

ABSTRACT

Background: Tuberculosis (TB) is a disease caused by the bacterium *Mycobacterium tuberculosis*. Anemia in TB can weaken the immune system, making individuals more susceptible to infection. The immune system is an important factor affecting sputum conversion and treatment success. The purpose of this study was to determine the relationship between anemia and sputum conversion of pulmonary TB patients after intensive phase treatment at the Jambi City Health Center.

Methods: This study was an observational analytic study using a prospective cohort research design using primary data. The study was conducted at several health centers in Jambi City in July-December 2023 on adult TB patients who were diagnosed through BTA or TCM examination, but did not have a history of cormobid disease that could affect sputum conversion results and response to TB treatment. Every newly diagnosed TB patient was tested for Hb.

Results: Out of 50 adult TB patients, there were more male (52%) and early adult (46%) patients. The majority of TB patients did not experience anemia at the beginning of treatment (54%) and experienced sputum conversion after the intensive phase treatment (90%). The results of statistical analysis obtained a p value of 1

Conclusion: There was no relationship between anemia and sputum conversion of pulmonary TB patients after intensive phase treatment at the Jambi City Health Center.

Keywords: tuberculosis, anemia, sputum conversion

ABSTRAK

Latar belakang: Tuberkulosis (TB) merupakan penyakit oleh bakteri *Mycobacterium tuberculosis*. Anemia pada TB dapat melemahkan daya tahan tubuh, sehingga membuat individu lebih rentan terhadap infeksi. Sistem kekebalan tubuh merupakan faktor penting yang mempengaruhi konversi sputum dan keberhasilan pengobatan. Tujuan penelitian ini adalah untuk mengetahui hubungan antara anemia dengan konversi sputum pasien TB paru setelah pengobatan fase intensif di Puskesmas Kota Jambi.

Metode: Penelitian ini merupakan penelitian analitik observasional dengan menggunakan desain penelitian kohort prospektif menggunakan data primer. Penelitian dilakukan di beberapa Puskesmas di Kota Jambi bulan Juli-Desember 2023 pada pasien TB dewasa yang terdiagnosis melalui pemeriksaan BTA atau TCM, namun tidak mempunyai riwayat penyakit kormobid yang dapat mempengaruhi hasil konversi sputum dan respons terhadap pengobatan TB. Setiap pasien yang baru terdiagnosis TB dilakukan pemeriksaan Hb.

Hasil: Hasil penelitian dari 50 responden pasien TB dewasa terdapat lebih banyak pasien berjenis kelamin laki-laki (52%) dan usia dewasa awal (46%). Pada pasien TB mayoritas tidak mengalami anemia di awal pengobatan (54%) serta mengalami konversi sputum setelah pengobatan fase intensif (90%). Hasil analisis statistik didapatkan *p value* sebesar 1

Kesimpulan: Tidak terdapat hubungan antara anemia dengan konversi sputum pasien TB paru setelah pengobatan fase intensif di Puskesmas Kota Jambi.

Kata kunci: tuberkulosis, anemia, konversi sputum