

ABSTRACT

The Pattern of Re-treatment Cases and Risk Factor of Tuberculosis Multidrug Resistant Patients in Dr. Soetomo General Hospital, Surabaya during the period of 2011-2015

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Background: Tuberculosis Multidrug Resistant (MDR-TB) is a minimally resistant Mycobacterium tuberculosis that is resistant to rifampicin and isoniazid with or without other OAT based on standardized laboratory tests. The cause of MDR-TB cases of re-treatment still a debate among researchers and its risk factors have not been much studied. **Objective:** To study the pattern of re-treatment cases and risk factors for patients with MDR-TB cases of re-treatment. **Methods:** A descriptive observational case-control study, that was conducted in 349 patients who has MDR-TB cases of re-treatment. Then identified related factor to MDR-TB cases of re-treatment such as age, sex, diabetes mellitus, smoking history, and MDR-TB re-treatment cases using secondary data at center of medical records in Dr. Soetomo General Hospital Surabaya period 2011-2015. **Result:** MDR-TB pattern of re-treatment case in RSUD Dr. Soetomo Surabaya in 2011 to 2015 was failed category 2 (20.6%), category 2 no conversion (1.7%), non-DOTS treatment (2.6%), category 1 (27.2%) failure, category 1 no conversion (3.7%), relapse (33.8%), dropout (9.2%), and TB-HIV (1.1%). The most common age pattern was in the age group of 45-64 years in the case of category 2 no conversion (50.0%), non-DOTS treatment (44.4%), category 1 failure (47.4%), relapse (52, 5%), drug withdrawal (50.0%) and age group 25-44 years in case of category 2 failure (54.2%), category 2 no conversion (50.0%), category 1 no conversion (53.8 %), TB-HIV (50.0%). The most common gender pattern was male (57.6%). The most common pattern of diabetes mellitus was in the group of patients who did not have diabetes mellitus (61.8%). The most prevalent smoking pattern was in the group of patients who did not have a smoking history (60.0%). **Conclusion:** The rate of MDR-TB re-treatment case in RSUD Dr. Soetomo Surabaya was still a high occurrence rate because some predisposing factors. The management and treatment among MDR-TB re-treatment case patients should be improved to minimize the incidence.

Keywords: *Tuberculosis Multidrug Resistant, MDR-TB, risk factors*