

ABSTRACT

ŠULCOVÁ, Hana: Analysis of pharmacotherapy in nursing homes. [Rigorózní práce]/Hana Šulcová - Charles University in Prague. Faculty of Pharmacy in Hradec Králové, Department of Social and Clinical Pharmacy - Prof. RNDr. Jiří Vlček, CSc., Hradec Králové, 2013.

Geriatric patients of these days are typical of their multimorbidity and often concurrently use large amounts of drugs. However, their body reacts to certain drugs or groups of drugs differently than the body of younger ones due to all involutional changes that come with aging process. Polypharmacy and the use of medication that is potentially inappropriate in the elderly are a common cause of adverse drug reactions and put the patient's health at risk. Residents of nursing homes are more susceptible to multi-drug use and potential adverse drug reactions than community-dwelling seniors.

This study is cross-sectional analysis of the pharmacotherapy in the nursing homes, focusing on the analysis of potentially inappropriate medications in the elderly (using STOPP criteria) and drug interactions (using databases AISLP and Micromedex). Five questionnaires focusing on the comprehensive geriatric assessment and respondents' awareness of their pharmacotherapy were also a part of the study. The respondents' demographic information and medical data were collected from february to may 2012.

The analysis was carried out in two nursing homes in Prague and Central region of Czech Republic. 58 respondents aged 65 years and older participated in the study. Their mean age was 82 years, 74 % were female. Respondents were independent in activities of daily living, but highly dependent in instrumental activities of daily living. They suffered from depression, mild or symptomatic quite often (51 %) and 65 % of respondents had normal cognitive function. Respondents were taking on average 8.9 prescription drugs, 1.2 non-prescription drugs and 0.6 dietary supplements. Medication affecting cardiovascular system, central nervous system and gastrointestinal system represented the largest part of prescribed drugs. Most prescribed groups of drug were antiplatelet agents (71 %), diuretics (55 %), anti-ulcer drug (50 %), ACE inhibitors (41 %), beta blockers (41 %) and antidepressants (35 %). Potential drug interactions occurred in 86 % of respondents and serious and very serious interactions occurred in 8.6 % of respondents. 65.5 % of respondents were prescribed potentially inappropriate medicines.

The incidence of drug-drug interactions among the nursing home residents is high and so is the prescription of potentially inappropriate medicines. Pharmacotherapy of elderly should be considered thoroughly and monitored regularly in order to be of a good quality.

Key words: nursing homes, pharmacotherapy of elderly, potentially inappropriate prescribing in elderly, STOPP kriteria, drug interactions

