INAPPROPRIATE MEDICATION IN ELDERLY PATIENTS IN THE UNIVERSITY CLINIC

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Background The rational use of drugs in elderly patients is an actual medical and social problem. Polypharmacy is associated with age, patients over 65 take on average up to 17 drugs per year and have 2-times higher risk of drug-related complications than younger patients.

Purpose University Clinic Kharkiv is a general hospital with educational functions for medical students and CPD. The purpose of the study was to evaluate appropriateness of medication in elderly patients in the departments for internal medicine, the potential for pharmacist intervention and acceptance of pharmacists recommendations by GPs.

Method Clinical pharmacist evaluated patient records of hospitalized persons over 65 years of age in the departments of internal medicine in May-June 2018 using the updated Beers-Criteria (AGS, 2015). The dosages of the drugs, the presence and degree of indications, and the possibility of replacing unwanted drugs were also analyzed. The conformity of pharmacotherapy with treatment goals and the risk of drug interactions for the occurrence of unwanted adverse reactions were assessed according to the standardized indicator MAI (Medication Appropriateness Index). The recommendations for improvement of pharmacotherapy were discussed with the responsible GP, who decided on their implementation.

Findings A total of 105 patients records included 744 prescribed drugs. A high level of polypharmacy was revealed (patients received on average 7 drugs, range 4-18). 98 medicines (13.2%) were not recommended in elderly patients according to updated Beers-Criteria. Among them: 4 prescriptions of thioridazine (potentially dangerous, category C) (4%), 9 prescriptions of spironolactone (not recommended, category B) (9.2%). The remaining 85 problematic prescriptions correlated with category A. The highest frequency among them was the prescription of NSAIDs (diclofenac and ketorolac) ? 38 (38%). In general, prescribing of drugs that are included in the lists of not recommended in elderly patients with varying strength of evidence and contraindications in 73% of patients. In 34.4% of cases, the inappropriate prescribing of the certain drugs was detected, and in 57.1%, incorrect dosing as well as high risk of adverse drug reactions according to the standardized MAI indicator was detected. The level of acceptance of pharmacist?s intervention was 67%, significantly higher among the GPs with longer work experience.

Conclusion Rational use of medicines in elderly patients is an actual problem in the University Clinic in Kharkiv. The pharmacist?s intervention is needed in at least 13% cases of potentially inappropriate prescribing in patients over 65 years. The acceptance of pharmacist?s recommendations is 67% and can be further improved.