Extent of Potential Drug-Drug Interactions in Patients Receiving Antihypertensive Medications in Two Tertiary Hospitals of Pakistan

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SUMMARY. In many complicated diseases such as hypertension, polypharmacy is done to treat the condition and every year a number of new drugs are introduced in market for such diseases. Increase in drugs prescribed per prescription also increases the chances of drug-drug interaction. The purpose of this record based study was to evaluate the extent of potential drug-drug interactions in patients receiving antihypertensive medications. Total 506 cases were randomly collected from two government hospitals of Punjab province (Benazir Bhutto Shaheed hospital, Rawalpindi and Bahawal Victoria hospital, Bahawalpur). Micromedex® Drug Information software was employed to elaborate potential drug-drug interactions. The potential drug-drug interactions were found in 320 (63%) prescriptions. Total 540 interactions were reported with an average of 1.68 interactions per prescription. Percentage of male patient prescription with interaction was 59.37% (190 cases) while 40.62% (130 cases) were of females. The most common interacting pairs found were furosemide-aspirin which was observed in 98 cases (18.1%), captopril-aspirin 94 (17.4%) and captopril-Furosemide in 70 (12.9%) cases. Our study concluded that 63% of the prescriptions had potential drug-drug interactions, which is quite high and needs importance and awareness by medical professionals. Pharmacist intervention in prescription evaluation and using such software which are updated and differentiates clinically significant and non significant drug interactions can decrease the extent and frequency of interactions and can make the therapy more affective.