**Impact of Tuberculosis Treatment Category on Treatment Outcomes: A Retrospective Cohort Study in a National Referral Hospital in Indonesia**

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**Background and aims.** Tuberculosis (TB) is one of the world’s leading infectious causes of death, with Indonesia ranking among the top three countries with the highest TB burden. The National TB Program categorizes patients into Category 1 (new cases) and Category 2 (relapsed or previously treated cases). This study aimed to examine the association between treatment category and treatment outcomes and to identify other factors influencing treatment success among pulmonary TB patients.

**Methods.** A retrospective cohort study was conducted using medical records of 360 adult pulmonary TB patients treated at Dr. Hasan Sadikin General Hospital, Bandung, from January 2019 to December 2021. Patients with drug-resistant or extrapulmonary TB and those with incomplete records were excluded. Data on demographics, comorbidities, and clinical status were analyzed. Treatment outcomes were classified as successful (cured or completed) or unsuccessful (lost to follow-up, transferred, or died). Statistical analysis was performed using chi-square and Fisher’s exact tests.

**Results** Of 360 patients, 291 (80.8%) received Category 1 treatment and 69 (19.2%) Category 2. The overall treatment success rate was 63.3%, with 29.2% lost to follow-up. Younger patients (15–49 years) had significantly higher success rates (68.4%) than those over 49 (40.9%) (p = 0.000029; RR = 1.671). Although not statistically significant, Category 1 patients had higher success rates (64.9%) than Category 2 (56.5%). No significant associations were found for sex, sputum status, diabetes, or TB complications. HIV-positive patients had higher success rates (71.1%) than HIV-negative patients (61.0%).

**Conclusion/Discussion.** While treatment category was not significantly associated with outcomes, younger age strongly predicted treatment success. The high proportion of patients lost to follow-up highlights the need for enhanced adherence strategies, particularly for older patients and those with prior TB history.

Keywords: tuberculosis, treatment category, treatment outcome, Indonesia, retrospective study