The incidence of MDR-TB based on Gen Xpert examination with previous tuberculosis drugs treatment history

Qori'atul Putri Nurmala¹, <u>Inayati</u>², Hasto Nugroho³

^{1,2} Fakultas Kedokteran dan Ilmu Kesehatan, Universitas Muhammadiyah Yogyakarta
³ Rumah Sakit Ario Wirawan Salatiga Jawa Tengah

ABSTRAK

Multidrugs-Resistant Tuberculosis (MDR-TB) is tuberculosis caused by tuberculosis drugs resistant Mycobacterium tuberculose at least Isoniazid and Rifampicin. MDR TB affects an efforts to tuberculosis cases eradication in the world. In 2014, 153 countries had reported MDR TB cases. MDR TB occurs due to secondary resistance. Indiscipline patients towards previous tuberculosis drugs treatment namely relapse, failure, and drop out. The study aimed to determine correlation between an incidence of MDR-TB based on Gen xpert examination in pulmonary tuberculosis patients and previous tuberculosis drugs treatment history. Cross-sectional study on 88 tuberculosis patients in Lung Hospital dr. Ario Wirawan Salatiga who was examined by Gene Xpert MTB / RIF and received tuberculosis drugs treatment . Previous tuberculosis drugs treatment history based on medical record patients. Eighty-eight patients diagnosed with tuberculosis showed 50 (56.8%) are male, 43(48.8%) are 26-45 years old. Previous tuberculosis drugs treatment history are 38(43.2%) relapse, 13 (14.8%) failure and 11 (12.5%) drop out patients. Gen-xpert examination results were 53(60.2%) MDR-TB Rifampicin resistant and 35 (39.7%) TB- Rifampicin sensitive. There is a correlation between the incidence of MDR-TB and previous tuberculosis drugs treatment history significantly (p value = 0.033 and r value = 0.228) Conclusion: Previous tuberculosis drugs treatment history is correlated with the incidence of MDR TB

Keywords: Multidrugs-Resistant Tuberculosis, tuberculosis drugs treatment history, tuberculosis.