## **Abstract**

## Analysis of the Dispensing Care Provided by Pharmacies in Hradec Kralove

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**Introduction:** Nowadays, a high professional level of dispensing activities is an indispensable prerequisite for the proper work of a pharmacist. A pharmacist is also very often the last link in the chain of healthcare professionals involved in the treatment of a patient and thus has a unique opportunity to detect any potential errors or risk of a given therapy. Regarding the self-medication, the pharmacist is often the only person, with whom the patient consults his therapy.

**Objective**: The aim of this thesis is to analyse dispensing activities provided by pharmacies in Hradec Kralove.

**Methodology:** Analysis of a dispensing activity of a prescription-only drug and over-the-counter product. The list of pharmacies was identified through the SÚKL database. The data collected during the visits were from the 32 pharmacies in total. The data collection tool was mystery shopping that followed thoroughly prepared scenario. The customer was a 26-year-old woman in the 10th week of pregnancy who had come up to pharmacies with a prescription for tetracycline antibiotics and she also asked for urological tea. An invalid credit card was used for the payment so the products were never really purchased. The data obtained were recorded on a pre-prepared sheet immediately after each visit. During the research, the aim of the methodology was to find out how will the pharmacist proceed during the prescription-only drug dispensing activity, what kind of information will be provided to the patient, whether the contraindication will be detected or not and what will be the potential reaction to the contraindication findings. In regards to the over-the-counter product, research was investigating pharmacist's capabilities to help the patient in a case of self-treatment of urinary tract infection.

**Results:** Only in 3,2 % of the cases pharmacists asked about possible pregnancy of the patient and discovered the contraindication themselves. In other cases, the patient pointed out that she was pregnant, however, in 6,3 % cases she was given the contradicted drug regardless. In one third of all the pharmacies visited, the drug was not dispensed only due to the fact that the

pharmacist was alerted about the pregnancy so he/she verified the given information on the computer and subsequently did not recommend the treatment by tetracyclines. Information about the drug safety given by pharmacist within the dispensing minimum was in most cases insufficient. Nearly one fifth of the pharmacists did not mention the potential risks of the contraindications of tetracycline antibiotics in combination with food and in less than half of the pharmacies the patient was not given any further recommendations about the drug consumption whatsoever. 9,7 % pharmacists recommended a contraindicated product in a way that the daily dose would be exceeded by 100 %. Within the over-the-counter sales the contraindicated product was offered in almost 10 % of the visited pharmacies.

## **Conclusion:**

The quality of dispensing activities in pharmacies varies considerably. Differences were not determined by the type of pharmacy, age of the pharmacist, or other factors. Proper dispensing activities in pharmacies do not appear to be commonplace today and in most cases, the dispensing activity provided by the pharmacist was inadequate. However, due to the limited sample of pharmacies, the results of this survey cannot be considered representative throughout the Czech Republic, and it would be advisable to conduct further research in other cities to confirm them.

**Key words:** pharmaceutical care, dispensing activities, pregnancy, self-medication, Hradec Králové, pharmacies