

## **ABSTRACT**

**Charles University in Prague, Faculty of Pharmacy in Hradec Králové**

**Department of Social and Clinical Pharmacy**

**Candidate:** Mgr. Barbora Bartova

**Consultant:** PharmDr. Daniela Fialova, PhD.

**Title of Thesis:** The Pharmacotherapy of Chronic Non-malignant Pain among Geriatric Patients

### **Introduction:**

Epidemiological studies demonstrate that prevalence of chronic pain increases with higher age. Furthermore, pain among older patients is often underrecognized and/or undertreated. Although rational treatment of geriatric pain has been extensively studied during the past decade, many older people still suffer from uncontrolled or insufficiently treated pain.

The aim of this study is to evaluate the treatment of non-malignant chronic pain by general practitioners (GPs) in geriatric patients. Further, we discuss the role of pharmacist in rational pain pharmacotherapy as well as complex pharmacotherapy management in these patients.

**Methods:** Data were obtained by prospective assessment of 80 geriatric patients 65+ (mean age 75,0 years (range 65-94 yrs), 80 % females) suffering from chronic nonmalignant pain. Evaluation of pain management and complex drug regimens was provided by specifically trained pharmacist in two general practices in Brno, Czech Republic (between March 2010 and December 2011). To assess the quality of analgetic treatment, patient's medications were reviewed in detail using specifically designed questionnaire. The dataset analyzed included data on I) patient's drug anamnesis, II) pain control (using Visual Analogue Scale and Pain Chart), and III) functional status of patients using standardized assessment scales- GDS (Geriatric Depression Scale) and ADL scale (Activities of Daily Living scale).

**Results:** 90 % of geriatric patients suffered from pain lasting more than 1 year, however 22.5 % did not take any analgetic medication. Strikingly, in 17.5 % of patients pain was not sufficiently controlled by analgetic treatment, and 16.3 % of patients took at least one potentially inappropriate medication in geriatric patients or medications inappropriate in

respect to present co-morbidities (using START/STOP criteria). Surprisingly, in 13.8 % of patients incorrect timing of analgesics was documented. Changes in pharmacotherapy were suggested in 61.3 % of patients.

**Conclusions:** Our study confirmed under- and misprescribing of analgetic drugs in older adults suffering from nonmalignant chronic pain and treated by general practitioners. One fifth of patients did not take any analgetic medication and almost half of them suffered from pain despite ongoing analgetic treatment. The contribution of this study was the improvement of pain treatment in study patients. We confirmed the important role of specifically trained pharmacist in the management of rational analgetic therapy in a close cooperation with general practitioners and patients.