

SPATIAL ANALYSIS OF HOUSE INDEX WITH DHF CASES IN BANGILAN DISTRICT, TUBAN REGENCY

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ABSTRACT

The case of Dengue Hemorrhagic Fever (DHF) in Tuban Regency is still a health problem. Bangilan District is one of the sub-districts in Tuban Regency which has high cases. Control efforts to reduce dengue cases in Bangilan District have been carried out. In order to see success in control, it can be seen through the level of the house index in each village. The purpose of this study was to analyze the spatial house index of dengue cases in Bangilan District, Tuban Regency.

The type of research was descriptive analytic with retrospective approach and spatial modeling. A retrospective study was used because this study required data on DHF cases in 2020-2022. The variables of this research are the house index surveyed inside and outside the home and cases of DHF in Bangilan District. The sample of this study is approximately 20 houses with a radius of 100 m from the patient's house. Data analysis was used to determine the effect of house index and dengue cases using the GeoDa application.

The results showed that the average house index in Bangilan District was 20.8%. The pattern of the spread of DHF cases is random with an Average Nearest Neighbor = 1. The house index level in Bangilan District is at high risk because (HI > 5%). While the results of Moran's Index (I) = 0.061 show that there is no strong spatial autocorrelation effect on the house index on DHF cases, locally the only ones with spatial autocorrelation are Kedungmulyo, Sidodadi, and Bate Villages. Mapping is very useful for disease surveillance and epidemiology activities because it can assess the accuracy of maps in predicting disease risk, especially DHF disease

Keywords : Spatial distribution, house index, DHF