

ABSTRAK

Latar belakang: Tuberkulosis (TB) yang disebabkan oleh *Mycobacterium tuberculosis* sering menyebabkan anemia, akibat kekurangan nutrisi dan malabsorpsi. Hal ini berdampak negatif pada kualitas hidup, prognosis, dan efektivitas pengobatan TB. Penilaian morfologi eritrosit melalui indeks eritrosit membantu mendiagnosis jenis anemia. Tujuan penelitian ini adalah untuk mengetahui hubungan antara manifestasi klinis dan morfologi eritrosit terhadap kadar hemoglobin pada pasien TB sebelum pengobatan di Puskesmas Kota Jambi.

Metode: Metode penelitian yang digunakan adalah pendekatan analitik dengan menggunakan desain studi *cross sectional*, yang melibatkan observasi dan pengukuran subjek penelitian pada satu waktu tertentu, serta melakukan analisis terhadap hasil pengamatan tersebut. Penelitian dilakukan di beberapa Puskesmas Kota Jambi mulai dari bulan Juli-Desember 2023 pada pasien TB dewasa hingga lansia yang terdiagnosis melalui pemeriksaan BTA atau TCM. Setiap pasien yang baru terdiagnosis TB dilakukan wawancara mengenai gejala. Kemudian, dilakukan pemeriksaan Hb dan morfologi eritrosit.

Hasil: Berdasarkan hasil penelitian terhadap 49 responden pasien TB sebagian besar tidak mengalami penurunan kadar Hb di awal pengobatan 51%. Diantara pasien TB, sebagian besar pasien berjenis kelamin laki-laki 53,1% dan usia dewasa 75,5 %. Dari hasil analisis statistik, diperoleh p value untuk gejala demam sebesar 0,003, anoreksia sebesar 0,006, penurunan berat badan sebesar 0,003, morfologi eritrosit sebesar 0,007. Sedangkan keringat malam didapatkan p value 0,111.

Kesimpulan: Kadar Hb berhubungan dengan gejala demam, anoreksia, penurunan berat badan dan morfologi eritrosit pada pasien tuberkulosis *pre-treatment* di Puskesmas Kota Jambi.

Kata kunci: Tuberkulosis, anemia, hemoglobin, morfologi eritrosit

ABSTRACT

Background: Tuberculosis (TB) caused by *Mycobacterium tuberculosis* often causes anemia, due to nutrient deficiencies and malabsorption. This negatively affects the quality of life, prognosis, and effectiveness of TB treatment. Assessment of erythrocyte morphology through the erythrocyte index helps diagnose the type of anemia. The purpose of this study was to determine the relationship between clinical manifestations and erythrocyte morphology to hemoglobin levels in TB patients before treatment at Jambi City Health Center.

Methods: The research method used is an analytic approach using a cross-sectional study design, which involves observing and measuring research subjects at one specific time, and analyzing the results of these observations. The study was conducted at several Jambi City Community Health Centers from July to December 2023 on adult to elderly TB patients diagnosed through BTA or TCM examination. Each newly diagnosed TB patient was interviewed about symptoms. Then, Hb and erythrocyte morphology were examined.

Results: Based on the results of the study of 49 TB patient respondents, most of them did not experience a decrease in Hb levels at the beginning of treatment 51%. Among TB patients, most patients were male 53.1% and adult age 75.5%. From the results of statistical analysis, the *p* value for symptoms of fever was 0.003, anorexia was 0.006, weight loss was 0.003, erythrocyte morphology was 0.007. While night sweats obtained a *p* value of 0.111.

Conclusion: Hb levels are associated with symptoms of fever, anorexia, weight loss and erythrocyte morphology in pre-treatment tuberculosis patients at Jambi City Health Center.

Keywords: Tuberculosis, anemia, hemoglobin, erythrocyte morphology