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**Occurrence of a dengue epidemic in Minipe valley of the Kandy district: evidence for *Aedes albopictus* being an epidemic vector of dengue in Sri Lanka**

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A dengue epidemic that occurred between April and October 2010 in Hasalaka and Pallewatta Medical Officer of Health (MOH) area, Minipe, was investigated to determine the density and breeding habitats of dengue vectors (*Aedes aegypti* and *Ae. albopictus*) in the affected areas. The epidemic was identified with the notification of an index case by the Medical Officer in-charge at the Divisional Hospital Hasalaka in June 2010. Details of all 267 clinically suspected and serologically positive Dengue Fever (DF) and Dengue Haemorrhagic Fever (DHF) cases were collected in consultation with MOH Minipe and 100 randomly selected cases were investigated to identify the source of infection. Entomological investigations were carried out to determine the density and breeding sites of *Aedes aegypti* and *Aedes albopictus*. 32 venous blood samples were collected from randomly selected in-ward patients with clinically suspected dengue (investigated cases) at Divisional Hospital Hasalaka and Base Hospital Mahiyangana and tested for dengue by Reverse Transcription Polymerase Chain Reaction (RT-PCR). Of these, 10 (31.3%) were positive for dengue indicating there is dengue activity in the area. Occurrence of dengue in children <5years of age and among people who have not travelled to dengue prevalent areas during the past 6 months revealed that there was local transmission of dengue in the area. Entomological investigations carried out before during and after the epidemic showed that there was no *Ae. aegypti*, but there was high density of *Ae. albopictus* (Container index: 4.6 – 22.0, House index: 4.6 - 21.7, Breteau index: 4.6 – 25.0). The major breeding sites of *Ae. albopictus* were water storage containers (cement tanks and barrels, n=38, 52.1%), and discarded containers (n=20, 27.4%). This study indicates the potential of *Ae. albopictus* to be an epidemic vector of DF/DHF in Sri Lanka. Dengue preventive and control activities needs to be extended to areas with high density of *Ae. albopictus* when the epidemiological conditions are conducive for dengue transmission.