DETERMINANTS OF DELAYED DIAGNOSIS AND MULTI-DRUG RESISTENT TUBERCULOSIS TREATMENT IN SURAKARTA, CENTRAL JAVA

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ABSTRACT

Background: Tuberculosis (TB) is a leading cause of morbidity and mortality worldwide, accounting for about 9.6 million new cases and 1.5 million deaths annually. Multidrug resistant tuberculosis (MDR-TB), defined as resistance to, at least, rifampin and isoniazid (the recommended first-line therapeutic regimen), represents another important threat in the fight against the disease. Approximately 480,000 newly emerging cases of MDR-TB are estimated to occur every year. The spread of MDR-TB mostly derives from mismanagement of TB cases such as the use of inappropriate dosage, inappropriate regimen, limited availability of quality assured pharmaceutical products, and little effort to support patient adherence. This study aimed to examine the determinants of delayed MDR-TB diagnosis and treatment in Surakarta, Central Java.
Subjects and Method: This was a cross sectional study conducted at Dr. Moewardi Hospital, Surakarta, Central Java. A total of 73 MDR-TB patients were selected for this study. The dependent variable was delayed MDR-TB diagnosis and treatment. The independent variables were age, gender, distance to health facility, health facility type, suspect criteria of MDR-TB. Data on MDR-TB were taken from medical record. The other data were collected by questionnaire and analyzed by a multiple logistic regression.
Results: Delayed MDR-TB diagnosis was associated with age (OR= 1.02; 95% CI= 0.98 to 1.06; p= 0.330), gender (OR= 0.06; 95% CI= 0.19 to 1.75 p= 0.330), distance to health facility (OR=1.50; 95% CI= 0.53 to 4.19; p= 0.450), health facility type (OR= 0.97; 95% CI= 0.49 to 1.92; p= 0.920), and MDR-TB suspect criteria (OR= 0.91; 95% CI= 0.61 to 1.35; p= 0.620), but none of them was statistically significant. Delayed MDR-TB treatment was associated with age (OR= 0.99; 95% CI= 0.96 to 1.03; p= 0.870), gender (OR= 0.42; 95% CI= 0.15 to 1.22; p= 0.112), distance to health facility (OR= 1.2; 95% CI= 0.44 to 3.30; p= 0.730), health facility type (OR= 1.50; 95% CI= 0.77 to 2.92; p= 0.240), and MDR-TB suspect criteria (OR= 0.90; 95% CI= 0.62 to 1.32; p= 0.600), but none of them was statistically significant.
Conclusion: Age, gender, distance to health facility, health facility type, and MDR-TB suspect criteria, can not be used as reliable predictors of delayed MDR-TB diagnosis and treatment.

Keywords: delayed, diagnosis, treatment, multidrug resistant tuberculosis.

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