Pharmacie des Hôpitaux Universitaires de Genève

Retrospective analysis of drug-related incidents voluntarily declared in a General Internal Medicine service

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Objective

In our institution, incidents without significant consequences are declared voluntarily. In order to gain an overview of incidents related to drugs, we conducted an analysis of cases declared in the General Internal Medicine service.

Method

- Reports **between 2000 and 2010** were evaluated retrospectively.
- Keywords used to select reports were: “prescription”, “administration”, “flow rate” and “PresCo” (name of our computerized physician order entry system).
- Duplicates and reports that were not exploitable (improper data) were excluded.
- Incidents were classified according to **(1) category**, **(2) type**, **(3) effect** and **(4) drugs involved**.

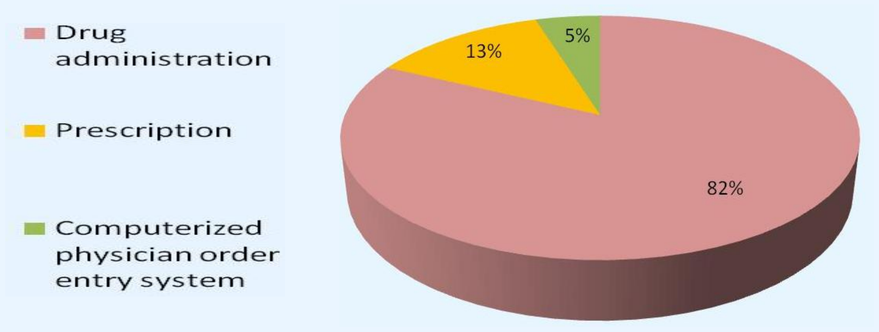
Results

Of the 147 identified incidents, 64 were excluded. In the 83 remaining incidents, classification was possible in:

1. **100%** for category 2. **95%** for type 3. **93%** for effect 4. **87%** for drugs involved

1 Category of incidents

Most reports referred to **administration errors**.



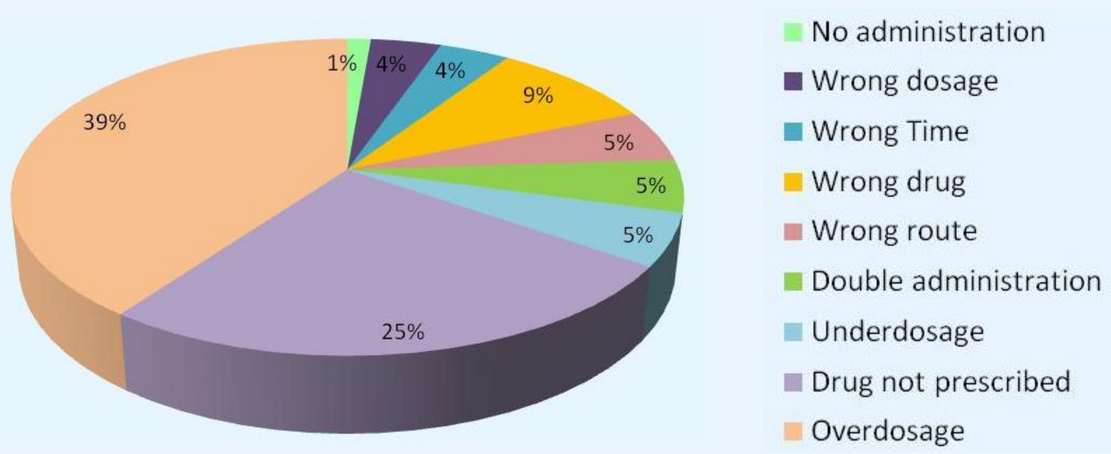
2 Type of incidents

Most incidents resulted in the administration of a **wrong dosage** or a **wrong drug**.

Errors of prescription resulted mainly in wrong dosage (33%), forgetting drug stop (25%) and wrong patient (17%).

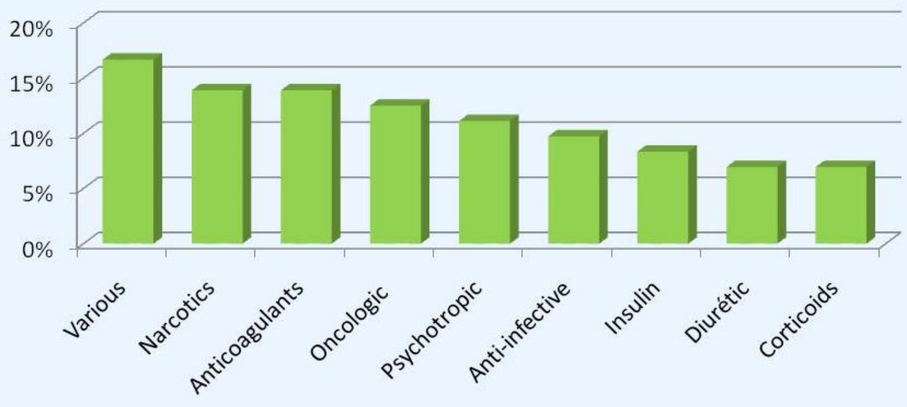
3 Effect of incidents

Most errors resulted in an **overdosage** or a **wrong drug**.



4 Drugs involved in incidents

Most drug classes involved were narcotics and anticoagulants with **morphine**,**methadone** and **heparin** being the most cited.



Conclusions

- This study confirms previous reports on medication errors in hospitalized patients (mainly in USA): most reports referred to administration errors.
- Most drugs involved are known to cause clinically significant adverse effects if misused.
- This study will help focus on medication errors which might occur again and for which prevention strategies could be implemented.

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