

## ABSTRACT

SENSITIVITY OF BACTERIA CAUSING LOWER RESPIRATORY TRACT  
INFECTION NON TUBERCULOSIS TO COTRIMOXAZOLE AT  
MICROBIOLOGY LABORATORIUM DR. M . DJAMIL HOSPITAL  
ON 1 JANUARY 2012 – 31 DECEMBER 2012

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Respiratory tract infections diseases, especially lower respiratory tract infections non tuberculosis is a health problem that is often encountered. Proper diagnosis and appropriate antibiotic selection based on testing and sensitivity will be helpful in the treatment of disease. Co-trimoxazole is a first-line antibiotic and widely used in several health centers as one of the treatment of lower respiratory tract infections non tuberculosis.

This research was conducted from July 2013 until January 2014 at in the department of microbiology laboratory of RSUP Dr. M. Djamil Padang. The goal of this research is to discover which bacterium causes lower respiratory tract infection and its sensitivity to Co-trimoxazole. This research is a cross-sectional descriptive study.

The results of research shown that there were 671 requests for microbiological examination which included a clinical diagnosis of lower respiratory tract infection as non-tuberculosis, most revealed clinical sign as pneumonia (87,78%), followed by bronchiectasis (5,96%), chronic bronchitis (4,32%), and acute bronchitis (1,94%). Besides that, according to the research result, bacteria that cause lower respiratory tract infection are *Klebsiella pneumoniae* (51,92%), *Streptococcus a hemolyticus* (17,78%), and *Pseudomonas sp.* (9,25%). All the bacteria has 18,78% sensitivity to cotrimoxazole.

It can be concluded that the bacteria which cause the highest number of lower respiratory tract infection cases is *Klebsiella sp.* and the bacteria sensitivity to cotrimoxazole is poor.

**Keyword:** lower respiratory tract infection, bacteria, sensitivity, cotrimoxazole.

## ABSTRAK

### POLA SENSITIVITAS BAKTERI PENYEBAB INFEKSI SALURAN NAPAS BAWAH NON TUBERKULOSIS TERHADAP KOTRIMOKSAZOL DI LABORATORIUM MIKROBIOLOGI RSUP DR. M. DJAMIL PADANG PERIODE 1 JANUARI 2012- 31 DESEMBER 2012

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Penyakit infeksi saluran napas, terutama infeksi saluran napas bagian bawah non tuberkulosis merupakan masalah kesehatan yang sering dihadapi. Penegakan diagnosis secara tepat dan tepat serta pemilihan antibiotika berdasarkan uji sensitivitas akan sangat membantu dalam tatalaksana penyakit. Kotrimoksazol merupakan antibiotika lini pertama dan banyak digunakan di beberapa puskesmas sebagai salah satu pengobatan infeksi saluran napas bawah non tuberkulosis.

Penelitian ini telah dilaksanakan pada bulan Juli 2013 sampai Januari 2014 di Laboratorium mikrobiologi RSUP Dr. M. Djamil Padang. Tujuannya untuk mengetahui bakteri penyebab infeksi saluran napas bawah serta sensitivitasnya terhadap kotrimoksazol. Penelitian ini merupakan studi deskriptif yang bersifat *cross-sectional*.

Hasil penelitian menunjukkan bahwa terdapat 671 permintaan pemeriksaan mikrobiologis yang mencantumkan diagnosis klinis sebagai infeksi saluran napas bawah non tuberkulosis, sebagian besar ditegakkan diagnosis pneumonia (87,78%), diikuti oleh bronkiektasis (5,96%), dan bronkitis kronis (4,32%), bronkitis akut (1,94%). Selain itu, dari hasil penelitian ditemukan bakteri penyebab terbanyak infeksi saluran napas bawah non tuberkulosis yang utama adalah *Klebsiella pneumoniae* (51,92%), *Streptococcus  $\alpha$  hemolyticus* (17,78%), dan *Pseudomonas sp.* (9,25%). Persentase sensitivitas bakteri penyebab infeksi saluran napas bawah terhadap kotrimoksazol sebesar 18,78%.

Disimpulkan bahwa bakteri penyebab terbanyak pada infeksi saluran napas bawah non tuberkulosis adalah *Klebsiella sp* dan sensitivitas bakteri terhadap kotrimoksazol kurang baik.

**Kata kunci:** infeksi saluran napas bawah non tuberkulosis, bakteri penyebab, sensitivitas, kotrimoksazol