

## **Tuberculosis-HIV Co-infection: Factors Associated With Its Mortality in Malaysia**

### **ABSTRACT**

About ten million people were diagnosed with Tuberculosis (TB) in 2019. It has been one of the top ten causes of death worldwide with 1.4 million recorded cases, and 15% of them were people with Human Immunodeficiency Virus (HIV). This study aims to identify factors associated with mortality among patients with TB-HIV co-infection in Malaysia. Methods: A retrospective cohort study was conducted using secondary data from the TB Information System (TBIS) in Malaysia from 2015 to 2019. A Kaplan-Maier survival curve and a Cox regression analysis were applied. Results: The factors associated with mortality among TB-HIV co-infection patients regarding foreign nationality include no level of education, no directly observed therapy (DOT) supervision, passive case detection, far-advanced findings on chest radiography, no highly active antiretroviral therapy (HAART), and no co-trimoxazole preventive therapy (CPT) treatment. Conclusion: The above findings provide a better picture of the current situation of TB-HIV co-infection on a national level. Therefore, the Ministry of Health Malaysia should give more focus and priority to addressing the challenge of reducing the dual burden disease of TB and HIV in Malaysia.