Special issues in pediatric oncology

Tiene Bauters, Pharmacy, Pediatric Hematology, Oncology and Stem Cell Transplantation, Ghent University Hospital, Ghent, Belgium

Children are not just small adults. From a pharmacological point of view, pediatrics embraces a heterogenic group of patients under the age of eighteen, posing some unique pharmacological and pharmaceutical challenges.

Pediatric oncology pharmacists must be trained to ensure safe, effective and rational drug use to optimize the drug treatment. In this presentation, some topics requiring special attention in pediatric oncology will be discussed (dosages, dilutions for parenteral drugs, the safe administration of cytotoxics) as well as the importance of a safety management system.

In a second part, a project on safe-handling of non-carcinogenic hazardous drugs will be discussed. Updated scientific insights have led to the development and implementation of a tool for safe handling of non-typical hazardous drugs manipulated by healthcare workers. The use of these drugs is widely spread across the hospital, also on the pediatric oncology ward, often without any safety warnings in terms of handling. Many of these drugs might have the potential to have negative effects for example, on the reproductive system. Guidance for healthcare workers to take correct protective measures depending on the pharmaceutical properties of the prescribed drug and hence reduce the risk for occupational exposure will be discussed.