

Tuberculosis Death and Associated Risk Factors in Hulu Langat District

ABSTRACT

Introduction: Addressing the challenge of mortality among tuberculosis (TB) patients undergoing treatment is a significant concern in Malaysia. It is essential to identify the factors linked to TB mortality to evaluate national TB control programs and identify high-risk individuals. The objective of this study was to assess the percentage of TB mortality among patients receiving treatment over a three-year duration and identify the associated factors in Hulu Langat District. **Method:** The study used secondary data collected from the national TB registry from 2019 to 2021, and all registered TB cases that met the inclusion and exclusion criteria were included. The data in the study were tested using regressions. **Results:** The results showed that 11.5% of total registered TB patients had died during their course of treatment, and multiple logistic regression identified several significant factors associated with TB mortality, including gender (aOR= 0.75, 95%CI: 0.58, 0.97; p=0.026), age (aOR= 16.94, 95%CI: 5.14, 55.81; p<0.001), household income level (aOR= 1.56, (95%CI: 1.22, 1.99; p<0.001), living area (aOR= 1.53, 95%CI: 1.00, 2.32; p=0.048) education level (aOR= 1.89, 95%CI: 1.06, 3.35; p=0.030), the severity of chest x-ray (aOR= 5.03, 95%CI: 2.95, 8.58; p<0.001), and HIV status (aOR= 3.72, 95%CI: 2.71, 5.19; p<0.001). **Conclusion:** TB mortality in the Hulu Langat district is a significant public health concern and interventions such as intensified case finding, home visits for elderly patients, and health promotion are needed to reduce TB mortality and achieve the WHO End TB strategy milestone.