever is a re-emerging arboviral disease caused by dengue virus (DENV), an RNA virus of the family *Flaviviridae*; genus *Flavivirus*<sup>2</sup> transmitted to humans primarily via the bite of an infected mosquito (*Aedes* spp. mosquito); In Bangladesh, *Ae. aegypti* mosquito was responsible for several dengue fever outbreaks, *Ae. albopictus* also can transmit dengue.<sup>3</sup>

July-October 2019, the situation worsened with an increasing number of clusters in the country. Since the introduction of Dengue virus, DGHS have reactivated the dengue fever control vector plan, based on an integrated vector management strategy promoted by the World Health Organization (WHO) and applicable to all vector-borne diseases. This strategy includes different approaches combining an environmental management program aimed at reducing breeding sites, using insecticides safely, biological control using organisms that reduce target species, providing education, increasing public awareness and promoting personal protection.<sup>4</sup>

The active and persistent participation of the individuals and communities is a key factor in the achievement and sustainability of vector control programs, as the punctual interventions are generally ineffective at preventing outbreaks of vector borne diseases. One important target group for such programs is the young generation, who can become more easily involved in community-based vector-source reduction campaigns. In addition, participation at the individual level, such as use of insect repellent, mosquito netting or elimination of the indoor breeding sites, may also play an important role. Although mass dengue campaigns have increased public awareness of health risks related to dengue fever, most of the population still lack proper knowledge regarding breeding, resting and time preference of *Aedes* mosquitoes.<sup>5</sup>

It is obvious that importance of the public understanding of illnesses in the adoption of effective protective behaviors, much to be done on the value of education campaigns aiming to improve the lay comprehension of the diseases. They may be a useful pre-requisite for the programs encouraging community participation in vector control.

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