

SUMMARY

DHF is an infection caused by the dengue virus which is spread by the Aedes aegypti mosquito. DHF cases in Indonesia have spread to all regions, in Jambi Province alone, DHF cases have spread to all districts/cities in Jambi Province. Seeing the number of cases of DHF that occurred, this study was conducted to see what factors could affect DHF cases and to see which districts/cities were most prone to dengue cases.

Regression is a mathematical equation that explains the relationship between the response variable and the predictor variable. Spatial regression is a regression method used for spatial data types or data that have a location effect. The basis for the development of the spatial regression method is the linear regression method. The development is based on the influence of place or spatial on the analyzed data, which is included in the spatial data including the spread of a disease, agriculture, medicine and so on.

This study uses spatial data. Spatial data is data that contains location information, not only what is measured but shows where the location is where the data is. The data used is data on dengue cases in districts/cities in Jambi Province. DHF case data as the dependent variable and population, area, rainfall and clean water as independent variables.

This study conveys that the results of the dependency on the incidence of DHF in Jambi Province using Moran's I resulted in a linkage between districts/cities in Jambi Province, the spatial regression model that was formed conveyed that each of the independent variables, namely population, area, rainfall and clean water affect DHF cases in districts/cities in Jambi province. The mapping of the distribution of dengue cases in Jambi Province resulted in the distribution at different levels, Merangin Regency was at a low-low level, which means that the number of dengue cases in Merangin Regency has a low number of cases and the district is surrounded by districts/cities that are also have low dengue cases. Jambi City has cases that are at a high-high level, meaning that the number of cases in Jambi City has high DHF cases and Jambi City is surrounded by districts that have a high number of DHF cases.