Analysis of Factor Affecting the Response to Treatment of First-line Pulmonary TB Treatment at Tugurejo Hospital, Semarang

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ABSTRACT

Background: Tuberculosis (TB) is still one of the infectious diseases of global concern. Tuberculosis treatment usingAnti Tuberculosis Drugs (ATD) should be given immediately when a person is diagnosed with tuberculosis. Several factors that can affect tuberculosis treatment include gender, age, nutritional status, and comorbidities. This study aims to determine the relationship between age, gender, nutritional status, and comorbidities with the response to first-line pulmonary tuberculosis treatment using Anti Tuberculosis Drugs category one in Tugurejo HospitalSemarang. **Methods**: This type of research is analytic observational with a cross-sectional approach. Age, gender, nutritional status, and comorbidities as independent variables, and response to first-line pulmonary tuberculosis treatment as thedependent variable. A total of 50 patients were taken as samples from the medical records of Tugurejo Regional PublicHospital. Statistical analysis used the chi-square test for bivariate and the logistic regression test for multivariate. **Results**: The results of the analysis showed that there was a significant relationship between nutritional status and treatment response (p-value 0.001), and there was a significant relationship between comorbidities and treatment response (p value 0.005). While the variables of age and gender did not have a significant relationship (p value 0.617and p value 0.425). The results of the logistic regression showed that comorbidities and nutritional status had significant results with the OR value of comorbidities (OR 13,622, 95% CI 2.207-84.075, p= 0.005) and nutritional status (OR 7.208, 95% CI 1.783-29.138, P=0.006). **Conclusion**: There is a significant relationship between nutritional status and comorbidities with the response to first-line pulmonary tuberculosis treatment at Tugurejo Hospital Semarang.

Keywords: Pulmonary Tuberculosis, Treatment Response, Nutritional Status, Comorbiditi