

SUMMARY

STUDY OF MEDICINAL PRODUCTS PREPARED IN PHARMACIES

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Introduction: The aim this study was to analyze the current preparation of medicinal products in pharmacies.

Aim of study: The principal aim was to analyze a file according to the following aspects: the frequency of occurrence of MP during the year, the complexity of MP, the composition of MP, incidence of proprietary medicines, kind of preparation, dosage form, quantity of MP and specialization of prescribing physician. Another objective was to find relations between the dosage form and others above mentioned aspects.

Methods: I carried out the research in a Pharmacy Vltavínská from 1. 9. 2002 till 31. 8. 2003. I gathered data at intervals of a month. I focused on prescription drugs. I monitored the composition in most occurring MPs, other aspects in the whole file. I analyzed monitored criteria for two views – with regard to individual formulas and to all of MPs where the formulas could be repeated. I described ocular, vaginal and rectal medicines separately. I analyzed the electronic database using contingency tables.

Results: The database contained 453 items, with development of formulas with more dosage forms for each of them 463 items (16 396 MPs). 131 formulas conformed to selection criteria most frequently prescribed medicines (occurrence of medicines in 6 months minimally) which after elaboration made a detailed database with 138 items (15 591 MPs).

The incidence was the highest in formulas which were dispatched during 1 month (38.7 % of formulas) and in MPs which were dispatched in all 12 months (86.0 % of MPs). The most frequently formulas were from 3 components (28.7 % formulas), as well as MPs (31.0 % MPs). The powder for preparation of gargle was the dosage form with the highest average number of components (4.5 components on the average). From among of 22.7 % formulas and 29.6 % MPs was one proprietary medicine at least. The dosage forms with the highest incidence in formulas were nasal drops (2.1 proprietary medicines on the average). Formulas were prepared mostly

individually (78.8 % formulas), MPs were factory-made (65.9 % MPs). With regard to dosage form there were occurred in most cases the semi-solid products (51.8 % formulas, 50.1 % MPs), with regard to the mode of application - products for skin use (71.7 % formulas, 72.0 % MPs) and with regard to both aspects - skin semi-solid products (51.0 % formulas, 48.7 % MPs). Many nondivided dosage forms were mostly (42.0 % formulas, 48.9 % MPs) between 51-100 g. Medicines, especially skin semi-solid products, were prescribing most often by dermatologists (37.2% formulas, 62.5% MPs).

To prepare master database of medicines was used 135 medicinal substances and adjuvans and 61 medicines for preparation of medicines, of which was 10 intermediates. To prepare detailed database of medicines was used 146 different raw materials, which were occurred 41 920 times. Of that there were 81 medicinal substances and adjuvans (24 450 occurrences), 44 medicines for preparation of medicines (10 529 occurrences) and 21 proprietary medicines (6 941 occurrences). Salicylic acid was the most often used raw material (3 175 occurrences).

Conclusions: I got results by analysis of medicines prepared in the pharmacy. I contributed to an objective view of the individual preparation in pharmacies Czech Republic.