Factors associated with tuberculosis (TB) treatment success among Malaysian TB/ HIV co-infected patients

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ABSTRACT

Introduction: Tuberculosis (TB) and Human Immunodeficiency Virus (HIV) co-infection is a global public health issue among people living with HIV (PLHIV). The objective was to assess the factors associated with TB treatment success among Malaysia TB/HIV co-infected patients for five years (2016 – 2020). Methods: This cross-sectional study was carried out at TB/Leprosy Sector, MOH by reviewing the secondary data from the MyTB online system. The data were analyzed using SPSS version 25.0. Ethics approvals were obtained from the Medical Research Ethics Committee (MREC). Results: Malaysia had 5515 TB/HIV co-infected patients from January 2016 to December 2020. Their ages ranged from 18 to 93, with a mean (SD) of 39.8 (10.60) years. The range of TB treatment duration was 0 to 859 days, with a mean (SD) of 179.7 (129.01) days. The prevalence of TB treatment success was 56.3% and unsuccessful was 43.7%. The duration of treatments, race, education status, smoking status, anatomy of TB location and category case were significantly associated with TB treatment success. Conclusion: This study's findings showed that the prevalence of TB treatment success rate was 56.3% and still under the international target WHO of > 90.0%. The duration of treatments, race, education status, smoking status, anatomy of TB location and category case were significantly associated with TB treatment success. Therefore, the government should strengthen the TB/HIV collaborative efforts to achieve good treatment outcomes among these vulnerable patients.