# ABSTRACT

## ANALYSIS OF ANTIBIOTIC IN INTERNAL MEDICINE AND SURGICAL PATIENTS AT RSUD dr. DORIS SYLVANUS PALANGKA RAYA

**Background-** Antibiotics widely used in infections caused by bacteria. Along with development and widespread use of antibiotics, the development of antibiotic resistant microbes is also increasing. The intensity use of antibiotics in hospitals is higher than in the community, therefore the inappropriate use of antibiotics increases the development of resistant microbes. Controlled use of antibiotics can prevent the emergence of antibiotic resistance and save the use of antibiotics which will ultimately reduce the burden of patient care cost, shorten patients length of stay, savings for the hospital, and improve the quality of hospital services. One indicator of the quality of hospital services is the evaluation of antibiotics use.

**Objective-** The aim of this study was to determine the quality and quantity of antibiotic use in internal medicine and surgical patients at RSUD dr. Doris Sylvanus Palangka Raya.

**Method-** This research was a prospective cross sectional observational analytical study. Data were collected from medical records, nurse records, drug administration records of patients who received antibiotics in the internal medicine and surgery, by total sampling method. The research period was carried out in May-June 2019. The total sample was 205 patients consisting of 95 internal patients and 110 surgical patients.

**Result-** the antibiotic qualitative analysis using the Gyssens method in internal disease patients: 55.7% category 0, 4.3% category II, 6.1% category III, 13.9% category IV, 18.3% category V, and 1.7% category VI. In surgical patients result: 47.0% category 0, 4.9% category IV, 42.7% category V, and 5.5% category VI. While the result of antibiotics quantitative analysis show 23.43 DDD/*100 patients-day* in internal disease patients and 55.96 DDD/*100 patients-day* in surgical patients.

**Conclution-** This research describes that the rational use of antibiotics in internal disease patients was 55.7% and 47.0% in surgical patients, there is no significant difference. Inapproriate use of antibiotics is more in surgical patients (24.3%) than in internal disease patients which is only 4.8%. For the category of no indication (category V) in surgical patients was 42.7% and in internal disease patients was 18.3%, there were significant differences in the administration of antibiotics without indication. Both from quantitative and qualitative results, it was found that the use of antibiotics in surgical patients was greater than internal disease patients. With this research as the first step, it is hoped the future research can be carried out to increase rational use of antibiotic in RSUD dr. Doris Sylvanus Palangka Raya.

Keywords- analysis of antibiotics, quantitative antibiotic, Gyssens, use of antibiotics