

## Abstract

### Analysis of drug administration by nurses in health facility IV

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**Background:** Currently, more emphasis is placed on quality and safe health care. At the medical facility, the nurse is responsible for administration of medications. Mistakes that may occur during administration may reduce the quality of health care delivery. For this reason, is important to minimize the occurrence of these doubts.

**Aim:** The aim of the diploma is to describe and analyze the most common medication errors occurring in medical facilities during drug administration by nurses.

**Methods:** This is a prospective observational study using direct observation. Nurses were administered medication in three hospital departments in the Czech Republic. Data collection took place for three following days at the Department of Internal Medicine, Surgery and Aftercare in July 2021. The data are recorded in a form. After a joint discussion, all data was rewritten into online database. The data were then exported to MS Excel and analyzed by descriptive statistics.

**Results:** The study included 75 patients and the administration of the drugs by 15 nurses was observed. A total of 1518 drug administrations were observed, including oral drug delivery (91.56%), injections (7.64%), ocular drug delivery (0.66%), rectal and inhalation (0.07% and 0.07%). The most common medical administration error was not performing hand disinfection (80.19% of 1518). Other errors included drug administration without ensured that the patient received the medication (37.42% of 1518), administration generic substitution drug without consultation with a doctor (10.74% of 1518), use another drugs strength (5.67% of 1518), prescription incompleteness (4.02% of 1518) and administration the wrong dose (3.82% of 1518).

**Conclusion:** Medication errors occur in healthcare facilities and have a negative impact on the patient's treatment. It is important to determine the prevalence of individual errors to implement measures and minimize the occurrence of medication errors.

**Keywords:** drug administration, nurse, health care facility.