

## **Abstract**

### **Analysis of drug-related problems in a health facility IV.**

**Author:** Linda Šubrtová

**Tutor:** PharmDr. Josef Malý, Ph.D.

Department of Social and Clinical Pharmacy, Faculty of Pharmacy in Hradec Králové, Charles University

**Introduction:** Increasing use of drugs leads to a growing risk of occurrence of drug-related problems. These problems can often endanger patient's health and increase the economic cost of the treatment. However, many of these problems can be prevented by controls and collaboration of all health care subjects.

**Objective:** The aim of this work was to carry out a revision of pharmacotherapy in a rehabilitation health facility and to analyse acquired drug-related problems.

**Methodology:** The collection of data took place from 13 to 15 February 2017 in health facility in the Czech Republic. The review of pharmacotherapy was performed by a three-member team (clinical pharmacist, pharmacist, work researcher). The data obtained from the provided medical records were recorded into the database, which was prepared for the purpose of the pharmacotherapy review. Recorded were: the patient's age and sex, allergic, family, work, social and personal history, physical and laboratory examinations and complete pharmacotherapy, which included over-the-counter drugs and dietary supplements, including dosage and route of administration. Potential drug-related problems, classified according to the modified PCNE (Pharmaceutical Care Network Europe) classification V5.01, were also recorded into this database. Related drugs were assigned to each drug-related problem. Drug-related problems were further evaluated according to the degree of severity. The data was described by descriptive statistic.

**Results:** In total, 103 patients were evaluated in the revision of pharmacotherapy. The reviewed patient population consisted of 58,3 % men and 41,7 % women. The median age of both sexes was 69 years. The average number of drugs used was 8,6 drugs per patient and one patient used up to 17 drugs. Discovered was in total 227 drug-related problems (2,2 drug-related problems per one patient). According to modified PCNE classification were the most common drug-related problems related to the choice of drug (51,1 %) or drug dosage (42,3 %).

**Conclusion:** There have been identified drug-related problems during the review of pharmacotherapy. To minimize the risks of pharmacotherapy, it would be appropriate to include part-time or full-time clinical pharmacist into the health facility team.

**Keywords:** drug-related problems, health facility, clinical pharmacy