

## RINGKASAN

Diagnosis Tuberkulosis dapat ditegakkan dari anamnesis, pemeriksaan fisik, laboratorium dan pemeriksaan penunjang lainnya, tetapi dalam konteks diagnosis TB dalam strategi DOTS, hanya akan dibicarakan peranan pemeriksaan hapusan dahak mikroskopis langsung yang merupakan metode diagnosis standart. Pemeriksaan mikroskopis dengan pengecatan *Ziehl Neelsen* untuk mendeteksi BTA adalah metode yang paling cepat dan murah.

Penelitian ini bertujuan untuk menelaah kualitas pemeriksaan mikroskopis BTA dalam menunjang program DOTS di Kabupaten Sampang , sehingga dapat diketahui hasil pengecatan sputum di PRM Kabupaten Sampang, hasil pengecatan sputum BTA di Instalasi Mikrobiologi Klinik RS dr Soetomo serta dapat membandingkan hasil pengecatan sputum BTA di PRM Kabupaten Sampang dengan di Instalsi Mikrobiologi Klinik RS dr Soetomo Surabaya.

Setelah dilakukan pengambilan sampel di PRM Kabupaten Sampang selama 3 bulan (Juni – Agustus 2005), dimana setiap penderita yang memenuhi kriteria sampel telah diperiksa oleh klinisi dan kemudian di diagnosis sebagai Suspek Tuberkulosis Paru. Setelah itu dilakukan pemeriksaan dahak secara mikroskopis dengan pewarnaan *Ziehl Neelsen* sebanyak 3 kali berturut-turut (Sewaktu-Pagi-Sewaktu). Dari penderita-penderita Suspek Tuberkulosis paru tersebut, diambil sebanyak 50 penderita dengan hasil pemeriksaan BTA positif maupun negatif sebagai sampel. Sputum berasal dari PRM Kabupaten Sampang dan di lakukan pemeriksaan mikroskopis BTA dengan metode *Ziehl Neelsen* di Laboratorium PRM Kabupaten Sampang dan sebagian sputum di Lakukan Pemeriksaan Mikroskopis BTA di Instalasi Mikrobiologi klinik RS dr Soetomo Surabaya dengan metode yang sama.

Hasil pemeriksaan di PRM Sampang sebanyak 31 orang penderita BTA positif (62%) dan 19 orang penderita BTA negatif (38%). Sedangkan di Laboratorium Klinik Rumah Sakit Umum Dr Soetomo Sirabaya 25 BTA positif (50%) dan 25 orang BTA negatif(50%) disebut dengan positif palsu 25,8% , Negatif Palsu 10,5% dan Tingkat Kesalahan pemeriksaan mikroskopis BTA 20%.

Jika dipergunakan batas tingkat kesalahan yang telah ditetapkan oleh Depkes RI yaitu 5%, maka tingkat kesalahan ini sangat tinggi yakni 20%. Hal ini bisa disebabkan karena beberapa hal berikut ini;

1. Tingkat pendidikan petugas masih rendah
2. Masa kerja di laboratorium masih pendek
3. Tingkat pelatihan yang masih sedikit
4. Tugas rangkap yang dikerjakan masih banyak

Sebagai kesimpulan tingkat kesalahan pemeriksaan BTA (Bakteri Tahan Asam) sangat tinggi, dengan kegiatan pelatihan ini kiranya bisa mengatasinya.

Dengan tingkat pendidikan petugas Laboratorium di PRM Kabupaten Sampang sebagai tenaga ahli (Analisis) yaitu sebesar 4 responden (80%) dan 1 orang tidak ahli (20%) . Sedangkan petugas Lab.Mikrobiologi Klinik RS dr Soetomo Surabaya tenaga ahli (lulusan Analisis) yaitu 3 responden (100%). Di PRM Kab.Sampang lama bekerja rata-rata 1-5 tahun sebanyak 3 responden (60%), < 1 th 1 responden (20%) dan 1 responden (20%) > 5th, sedangkan di Instalasi Mikrobiologi Klinik RS dr Soetomo Surabaya lama bekerja 1-5 th sebanyak 2 responden (66,7%) dan > 5th sebanyak 1 responden (33,3%). Di PRM

Kabupaten Sampang yang sudah dilatih sebanyak 4 responden (80%) dan belum pernah pelatihan sebanyak 1 responden (20%), sedangkan responden di Instalasi Mikrobiologi Klinik RS dr Soetomo semuanya pernah ikut pelatihan yaitu 3 orang (100%) dan semua masih merangkap dengan tugas lain.

Sebagai kesimpulan hasil pemeriksaan mikroskopis BTA di PRM Sampang dibanding dengan di RSU Dr Soetomo tingkat kesalahan 20 % ini cukup tinggi melebihi standart Depkes, dengan kegiatan pelatihan kiranya bisa mengatasi hal tersebut.

## SUMMARY

Tuberculosis diagnose can be undertaken from anamnesis, physical, laboratory and other supporting examinations, but in the context of Tuberculosis diagnose under the DOTS strategy, this research merely discusses a role of direct sputum smear which are standart diagnose method Microscopic examination with *Ziehl Neelsen* staining to detect the acid fast bacilli is the most rapid and cheapest method.

The purpose of this study were comparing the result of direct microscopic examination of *Ziehl Neelsen* staining for detection of Acid Fast Bacilli (AFB) in PRM Sampang district area and that examined in Clinical Microbiology Laboratory in dr Soetomo Hospital Surabaya

After taking samples in PRM Sampang district area for 3 months (June-August 2005), wich every patients with all criteria samples checked by health technition then diagnosed as inquiry/sputum Tuberculosis. After that, sputum ware examined by microscopic with *Ziehl Neelsen* staining three times continuously (at the time of first visiting, and two sample at the second day in the morning and at the time of visiting to health center). From suspect Tuberculosis patients, taken 50 patients results acid fast bacilli examination positive and negative as sample. Sputum for PRM Sampang district area and checked microscopic acid fast bacilli examination with *Ziehl Neelsen* method in PRM Sampang laboratory and another sputum were examination in clinical Microbiology Laboratory in dr Soetomo Hospital with same method.

Results in PRM Sampang, 31 patients were acid fast bacilli positive (62%) and 19 patients were acid fast bacilli negative (38%). In Clinical Microbiology Laboratory in dr Soetomo Hospital Surabaya 25 patients were acid fast bacilli positive (50%) and 25 patients are acid fast bacilli negatif (50%) with ***False positive*** 25,8%, ***False Negative*** 10,5% and ***Error Rate*** in acid fast bacilli microscopic examination 20%.

This result of error rate was high against the recommended standart 5% by Departement of Health. It would be das to many factors, such in the education, facilities and experience that different to Clinical Microbiology Laboratory in Dr Soetomo Hospital. Supported by laboratory technician education in PRM Sampang as analis 4 respondens (80%) and 1 respondens non analis (20%). Clinical Microbiology Laboratory in Dr Soetomo Hospital as analis 3 respondens (100%). In PRM Sampang mean work 1-5 th to 3 respondens (60%) and > 5 th (33,3%). In PRM Sampang is 4 respondens (80%) follwed acid fast bacilli microbiology eaxamination course and 1 respondens (20%) not yet following this course, Clinical Microbiology Laboratory in Dr Soetomo Hospital all technicians followed course are 3 respondens (100) and all of them still bacilli have another job.

The conclusion, mickroscopic examination for acid fast bacilli in Sampang Health Center (PRM) was difference compare to dr Soetomo Laboratory . The error rate 20% is too high against the standart 5% of Departement of Health. The training activity for all that invalved in the AFB examination will by beneficial.

## ABSTRACT

### Kustono

In DOTS strategy, direct sputum smear become a standart diagnosis method. Objective of this research is to study diagnosis pulmonary tuberculosis on basis of clinical symptoms, microscopic acid fast bacilli examination. Sample includes patients pulmonary tuberculosis with negatife smear of acid fast bacillus and positife smear of acid fast bacillus.

From suspect Tuberculosis patients, taken 50 patients results acid fast bacilli examination positive and negative as sample. Sputum for PRM Kabupaten Sampang and checked microscopic acid fast bacilli examination with *Ziehl Neelsen* method in PRM Kabupaten Sampang laboratory and another sputum checked in clinical microscopic instation RS dr Soetomo with same method.

In the end of research, it can be known how many percentage of false positive, false negatife and error rate.

Results in PRM Kabupaten Sampang, 31 patients are acid fast bacilli positive (62%) and 19 patients are acid fast bacilli negative (38%). In clinical microbiology instalation RS dr Soetomo 25 patients are acid fast bacilli negative (50%) and 25 patients are acid fast bacilli positive (50%) with false positive 25,8%, false negative 10,5% and error rate in acid fast bacilli microscopic examination 20%, supported by laboratory technician education, mean works, and all of them still have another job

We did *Chi Square* statistic test differencial ( $p=0.00$ ), it means there are significan results of acid fast bacilli microscopic examination present morning in PRM Kabupaten Sampang with clinical microbiology instalation RS dr Soetomo Surabaya. causal factor is person, instrument, and material.