Extemporanous preparations for children, back to the future

Abstract

Essential anticancer medicines are a principal component of evidence-based best practice in paediatric cancer care, generating an 80% disease-free survival at 5 years in malignancies affecting children and adolescents <18 years of age. Most medicines used for childhood cancers are off-patent, available as generics, and prescribed off-label in the paediatric population.

In the study, conducted as part of the EU Joint Action on Rare Cancers (JARC) project, health professionals reported that 27% of the oral essential medicines on the survey list were never available in an age-appropriate formulation for administration in young patients. Parents overwhelmingly confirmed this finding, reporting complex manual format adjustments and the distress experienced in the process.

Extemporaneous compounding in hospitals and community pharmacies is pivotal since it enables the preparation of age-appropriate dosage forms when suitable authorised medicines are not available. Since many medicines are not licensed for use in paediatric populations, the manufacturer does not ordinarily produce age-appropriate dosage forms for the market. There are also circumstances where the medicines are not available from commercial suppliers: shortages of medicines, discontinued medicines, special combinations or orphan medicines.

Therefore, SIOPE and ESOP made a recommendations with the aim to set a European standard for developing paediatric-specific extemporaneous formulations to promote appropriate administration of medicines for children and reach a meaningful therapeutic benefit to those patients over existing therapies.

In our session we are going to discuss:

1. The definition, importance and value of extemporaneous preparation
2. Role of the oncology pharmacists
3. Standartisation opportunities of the process of preparation
4. Quality assurance
5. Follow up and drug use evaluation