POTENTIALLY INAPPROPRIATE MEDICINES IN OLDER PATIENTS

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Background and Importance. *Chronic diseases, physiologic changes associated with aging, and altered drug pharmacodynamics and pharmacokinetics as consequences of aging place elderly patients at high risk of prescribing potentially inappropriate medications (PIMs). Screening Tool of the Older Person's potentially inappropriate Prescriptions (STOPP) criteria refers to drugs classified according to the systems of the organs with which they operate.*

Aim and Objectives. *To determine the prevalence rate of PIMs in older patients (≥ 65 years) by using STOPP criteria on admission to the university hospital.*

Materials and Methods. *A cross-sectional study included 250 patients ≥ 65 years, who had two or more drugs prescribed. Data collection lasted for two months and was conducted by pharmacists. Approval for the study was granted by the Ethics Committee of the hospital. Informed consent was obtained from all participants.*

The inadequacy of prescribed drugs was assessed on the basis of STOPP criteria, using a shortened version with 30 indicators. Statistical analysis was performed using the software PASW Statistics (PASW Inc., Chicago, IL, USA) version 22 and Microsoft Excel® 2010.

Results. *The mean age in the group was 74.23±6.92 years. The majority were male patients (62.1%). Hypertension had 218 (87.90%) patients. Mean of prescribed drugs was 5.25±2.70. We identified a total of 62 PIMs prescribed for 57 (22.98%) patients. Pantoprazole (46.77%) was the most prescribed, followed by diazepam (16.13%) and omeprazole (14.52). The higher prevalence of PIMs related to proton pump inhibitors-PPIs (42 a total of 62 PIMs or 67.74%). Only 4 (13.33%) criteria were shown to be relevant for identifying PIMs (long-term use of PPIs, long-acting benzodiazepines, presence of therapeutic duplications and use of thiazide diuretics in patients with gout).*

Correlation between the number of drug prescribed and the number of PIMs was significant (ρ = 0.297; $p < 0.01$).

Conclusion and relevance: *The STOPP criteria should be used when prescribing drugs to older patients with multimorbidity and polypharmacy in order to avoid prescribing of inappropriate ones.*

References: *Bradley M., Fahey T, Cahir C et al. Potentially inappropriate prescribing and cost outcomes for older people: a cross-sectional study using the Northern Ireland Enhanced prescribing database. Eur J Clin Pharmacol, 2012; 68:1425-33.*

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