

ABSTRACT

Tuberculosis transmission can occur due to the mobility of agents from one district to another, causing regions with high case numbers to influence surrounding regions. Therefore, identifying regions at high risk of tuberculosis transmission is crucial to understand the interrelations between regions. This study aims to apply the Spatial Autoregressive (SAR) method to determine the influencing factors and mapping tuberculosis cases in Central Java in 2022. The analysis results show that the SAR model successfully identified significant factors such as population density, the number of households with access to healthy homes, and Bacillus Calmette-Guerin (BCG) immunization coverage in infants. The SAR model also revealed a significant relationship between tuberculosis cases in one district and neighboring districts. Based on the results of the Moran index test, it is known that there is spatial autocorrelation in tuberculosis cases in Central Java. The research results show that the SAR model has an AIC value of 63.62886.

Keywords: *Tuberculosis, Spatial Autoregressive Model, Mapping, Central Java*