

Towards an innovative approach to control dengue: Bio-Social study in Gampaha District, Sri Lanka

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Dengue/Dengue Hemorrhagic Fever (DHF) has become a major public health problem in many parts of the tropics. In Sri Lanka, it is endemic in some parts of the country with outbreaks of dengue/ DHF. The present study was done to describe and analyze the relative importance of ecological, biological and social factors associated with different levels of vector density and to identify appropriate interventions tools for the control of dengue in the district of Gampaha. Study was carried out in twenty selected dengue high and low transmission areas with two entomological cross sectional surveillances during rainy season (June-August) and shortly after the rainy season (October-November), 2007 and a Knowledge, Attitudes and Practices (KAP) survey together with Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs). Of the 2000 respondents interviewed majority were females (65.2%). More than 90% had secondary education (90.2%). More than 95% of the respondents had the knowledge about dengue fever and its transmission. 91.3% stated TV/Radio as their main source of information on dengue. 34.3% had received suggestions or participated in any training on dengue prevention and 7.8% had received support materials. Most of respondents felt that no action was taken by the government to control mosquitoes (56.8%). Result of FGDs and KIIs also revealed that the knowledge of the community on dengue was sound. However it was found that good knowledge itself does not necessarily lead to good practices. The respondents' attitudes were found to be good and most of them were supportive of control measures. The key containers for *Aedes* species were discarded containers, unused bowls, plant axils, water storing barrels and coconut shells while the most pupal productive containers were tyres, ponds and metal pots. Most of the breeding places found were uncovered, filled with rain or tap water but without intervention or usages within last 7 days. Container locations were mainly outside without no vegetation or shade. Therefore an integrated control effort to include community level awareness programmes through mass media and development of educational strategies designed to improve behaviour and practices of effective control measures among the community, improved solid waste management for small containers and efforts to prevent breeding in plants is suggested for prevention of dengue in the district.

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