Correlation between Larvae Free Number with DHF Incidence in Sleman, Yogyakarta, Indonesia

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Abstract

Larvae free number (LFN) is a measure to evaluate the prevention of dengue hemorrhagic fever (DHF) through environmental management. It was assumed that the greater the LFN, the smaller the potential for transmission and vice versa. This study aims to prove whether LFN associated with incidence of DHF. This was an observational study using retrospective method. The study was conducted in 17 villages of 4 sub-districts with different levels of endemicity. Larvae free number and the incidence of DHF from year 2009 to 2013 used as independent and dependent variable respectively. Data of LFN and incidence of DHF obtained from District Health Office. There were 1,461 DHF cases in 4 sub-districts in year 2009-2013. The average of LFN was 80.70 (68.4 - 95). The relationship between the LFN and DHF was not associated with the incidence of DHF (p = 0.312). It was concluded that the value of LFN was not correlated with the incidence of dengue in Sleman, Yogyakarta.

Keywords: DHF, larva free number, correlation, environment management prevention