

Weather Impact on Number of Dengue Cases in Temerloh

Mohammad Zainie Bin Hassan, Suzana Binti Mohd Hashim

Pejabat Kesihatan Daerah Temerloh

ABSTRACT

Background: Weather is always an issue for dengue control in district. We are not very sure whether cold weather, rainy or sunny day and humidity have a direct impact on dengue cases or not. **Objective:** To evaluate the association between number of dengue cases with weather temperature level in Temerloh District, Pahang, Malaysia. Hence, to identify whether raised in weather temperature level, rain and humidity are related with increasing number of dengue cases or not and to determine the incidence of dengue in Temerloh. **Methods:** All registered dengue cases in E-Denggi were collected as a cumulative data for number of dengue cases in a week according to epid week in Temerloh Health District and an average weather temperature level, rain distribution and humidity in a week were collected from Metereology Department website from January to December 2016. Data obtained were analysed by using Pearson correlation. P value of <0.05 is considered as statistically significant. **Results:** A total of 522 dengue cases in the year 2016 were included in this study. The incidence rate of Dengue fever in Temerloh was 296 per 100000 population. There were significant negative correlation between weather temperature level and number of dengue cases ($r=-0.419$, $p<0.01$), significant positive correlation between rain distribution ($r=0.293$, $p<0.05$) and humidity with number of dengue cases ($r=0.308$, $p<0.05$). **Conclusion:** This result implicated that cold weather, rainy week and humid weather had significant association with raised in dengue cases. Therefore, dengue control measure need to be more focus during these time as we expect that dengue cases will arise.