

ABSTRACT

Background: *Pneumonia is an acute respiratory infection of the lungs. According to a report by the United Nations Children's Fund (UNICEF), global pneumonia cases exceed 1,400 per 100,000 children, or 1 case per 71 children annually. In Indonesia, pneumonia is the leading cause of death among children aged 12-59 months (toddlers). The characteristics of the pathogens responsible for the disease and the host's immune response significantly influence the progression of pneumonia. This study aimed to determine the relationship between rational empirical antibiotic therapy and clinical improvement in pediatric pneumonia patients at Raden Mattaher Hospital in Jambi.*

Methods: *This study was an analytical observational study employing a cross-sectional approach. The study samples were pediatric pneumonia patients who received antibiotic therapy in the inpatient ward at Raden Mattaher Hospital, Jambi. Sampling was performed using a purposive sampling technique. Statistical test use the chi-square test.*

Results: *The use of empirical antibiotics was predominantly dominated by ceftriaxone, which was administered to 28 patients (41.2%). Of the total patients, 43 patients (63,2%) received rational antibiotic therapy, while 25 patients (36,8%) received irrational antibiotic therapy. No significant relationship was found between rational empirical antibiotic therapy and clinical improvement in the patients (p value = 0.333).*

Conclusion: *Based on this research, there was no significant relationship was found between rational empirical antibiotic therapy and clinical improvement of pediatric pneumonia patients at the inpatient ward of Raden Mattaher Hospital in Jambi.*

Keywords: *Rational Therapy, Empirical Antibiotics, Clinical Outcome, Pediatric Pneumonia*

ABSTRAK

Latar Belakang: Pneumonia merupakan suatu penyakit infeksi saluran pernapasan akut (ISPA) pada paru-paru. Laporan *United Nations Children's Fund* (UNICEF) menunjukkan bahwa secara global kasus pneumonia mencapai lebih dari 1.400 kasus per 100.000 anak, atau 1 kasus per 71 anak dalam setiap tahunnya. Di Indonesia, pneumonia menjadi penyebab kematian terbanyak pada kelompok usia 12-59 bulan (balita). Karakteristik patogen yang berperan pada penyakit ini serta respon imun pejamu menentukan perkembangan penyakit ini. Tujuan penelitian ini untuk mengetahui hubungan antara terapi rasional antibiotik empiris dengan perbaikan klinis pada pasien pneumonia anak di Instalasi Rawat Inap RSUD Raden Mattaher Jambi.

Metode: Penelitian ini merupakan penelitian yang bersifat observasional analitik dengan menggunakan pendekatan secara *cross sectional*. Sampel penelitian ini adalah pasien pneumonia anak yang diberi terapi antibiotik di Instalasi Rawat Inap di RSUD Raden Mattaher Jambi. Pengambilan sampel dilakukan dengan teknik *purposive sampling*. Uji statistik menggunakan uji *Chi-Square*.

Hasil: Penggunaan antibiotik empiris didominasi oleh penggunaan ceftriaxone sebanyak 28 pasien (41,2 %). Gambaran pemberian adalah 43 pasien (63,2%) diberikan antibiotik secara rasional dan 25 pasien (36,8%) diberikan antibiotik secara tidak rasional. Tidak terdapat hubungan antara terapi rasional antibiotik empiris dengan perbaikan klinis pasien (*p-value* 0,333)

Simpulan: Berdasarkan penelitian ini, tidak terdapat hubungan antara terapi rasional antibiotik empiris dengan perbaikan klinis pasien pneumonia anak di Instalasi Rawat Inap RSUD Raden Mattaher Jambi.

Kata Kunci: Terapi Rasional, Antibiotik Empiris, Perbaikan Klinis, Pneumonia Anak