

# Abstract

**Title of thesis:** Analysis of drug-related problems in a healthcare facility VI.

**Candidate:** Kristína Záleská

**Supervisor:** PharmDr. Martin Doseděl, PhD.

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

**Background and aim:** A drug-related problem (DRP) has been defined as an event or circumstance involving drug therapy that actually or potentially interferes with desired health outcomes [1].

The theoretical background chapter is aimed to give a detailed description of selected studies dealing with drug-related problems in various settings. The retrospective cross-sectional study, described in the experimental part of the thesis, was carried out in order to identify, classify and assess DRPs in a rehabilitation facility and to discuss the results with a physician and subsequently determine intervention acceptance rate.

**Methods:** The data were collected during a nine-day-long audit in three wards of a rehabilitation facility in the Czech Republic through a review of medical documentation. The detected DRPs were classified using the modified version of PCNE classification v5.01 and their severity was assessed on a scale of 0 to 5. The DRPs were subsequently discussed with physicians and the pharmaceutical intervention acceptance rate was determined. The data were analysed with descriptive statistics using LibreOffice Calc.

**Results:** 175 DRPs were detected (3,6 DRP per patient), while at least one DRP was found in 97 % (44/48) of patients. Drug choice problems (44,6 %), and dosing problems (42,9 %) were most common. Drugs for cardiovascular (38,3 % DRPs) and nervous system (22,3 % DRPs) were most frequently involved in DRPs. Overall, 118 DRPs were discussed with physicians, who accepted recommendations regarding 18 % of those DRPs, which may lead to resolution of 12 % of all detected DRPs. Although physicians have formally agreed with the majority (62 %) of proposed interventions, those will most likely not be implemented and have therefore been classified as “agreement without change”.

**Conclusion:** DRPs are prevalent in the rehabilitation facility and a pharmacist is able to detect them. Acceptance rate by physicians is very low, however, high proportion of “agreement without change” suggests there is room for improvement.

**Keywords:** drug-related problem, PCNE, health facility, intervention, acceptance

## References

1. PHARMACEUTICAL CARE NETWORK EUROPE FOUNDATION. *PCNE-DRP Classification v6.2* [online]. 2010 [visited on 2020-11-24]. Available from: [https://www.pcne.org/upload/files/11\\_PCNE\\_classification\\_V6-2.pdf](https://www.pcne.org/upload/files/11_PCNE_classification_V6-2.pdf).