11. DRUG-DRUG INTERACTIONS AMONG HYPERTENSIVE PATIENTS

Author: Boico Irina; **Co-author:** Mazur-Nicorici Lucia

Scientific advisor: Mazur-Nicorici Lucia, MD, PhD, Professor, Discipline of Cardiology, Department of Internal Medicine, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova.

Introduction. Hypertension has increased prevalence and concurrent comorbidities, because these patients are treated with a complex therapeutic regimen comprising multiple different drugs. A drug interaction is a reaction between two (or more) drugs or between a drug and a portion of food, beverage, or supplement and can cause an unwanted reaction.

Aim of study. It was to assess the utilization pattern of antihypertensive and comorbidities drugs and their interaction in hypertensive patients.

Methods and materials. 62 patients from the Institute of Cardiology were questioned based on the questionnaire consisting of 68 questions and drug interactions were checked through a drug interaction checker.

Results. Among the 62 patients with the average age 65± 8.8 years the average number of cardiological medications was 7. Scientific evidence has shown that 70.9% of prescriptions were identified as having at least one drug-drug interaction. Also, the study showed that in 65% of cases among the surveyed patients, clopidogrel is prescribed with pantoprazole, which represents a medium-level interaction. As well, the study noted that 45% of patients administer drugs without a doctor's prescription, which increases the risk of developing interactions with drugs prescribed by a cardiologist. The average Charlson index in patients present in the study was 5.5, which represented a valid predictor of morbidity in patients and demonstrated the association of drugs prescribed by another specialist. The average number of drugs associated with a pathology other than cardiac is 3 drugs and represents a risk factor for the development of interactions other than those known to the cardiologist. Likewise, the study showed that in 21% of prescriptions the spironolactone + valsartan combination was present, which represented a serious interaction that increases the level of potassium in the blood. Concomitant use of angiotensin II receptor blockers (ARBs) and potassium-sparing diuretics may increase the risk of hyperkalemia. Inhibition of angiotensin II results in decreased aldosterone secretion, which can lead to increases in serum potassium that may be additive with that induced by potassium-sparing diuretics.

Conclusion. This study identified the potential drug-drug interaction and documented interactions in hypertensive patients. Although, potential drug-drug interactions, though common in this study comprised mainly of minor and moderate types. Notwithstanding, physicians need to be reminded of the potential interactions.