CHEMOTHERAPY ERRORS DETECTED DURING PHARMACEUTICAL VALIDATION

Sánchez Argáiz MC, Gándara Ladrón de Guevara MJ, Sierra Torres MI, Montero Vilchez C, Jiménez Morales A.
Hospital Universitario Virgen de las Nieves (Hospital Pharmacy) Granada, Spain

Background and Importance
Chemotherapy errors represent a potentially serious risk of patient harm because of the narrow therapeutic window of antineoplastic and their high toxicity. Pharmaceutical validation aims to optimize chemotherapy treatment in order to obtain the best results for patients' health and to minimize potential prescription errors.

Aim and objectives
To describe the chemotherapy prescription errors of intravenous cytostatic detected during the pharmaceutical validation and the interventions made to avoid potential harm to the patient, helping prevent mistakes.

Material and Methods
Observational, descriptive and retrospective study
We registered the chemotherapy prescribing errors detected by pharmaceutical validation between November 2020 to August 2022 and those that resulted in a prescription change in intravenous chemotherapy (the programme used for prescribing and recording was OncoFarm®)
The errors were classified into 10 group:
1) Upper/lower dose <10%
2) Upper >10%
3) Lower dose >10%
4) Inappropriate cycle frequency
5) Relevant interaction or adverse effect
6) Dose adjustment or delay administration (renal and hepatic impairment, haematologic toxicity)
7) Incorrect protocol
8) Missing drug
9) Excess drug
10) Others

Results
2,944 outpatients received chemotherapy treatment (63% oncological service, 32% haematological service, 5% others)
53,243 doses of intravenous chemotherapy were prepared in the hospital pharmacy
180 chemotherapy errors were detected through pharmaceutical prescription review and changes in chemotherapy prescriptions were induced:

Most common errors: upper dose prescribed >10% (36% were carboplatin dose mistakes).

Conclusion and Relevance
Despite the number of detected chemotherapy errors does not represent a large volume in the total number of patients treated in almost two years, they led to a probable reduction in adverse drug events, toxicities and patients overdose. This gives us an idea of the benefit and the importance of pharmaceutical validation in chemotherapy treatment optimization and patient safety.