## **ABSTRACT**

## ANTIDIABETIC DRUG INTERACTION STUDY IN GEO MEDIKA CLINIC SIDOARJO

## Afifah Arda Maharani

The existence of polypharmacy such as writing a drug in a prescription with several drugs at the same time can lead to drug interactions. Drug interactions will increase with the use of more drugs from complications of disease, so the effectiveness of drugs can be reduced and will have an impact of drug therapy. Complications that occur in diabetes mellitus will add to the complexity of treatment on patient. The purpose in this study was to determine the incidence of anti-diabetic mellitus drug interactions at the Geo Medika Clinic. This research is descriptive observational with the direction of taking data retrospectively, manely observing data on drug interactions that appear in the prescription of anti-diabetic mellitus drugs at the Geo Medica Clinic in period January-December 2021. The sampling method is using a total sampling technique. Prosessing data in this study was carried out by observing anti-diabetic drug interactions of drug interaction mechanism, and the severity of drug interactions using the Medscape. From 54 prescriptions is was found 30 prescriptions (55,56%) had drug interactions, and 24 prescriptions (44,44%) had no drug interactions. Based on the table of recapitulations results of drug interaction, the level of Minor drug interaction is 15 interactions (38,46%), Monitoring Closely is 24 interactions (61,54%), and Serious is 0 interactions (0%). Type of interactions, there were 3 pharmacokinetic interactions (7,69%), and 36 pharmacodynamic interaction (92,31%). To anticipate drug interactions, its better to improve communication between pharmacists and doctors in determining therapy for patient.

**Keyword:** Drug interactions, Anti-diabetic