

## **ABSTRACT**

### **ANTIBIOTIC INTERACTION STUDY IN WIDJAJA ASTHMA CENTRE SURABAYA CLINIC**

Drug interactions are interactions that can occur when the effects of drugs are changed by other drugs, food or drinks. These drug interactions can cause several problems, including decreased therapeutic effect, increased toxicity, or unexpected pharmacological effects. Antibiotics are the most widely used drugs for infections caused by bacteria. The design of this study was an observational descriptive study made using a quantitative research method by collecting several recipes at Widjaja Asthma Centre Surabaya Clinic. In analyzing the data, a descriptive method was used to find out during interactions antibiotic prescriptions at Widjaja Asthma Centre Surabaya Clinic. The population in this study were all prescriptions period July to December 2022, with inclusion criteria based on prescriptions containing antibiotic. The sample was taken using a total sampling technique. The drug interaction mechanism was determined by inserting the antibiotic drug which has the possibility of interacting with other drugs in the prescriptions on the Medscape application. A total of 2044 prescriptions were screened and analyzed in this study and 337 prescriptions with potential drug interactions were obtained. The result of the analysis of potential drug interactions based on mechanism showed that pharmacokinetic interactions with metabolic phases were (20,47%), pharmacodynamic interactions were 268 (79,53%). Based on the degree of severity, there was no minor (0%), close monitors were 291 (86,35%), and serious were 46 (13,65%). From this level of severity it can be concluded that the use of drug combinations in joint use needs to be considered again and need some monitoring.

*Keywords : Drug interaction, antibiotics, prescription, Medscape,*