



GEOGRAPHIC, ECONOMIC AND SOCIO-CULTURAL FACTORS WHICH  
DEFINING THE RISK OF DENGUE TRANSMISSION IN KELANIYA, SRI LANKA

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KEYWORDS

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ABSTRACT

This study involved geographic, socio-economic and socio-cultural factor analysis which was conducted for the year 2008-2009 at the time of dengue outbreaks in Kelaniya Medical Officer of Health (MOH) area of Sri Lanka. Locations of the residence of dengue cases (n=100) reported at Kelaniya MOH office were taken into consideration and each household was interviewed after their verbal consent through a predefined questionnaire that consisted of 16 variables. Dengue vector mosquito larval surveillance was carried out to determine the *Aedes* mosquito species that is/are responsible in transmitting dengue virus in this area. Results of the survey revealed that majority households have permanent residency but only 14% of them temporary resided in this area. Gender is not a significant factor in dengue infection. The age group most vulnerable for dengue infection occurrence was 6 -18 yrs. The dengue vector mosquito larval surveillance revealed, the occurrence of both *Aedes albopictus* and *A. aegypti* in the study area where *A. albopictus* is more prevalent than *A. aegypti*. Majority of these mosquitoes recovered from outdoor breeding sources while minority was found in indoor. Survey also revealed that 68% of house premises were sparsely covered with vegetation but only a few houses densely surrounded with vegetation. Number of dengue patients reported during the study period and geographic factors were tabulated in GIS database and presented to illustrate dengue risk maps in Kelaniya MOH area.