



ABS003

ASSESSMENT OF POTENTIAL DRUG-DRUG INTERACTIONS IN PRESCRIPTIONS OF PATIENTS WITH CHRONIC DISEASES IN COMMUNITY SETTING

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OBJECTIVES-To assess the potential drug drug interactions in prescriptions of patients with chronic diseases and also to evaluate the severity and prevalence of potential drug drug interactions.

METHODOLOGY-This was a cross- sectional observational study carried out over a period of six months in three selected community pharmacies of a Mysuru city. The prevalence of potential drug drug interactions was calculated and the predictors of potential drug drug interactions were determined by applying student t- test and chi-square test. The study criteria for enrolling subjects in our research study were patients of either gender who are coming to community pharmacy with prescriptions and exclusion criteria were patients receiving medicines other than allopathic.

RESULTS AND DISCUSSION- A total of 800 prescriptions of patients with chronic diseases such as Diabetes Mellitus, Hypertension, Acute Coronary Syndrome etc were reviewed for potential drug-drug interactions (PDDIs) during our study period. 69.62% (n=557) of the study patients had two to four drugs in their prescriptions and the remaining 30.37% (n=243) of study patients had more than five drugs in their prescription. The prevalence of prescriptions with potential drug drug interactions among the study population was found to be 39.37%. Similar result was observed in the study conducted by H.Kafeel et al in Karachi where the prevalence of PDDIs in prescriptions dispensed by the community pharmacies was 40%. Among 500 potential drug drug interactions, moderate (n=354, 70.8%) in severity (n=354, 70.8%) were high compared to major (n=126, 25.2%) and minor (n=20, 4%) PDDIs. Comparing the age of patients with and without PDDIs, mean standard deviation age of the patients with PDDIs was more (58.68 (9.96) years) than patients without PDDIs (56.85 (11.34) years) and it was found to be statistically significant (P = 0.020). During the span of six month research study highest recorded PDDIs (22.4%) were beta adrenergic blockers and oral hypoglycaemic agent (glimepride + metformin) followed by beta blockers and dihydropyridine calcium channel blockers (10.6%)

CONCLUSION-The predictors of PDDIs identified in our study were age, number of drugs prescribed and presence of co-morbidities (n=618, 77.2%) such as Hypertension with Diabetes Mellitus, Hypertension with Congestive Cardiac Failure etc. Interaction between beta adrenergic blockers and glimepride + metformin was the most commonly observed interaction in our study.

Keywords: *Potential Drug Drug Interactions, Chronic Diseases, Multiple Medications.*