

## ABSTRACT

### **DRUG UTILIZATION STUDY OF ANTIBIOTICS IN INFANT PNEUMONIA PATIENT (Study at Department of Pediatric Inpatient Care Dr. Soetomo Teaching Hospital Surabaya)**

**ANGGRAENI PERMATASARI**

Pneumonia is an infection in lower respiratory tract that caused inflammation on the parenchyma of the lungs. The infection is due to the invasion of several pathogens like bacteria, virus, parasites, and fungi. The main therapy for pneumonia is antibiotics along with supportive therapy like oxygenation, mechanical ventilation, symptomatic drugs, and etc. The antibiotics are given regarding to several conditions like ages, body weight, severity of the infection, and clinical condition of the patient.

The aims of this study was to analyze the antibiotics used in the hospital settings of infant pneumonia; to describe drug use with its correlation to clinical, laboratory, or microbiological data; and to identify Drug Related Problems (DRPs). This study was a retrospective study by using medical records of the patients aged 1 month until 1 year during January to December 2012 period that hospitalized at Department of Pediatric Inpatient Care Dr. Soetomo Teaching Hospital Surabaya.

There were 51 patients with pneumonia included in this study. The major antibiotic used in treating infant pneumonia was ampicillin sulbactam, other antibiotics were also used in less patients like amikacin, erythromycin, ceftriaxone, cloxacillin, and gentamicin. The antibiotics dosage and frequency in some patients were found to be similar with the recommended dosage and frequency in literature. The duration of antibiotics therapy given was depending on the condition of the patients. Outcomes of the therapy was the improving condition of the patients including clinical condition and laboratory data after therapy was given. Drug related problems that could be observed were adverse effects and drug interactions.

**Keywords :** *Pediatric pneumonia, Infant pneumonia, Drug Utilization Study (DUS), Antibiotics, Ampicillin sulbactam, Drug Related Problems (DRPs)*