

ABSTRACT

Hypertension is a chronic disease with a high prevalence that can cause serious complications in the cardiovascular system, kidneys, and other vital organs. The frequent use of combination antihypertensive medications to enhance therapeutic effectiveness can increase the risk of drug interactions. This study was conducted at the K-24 Gejayan Pharmacy to identify potential drug interactions in antihypertensive prescriptions filled by patients, thus providing a basis for improving the quality of pharmaceutical services.

This study used a quantitative descriptive method with a retrospective approach. Data were obtained from prescriptions filled by hypertension patients at the K-24 Gejayan Pharmacy and analyzed using the Drugs.com website to identify potential drug interactions. This website was selected based on its ease of access, free availability, and high sensitivity in detecting drug interactions. The study sample consisted of 80 prescriptions that met the inclusion criteria, and the interaction results were categorized based on the level of interaction: minor, moderate, and major

.The results showed that the majority of hypertensive patients were male (52.5%), with the age group <45 years as the largest group. Most prescriptions fell into the minor polypharmacy category (2–4 drugs) at 81.25%. The most frequently prescribed antihypertensive drugs were amlodipine (36.25%), candesartan (28.75%), and bisoprolol (27.50%). Potential drug interactions for most prescriptions were moderate, with the highest level of interaction being pharmacodynamic interactions. All identified interactions were pharmacodynamic, with combinations of antihypertensive drugs with non-antihypertensive drugs showing major, moderate, and minor interactions, while interactions between antihypertensive drugs were only found at a moderate level.

Keyword : Hypertension, polypharmacy, Drug Interactions, and Antihypertensive Prescription