

POLTEKKES KEMENKES TANJUNGPINANG
PRODI TEKNOLOGI LABORATORIUM MEDIS
PROGRAM SARJANA TERAPAN

Skripsi, Juni 2025

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**Hubungan Kadar Hemoglobin (Hb) Dengan Kadar Feritin Pada Pasien
Tuberkulosis Paru Di Puskesmas Rawat Inap Panjang**

xv + 33 halaman, 6 gambar, 6 tabel, 17 lampiran

ABSTRAK

Tuberkulosis paru (TB) merupakan penyakit infeksi kronik yang disebabkan oleh *Mycobacterium Tuberculosis*. Infeksi ini sering menyebabkan gangguan hematopoietik, termasuk penurunan kadar hemoglobin (Hb) dan perubahan kadar feritin, yang mencerminkan status zat besi tubuh. Feritin sendiri juga merupakan protein fase akut yang dapat meningkat akibat peradangan. Tujuan Penelitian ini bertujuan untuk mengetahui hubungan antara kadar hemoglobin dengan kadar feritin pada pasien tuberkulosis paru di Puskesmas Rawat Inap Panjang. Metode penelitian ini menggunakan desain analitik *cross-sectional*. Populasi sampel sebanyak 40 dan sampel yang diambil sebanyak 30. Pemeriksaan Hb dilakukan dengan alat *Hematology Analyzer* dan pemeriksaan feritin dilakukan menggunakan metode ELISA. Analisis statistik menggunakan uji korelasi *Spearman* karena data tidak berdistribusi normal. Hasil penelitian menunjukkan rerata kadar hemoglobin adalah 11,4 g/dl dan rerata kadar feritin adalah 168,318 ng/ml, nilai minimal kadar hemoglobin 7,5 g/dl, nilai maksimal 15,1 g/dl dan nilai minimal kadar feritin 0,00 ng/ml, nilai maksimal 800,000 ng/ml. Hasil uji *Spearman* menunjukkan tidak terdapat hubungan yang signifikan antara kadar hemoglobin dan kadar feritin pada pasien TB paru ($p=0,886$; $r= 0,027$).

Kata Kunci : Anemia, Feritin, Hemoglobin, Status Zat Besi, Tuberkulosis Paru
Daftar Bacaan : 32 (2015-2025)

TANJUNGKARANG HEALTH POLYTECHNIC
MEDICAL LABORATORY TECHNOLOGY STUDY PROGRAM
APPLIED BACHELOR'S PROGRAM

Thesis, Juni 2025

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Relationship Between Hemoglobin (Hb) and Ferritin Levels in Pulmonary Tuberculosis Patients at a Community Health Center with Long-Term Hospitalization

xv + 33 page, 6 picture, 6 tabel, 17 attachment

ABSTRACT

Pulmonary tuberculosis (TB) is a chronic infectious disease caused by Mycobacterium tuberculosis. This infection often causes hematopoietic disorders, including decreased hemoglobin (Hb) levels and changes in ferritin levels, which reflect the body's iron status. Ferritin itself is also an acute phase protein that can increase due to inflammation. The aim of this study is to determine the relationship between hemoglobin levels and ferritin levels in pulmonary tuberculosis patients at the Panjang Inpatient Health Center. The study design used was an analytical cross-sectional study. The sample population consisted of 40 individuals, with 30 samples collected. Hemoglobin levels were measured using a hematology analyzer, and ferritin levels were determined using the ELISA method. Statistical analysis employed the Spearman correlation test due to the non-normal distribution of the data. The study results showed that the mean hemoglobin level was 11.4 g/dl and the mean ferritin level was 168,318 ng/ml, with a minimum hemoglobin level of 7.5 g/dl, a maximum of 15.1 g/dl, a minimum ferritin level of 0.00 ng/ml, and a maximum of 800,000 ng/ml. The Spearman correlation test results showed no significant relationship between hemoglobin levels and ferritin levels in pulmonary TB patients ($p=0.886$; $r=0.027$).

Keywords: Anemia, Ferritin , Hemoglobin, Iron Status, Pulmonary Tuberculosis
Reading List: 32 (2015-2025)