

# **Hubungan Laju Endap Darah (LED) Dengan Jumlah Leukosit Pada Pasien**

## **Tuberkulosis Paru Di Puskesmas Mamsena**

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### **ABSTRAK**

**Latar Belakang:** Salah satu penyakit menular adalah tuberkulosis (TB), yang disebabkan oleh bakteri *Mycobacterium tuberculosis*. Sebagian besar bakteri ini tidak hanya menyerang paru-paru tetapi juga dapat menyerang kelenjar, kulit, tulang, dan organ lain di tubuh manusia. Seseorang dapat terinfeksi dengan menghirup bakteri basil *Mycobacterium tuberculosis*. Bakteri menyebar ke alveoli melalui jalan napas. Di sana, mereka berkembang biak dan tampak bertumpuk. Tubuh seseorang yang menderita TB akan mengalami inflamasi, yang dapat menyebabkan gejala hematologi. Untuk mengidentifikasi infeksi awal tuberkulosis paru, pemeriksaan hematologi seperti laju endap darah (LED) dan jumlah leukosit sangat penting. Tujuannya adalah untuk melihat hubungan antara laju endap darah (LED) dan jumlah leukosit pada pasien tuberkulosis di Puskesmas Mamsena. Metodenya adalah desain cross-sectional dengan sampel total, dengan data primer dan sekunder dari pasien yang memenuhi kriteria inklusi. Hasil: Ada korelasi positif yang kuat antara nilai laju endap darah (LED) dan jumlah leukosit pada pasien tuberkulosis paru di Puskesmas Mamsena ( $\rho=0.788$ ,  $p<0.05$ ). Kesimpulan: temuan penelitian menunjukkan hubungan yang signifikan antara LED dan jumlah leukosit pada pasien tuberkulosis paru di Puskesmas Mamsena.

**Kata Kunci:** Tuberkulosis Paru, Laju Endap Darah (LED), Jumlah Leukosit.

***The Relationship between Erythrocyte Sedimentation Rate (ESR) and Leukocyte Count in Pulmonary Tuberculosis Patients at Mamsena Community Health Center***

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**ABSTRACT**

**Background:** Tuberculosis (TB) is an infectious disease caused by the bacteria *Mycobacterium tuberculosis*. Most of these bacteria not only attack the lungs, but can also attack other organs in the human body (for example: bones, glands, skin, etc.). Infection begins when a person inhales the *Mycobacterium tuberculosis* bacillus. Bacteria spread through the respiratory tract to the alveoli and then multiply and appear to accumulate. A person who is infected with TB will experience an inflammatory process in their body, this inflammation can cause haematological manifestations. Haematological examinations such as erythrocyte sedimentation rate (ESR) and leukocyte count are important to determine the initial infection of someone suffering from pulmonary tuberculosis. **Objective:** To analyse the relationship between erythrocyte sedimentation rate (ESR) and leukocyte count in patients suffering from tuberculosis at Puskesmas Mamsena. **Method:** Cross-sectional design with total sampling, with primary and secondary data collected from patients who met the inclusion criteria. **Results:** Shows a significant relationship between the erythrocyte sedimentation rate (ESR) value and the number of leukocytes in pulmonary tuberculosis patients at the Mamsena Community Health Centre. There was a strong positive correlation between ESR and leukocyte count ( $\rho=0.788$ ,  $p<0.05$ ). **Conclusion:** The results of the analysis show that there is a positive and significant relationship between ESR and the number of leukocytes in pulmonary tuberculosis patients at the Mamsena Community Health Center.

**Keywords:** Pulmonary Tuberculosis, Erythrocyte Sedimentation Rate (ESR), Leukocyte