

## **ABSTRACT**

### **STUDY OF ANTIBIOTIC USE AND QUANTITATIVE EVALUATION IN THE PEDIATRIC DEPARTMENT (At Bhayangkara H. S. Samsleri Mertojoso Hospital Surabaya)**

Nur Arbaisyah

The high intensity of antibiotic use has the potential to risk the imprudent of antibiotic use which raises global problems, namely antibiotic resistance. One of antibiotic resistance control programs is by conducting surveillance of antibiotic use patterns and evaluating the quantitative use of antibiotics. This research is retrospective observational using patient medical records of patients undergoing hospitalization in Pediatric Department Bhayangkara H.S. Samsleri Mertojoso Hospital Surabaya from November 1<sup>st</sup> 2018 to December 31<sup>st</sup> 2018. The number of samples was 150 samples consisting of 87 male patients (58%) and 63 female patients (42%). The results showed the use of single antibiotics in Pediatric Department is 168 prescriptions (93%) with ceftriaxone as the single most antibiotic and the use of combined antibiotic in Pediatric Department is 11 prescriptions (7%) with the most combination antibiotic therapy was ampicillin-gentamycin. The most widely used type and regimentation of antibiotic doses in Pediatric Department are ceftriaxone (1x1 g) IV of 19.58%, ampicillin (4x250 mg) IV of 8.99%, and cefixime (2x20 mg) PO of 6.84%. The most widely used antibiotics in abdominal infection are cefixime, while the most widely used antibiotic in the respiratory tract infection, urinary tract infection, and skin and soft tissue infection is ceftriaxone. The highest DDD/100 patient-days antibiotic values are ceftriaxone with 17.27/100 patient-days, ampicillin 3.61/100 patient-days, and cefixime 1.18/100 patient-days. Other antibiotics are gentamycin 1.03/100 patient-days, thiamphenicol 0.78/100 patient-days, co-amoxiclav 0.26/100 patient-days, and spiramycin 0.17/100 patient-days. Ceftriaxone has the highest DDD/100 patient-days and was the most frequent antibiotic that prescribed in Pediatric Department Bhayangkara H.S. Samsleri Mertojoso Hospital Surabaya.

Keywords: Defined Daily Doses, Antibiotics, Pediatric Department, Bhayangkara Hospital