

Dengue Prevalence Trends in The Past Decade Across All Districts of Sri Lanka

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Dengue is a viral infection transmitted by the bite of an infected mosquito. The global prevalence of dengue has increased dramatically in recent decades. Dengue fever, dengue hemorrhagic fever, and dengue shock syndrome (DSS) occur in over 100 countries and threaten the health of more than 2.5 billion people in urban and peri-urban areas especially in south and south East Asia including Sri Lanka. This study was conducted to find out the trends of reporting dengue cases in all the administrative districts over the last decade. All 25 districts were selected as study area.

Annual dengue incidence data for each district over a 10-year period from 2006 to 2015 and Midyear population data of each year were collected. Then the number of cases per 1000 people per month was calculated in each year and plotted in scatter plots and calculated the gradient of linear trend line of each district. All statistical and graphical analyses were performed using Microsoft Excel 2010. Reporting of dengue cases of all the 23 districts except Mathale and Vavuniya shows the increasing trend over the past 10 years and it can be recognized as a continues public health hazard in Sri Lanka. The gradients are ranging from 0.555 to -0.038. All the 23 districts show the positive gradients of trendline. People who live in Colombo, Jaffna and Gampaha districts are highly vulnerable for dengue fever. These finding indirectly emphasize that the different efforts employed by the authorities to control dengue cases in the country have less impact on dengue prevention. The researches have to be conducted to find out the actual courses of spreading dengue over the island and controlling measures have to be restructured to manage this public health hazard.

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