

Estimation of Relative Risk of Dengue Fever in Makassar Using Localized Bayesian Autoregressive Conditional Model

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Abstract

Analysis of the relative risk of the spread of dengue fever (DF) in Makassar city, Indonesia, needs to be done to see the which areas are at high risk of DF. Bayesian Autoregressive Conditional (CAR) is used in the mapping model of this disease. This model is Able to model of relative risk by taking into account the smoothing of that relative risk and entering spatial information to reduce the error of the estimated parameters in order the reliable relative risk models is Obtained. In this study, the relative risk value of the spread of DF was analyzed using the localized Bayesian models CAR. Under this model the geographical mapping of DF in Makassar can be identified for each sub-district and shows that Makassar is still very vulnerable to DF.

Keywords: Bayesian, conditional autoregressive, dengue fever, a relative risk reduction, localized models