

Factors associated with advanced chest X-ray lesions among orang asli with tuberculosis in Batang Padang District, Perak

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ABSTRACT

Introduction: Morbidity and mortality rates of Tuberculosis (TB) among indigenous peoples are significantly greater than those of the dominant populations. The National Strategic Plan aims for Malaysia to be a TB-free country by 2035. Therefore, it is vital to ensure timely universal access to quality-assured diagnosis and treatment of TB. Delaying in TB diagnosis among the Orang Asli (OA) can result in a more advanced stage of the disease when it is finally detected, facilitates transmission in households and congregate settings, and leads to advanced chest X-ray (CXR) lesions. **Objective:** To determine the prevalence of advanced CXR lesions and the associated factors among the OA population with TB in Batang Padang, Perak. **Materials and Method:** This cross-sectional study used data from 71 OA patients recorded in the National TB Registry (NTBR) from 2018 to 2023. Descriptive analysis and logistic regression were used to describe the sociodemographics of TB patients among the OA and identify the factors associated with advanced CXR lesions. **Results:** The prevalence of advanced CXR lesions was 47.9%. Significant factors of advanced CXR lesions were age > 60 years old (OR: 4.772, 95% CI: 1.174, 18.997), smokers (OR: 4.538, 95% CI: 1.583, 13.008), and smear-positive TB (OR: 5.1, 95% CI: 1.491, 17.539). Despite being insignificant, other factors, such as sex, hometown, education level, job status, diabetes status, and distance to the nearest Primary Health Clinic should be considered by researchers for practical and theoretical reasons. **Conclusion:** This study's implications extend beyond academia and have a practical impact on healthcare providers, policymakers, and community organizations. The early TB case-detection efforts require solid multisectoral partnerships. Enhanced public-private partnerships can have a significant effect by ensuring the execution of recommended smoking cessation programs among the OA population and tracking the high-risk older adults, ensuring no one is left behind. Future research should include a mixed-methods study to investigate the social, behavioral, and clinical determinants of advanced CXR lesions further.