

**Hubungan Derajat BTA Positif Dengan Laju Endap Darah Pada Penderita  
Tuberculosis Paru  
( Diwilayah Puskesmas Siwalan Kabupaten Pekalongan )**

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**ABSTRAK**

*Tuberculosis* merupakan penyakit menular yang disebabkan oleh bakteri *Mycobacterium tuberculosis*. Bakteri ini lebih sering menginfeksi paru-paru. Penderita TB paru dengan BTA positif akan mengalami inflamasi yang menyebabkan jumlah leukosit dan eritrosit meningkat. Jumlah leukosit berkaitan dengan fungsinya sebagai pertahanan, sehingga ketika terjadi infeksi pada penderita TB paru dengan BTA positif jumlah leukosit akan mengalami pengendapan yang lebih cepat karena bertambahnya jumlah sel darah, apabila jumlah leukosit tinggi maka, darah akan mengendap sehingga Laju Endap Darah akan tinggi. Tujuan penelitian untuk mengetahui hubungan derajat BTA positif dengan laju endap darah pada penderita Tuberculosis paru. Jenis penelitian ini adalah penelitian analitik. Sampel penelitian adalah pasien Tuberculosis paru derajat BTA positif di Puskesmas Siwalan Kabupaten Pekalongan, sebanyak 20 penderita. Hasil pemeriksaan menunjukkan bahwa rata-rata laju endap darah pada penderita derajat BTA positif 1 sebesar 20.66 mm/jam, sedangkan rata-rata laju endap darah pada derajat BTA positif 2 sebesar 30.71 mm/jam dan rata laju endap darah pada penderita derajat BTA positif 3 sebesar 61.80 mm/jam. Uji statistik *spearman rank* diperoleh *p value* sebesar  $0,00 < 0,05$ , dan nilai *r* sebesar 0,716, sehingga dapat disimpulkan bahwa ada hubungan derajat BTA positif dengan Laju Endap Darah pada penderita TB paru.

Kata kunci : Tuberculosis Paru, Derajat BTA positif, Laju Endap Darah, Hubungan

**Relationship of Positive BTA with Blood Sediment Rate in Lung Tuberculosis Patients**  
**(In the Siwalan Puskesmas area, Pekalongan Regency)**

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**ABSTRACT**

Tuberculosis is an infectious disease caused by the bacterium *Mycobacterium tuberculosis*. These bacteria infect the lungs more often. Patients with pulmonary TB with smear positive will experience inflammation which causes the number of leukocytes and erythrocytes to increase. The number of leukocytes is related to its function as a defense, so that when there is infection in pulmonary TB patients with positive smear, the number of leukocytes will experience a more rapid deposition due to an increase in the number of blood cells, if the leukocyte count is high then the blood will settle so that the blood sedimentation rate will be high. The aim of the study was to determine the relationship of positive BTA with blood sedimentation rate in patients with pulmonary tuberculosis. This type of research is analytical research. The study sample was a positive smear-positive pulmonary tuberculosis patient at Siwalan Health Center in Pekalongan Regency, as many as 20 patients. The examination results showed that the average blood sedimentation rate in patients with positive smear 1 was 20.66 mm / hour, while the average blood sedimentation rate in smear positive 2 was 30.71 mm / hour and the average blood sedimentation rate in patients with positive smear was 3 amounting to 61.80 mm / hour. Spearman rank statistical test obtained  $p$  value of  $0.00 < 0.05$ , and  $r$  value of 0.716, so it can be concluded that there is a positive BTA degree relationship with blood sedimentation rate in pulmonary TB patients.

Keywords: Pulmonary Tuberculosis, Positive BTA Degree, Blood Sedimentation Rate, Relations