ABSTRACT

Background: The incidence of tuberculosis in the West Bandung Regency has fluctuated over the past 3 years and has fallen short of the national TB target.
Purpose: To analyze relationship between physical and socio-economic environmental factors with incident of AFB (+) pulmonary tuberculosis in the West Bandung Regency in 2018, 2019, dan 2020.
Methods: This type of study is quantitative study using cross-sectional study. Population and samples are all AFB (+) cases of pulmonary tuberculosis of 16 sub-district in West Bandung Regency in 2018-2020. The tool used is questionnaire and ArcGIS 10.4.1 software. The data were analyzed using univariate, bivariate and spatial analysis.
Results: Based on the analysis, between healthy home coverage (p=0.001; r=0.726), population density (p=0.004; r=0.678), and pre-prosperity family coverage (p=0.000; r=0.897) is related to proportion of AFB (+) pulmonary tuberculosis in 2018. There is a relationship of healthy home coverage (p=0.004; r=0.674), population density (p=0.000; r=0.812), and pre-prosperity family coverage (p=0.003; r=0.690) with proportion of AFB (+) pulmonary tuberculosis in 2019. Also healthy home coverage (p=0.000; r=0.959), population density (p=0.000; r=0.968), pre-prosperity family coverage (p=0.000; r=0.976) is related to proportion of AFB (+) pulmonary tuberculosis in 2020. On the other hand, altitude does not show a relationship with the proportion of AFB (+) pulmonary tuberculosis in 2018. (p=0.371 and r=0.240), 2019 (p=0.926 and r=0.025), and 2020 (p=0.892 and r=0.037).
Conclusion: It takes efforts to control TB that involve improving the quality of life of communities through collaboration between the health sector and the non-health sector.

Keywords: Spatial Analysis, AFB (+) Pulmonary Tuberculosis, Physical Environment, Socio-Economic.