## **ABSTRACT**

## ANTIBIOTIC INTERACTION STUDY IN RAFA FARMA 1 PHARMACY SURABAYA

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Drug interactions occur when a drug changes due to the presence of another drug, food, or drink. Drug interactions can produce desired effects (Desirable Drug Interaction) or unwanted effects (Undesirable/ Adverse Drug Interactions/ADIs) which usually cause drug side effects and toxicity due to increased plasma drug levels, or conversely decreased plasma drug levels. which causes the therapeutic results to be suboptimal (1). This interaction can occur both inside and outside the body, which is more often what happens inside the body (2). This research was conducted by collecting data retrospectively. Data were collected using a total sampling method with a total of 76 drug interactions during the period January-December 2021. With inclusion criteria based on a prescription containing antibiotics Amoxicillin, Ampicillin, Tiamphenicol, Co-trimoxazole, Cefadroxil, Cefixime, Ethambutol, Isoniazid, Rifampicin, Pyrazinamide. The results of this study found 32 drug interactions and 44 others did not have potential drug interactions. Based on the type of interaction, there were 11 (34.38%) interactions with pharmacokinetics and 21 (65.62%) pharmacodynamic interactions. Based on the severity of drug interactions there are 20 (62,5 %) drug interactions with serious severity, 1 (3,125 %)drug interaction with the severity of closely monitoring, and 11 (34,375 %) drug interactions with minor severity.

Keywords: Drug interaction, antibiotics