## **ABSTRACT**

## POTENTIAL DRUG INTERACTIONS IN ANTIDIABETIC PRESCRIPTIONS AT PHARMACY "X" SURABAYA

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One of the health problems whose prevalence continues to grow is diabetes mellitus. Diabetes mellitus is a disease characterized by high levels of sugar in the blood (hyperglycemia). Diabetes mellitus if not handled properly will cause complications so that patients get many drugs in one prescription which can cause drug interactions. Drug interactions are conditions that can occur when two or more drugs are taken at the same time. The purpose of this study was to determine the potential interactions of antidiabetic drug prescribing at the pharmacy"X" in the Ahmad Yani area of Surabaya. The sample in this study was antidiabetic prescriptions drugs as many as 116 prescription sheets during the period of December 2021. The analysis of drug interactions was conducted using the online drug interaction checker available at drugs.com. Of the total 116 prescriptions analyzed, there were 67 (57.76%) prescriptions had potential drug interactions. Of that there were 124 potential drug interactions observed. The most common drug interactions observed were pharmacodynamic interactions (85.48%). The severity of the potential drug interactions mostly found was moderate potential (87.09%). The most frequent combinations of drugs observed was metformin and glimepiride as many as 40 (32.25%). Future research using the other checker resource is needed in order to conducting wider analysis because several antidiabetics did not available at the resource using in this research.

**Keywords**: diabetes mellitus, diabetes drug prescriptions, potential drug interactions