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Prevalence of dengue vector mosquitoes and factors affecting dengue transmission in Wellawatta Municipal Council area.

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Abstract

PREVELANCE OF DENGUE VECTOR MOSQUITOES AND FACTORS AFECTING DENGUE TRANSMISSION IN WELLAWATTA MUNICIPAL COUNCIL AREA

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In a study to determine the prevalence of dengue vector mosquitoes and factors affecting dengue transmission in Wellawatta Municipal Council area, 280 premises from December 2004 to August 2005 were investigated.

It was revealed that of these 280 houses, 33 houses were infested by *Aedes* spp. Larvae of *Aedes aegypti* were collected in 26 houses and 15 houses were infested by *Aedes albopictus*.

In the study area the predominant vector was Aedes aegypti.

Entomological surveillance revealed, commonly the *Aedes* spp were found in tyres, pot trays, flower pots, discarded containers and coconut shells. The major larval breeding places for *Aedes aegypti* were discarded containers, tyres and pot trays, whereas for *Aedes albopictus* discarded containers was the commonnest breeding habitat. The House Index for the study area of 11.78 showed that the area was high risk of dengue transmission. The Breteau Index for *Aedes* spp was 17.14.

The distribution by age of dengue fever cases showed that the highest percentage occurred in the 1-16 year age group (59%). It was noted that dengue incidence was common to all socio-economic groups.



Among the dengue patients, 53% of them used coil/mats/vapourizers or nets. Though use of repellent cream, aerosol are more effective to protect from dengue vector bite, they were least practiced measure by patients.

Since the study area has a high risk of dengue transmission, effective solid waste management programme, collective responsibility of the community to control the disease, regular entomological surveillance, health education specially for school going children and law enforcement are recommended to control the larval breeding places and dengue transmission.

