RISK MANAGEMENT OF PRESCRIPTION AND PREPARATION OF CYTOTOXIC DRUGS IN HOSPITAL PHARMACIES

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Background
Cytotoxic drugs medication errors in oncology can have serious consequences because of their narrow therapeutic index. 37 centralized cytotoxic preparation units in Czech hospital pharmacies preparing cytotoxic drugs (1.3.2014).

Methods
The survey was based on the anonymous online questionnaire, which contained 29 questions focusing on the organization of work, amount, frequency and the type of preparation, prescription and preparation method and the safety of the pharmaceutical staff. The questionnaire was sent to all 37 hospital pharmacies with cytotoxic preparation units. All responses were evaluated and presented graphically in absolute numbers and percentages.

Results
35/37 (94.6%) questionnaires were collected. 33 (94%) pharmacies prepare cytotoxic drugs for all hospital departments. 43% of the centralized cytotoxic preparation units periodically record errors. 22 (63%) pharmacies perform regular staff training each year.

Conclusions
According to our questionnaire 32 critical points of the prescription and preparation process were identified, each of them represents a contribution to safety of the chemotherapy process.

The overall level of safety in the prescription and preparation of cytotoxic drugs is rather imbalanced in the Czech Republic and varies from 6.3% to 87.5% (compared to the ideal state). We have proved that computerized physician order entry (CPOE) plays one of the key roles in eliminating chemotherapy errors. The data from this study will help when sharing the experience among hospital pharmacies.

Conflict of interests
None