

## ABSTRACT

*Pneumonia was an infection of lungs which made inflammatory caused by microorganism. Based on the research of Ditjen P2PL, in 2014, was claimed that pneumonia was number three of cause of death for child less than five years old in Indonesia those were 9,4%. The use of antibiotic was a treatment for pneumonia patient must be use rationally. In Canada, 74% of preschool children were prescribed antibiotics for the treatment of respiratory infections and 85% of these cases got a prescription for an antibiotic, when not needed. This research aimed to reveal the rationality of antibiotic use and to reveal the relation between the rationality of antibiotic use with length of stay of child less than five years patient who got pneumonia in certain ward Panembahan Senopati Bantul Hospital.*

*This research used observational research which was designed descriptively by using cross sectional method. The data was taken in September 2016 by using retrospective in RSUD Panembahan Senopati Bantul Yogyakarta. The population of this research was taken from the patient in January- December 2015 as much as 62 patients. The rationality of antibiotic use was done by using analytical descriptive based on accurate medicine choice, dosage, interval time of giving medicine, duration of giving medicine and side effect.*

*The research showed that the accuracy of diagnosis in 62 patients (100%), accuracy of indication in 62 patients (100%), the accuracy in choosing medicine in 53 patients (85,48%), accuracy of time interval on giving the medicine for 34 patients (54,83%), accuracy in duration of giving medicine for 61 patients (98,38%), and not having side effect the medicine for 60 patients (96,77%). The longest hospitality was 24 days, then the shortest duration was 3 days. Statically test showed that the length of stay influenced the rationality of antibiotic use ( $p=0,002$  ;  $r = -0,377$ ) that showed for child less than five years who got pneumonia especially to make them faster to treated.*

***Keywords: Antibiotic, Children under five years old, Rationality, Pneumonia, Length of Stay***