

UNLICENSED DRUGS FOR CHILDREN: A RISK OF TREATMENT DELAY AT HOSPITAL DISCHARGE IN SWITZERLAND?



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Background & Objectives

In Swiss hospitals, only half of the drug prescriptions for children follow the terms of the marketing authorization [1]. "Unlicensed drugs" (manufactured and imported drugs) are often used to treat children [2]. Their availability can sometimes delay the continuity of care.

This topic was recently discussed in the **GSASA Paediatric working group** (see right section) and it was decided to get an overview of the situation in Switzerland.

The aim of this study was to evaluate the supply chain of unlicensed paediatric drugs at the transition point from hospital to home care in Switzerland.

GSASA Paediatric working group

The **GSASA paediatric working group** was launched in 2008. It gets involved in children drug safety and in supply chain of paediatric drugs. Its main objectives and visions are harmonized and validated drug information, for example paediatric drug dosages or production specifications for manufactured paediatric drugs.

Methods

An electronic survey was sent to 23 presidents of the pharmacists Swiss cantonal associations and to 46 chief pharmacists of the Swiss hospitals.

Five questions focused on the distribution of unlicensed paediatric drugs at hospital discharge, the risk of drug shortfalls of this supply chain and the way to provide manufactured drugs to children (table 1).

- 1) How is the supply chain of unlicensed paediatric drugs (imported or manufactured drugs) at the transition point from hospital to home care organized?
- 2) According to you, are there supply shortfalls with imported drugs for children at the hospital discharge?
- 3) According to you, are there supply shortfalls with manufactured drugs for children at the hospital discharge?
- 4) Do the hospital pharmacies provide their production specifications to the community pharmacies?
- 5) Which description of the organisation / the supply chain of manufactured paediatric drugs corresponds the most to the situation in your canton? (possible answers: paediatric drugs are manufactured by community pharmacies, or by hospital pharmacies, or one community pharmacy is responsible for other pharmacies concerning the drug manufacturing)

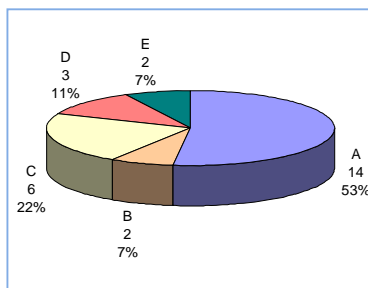
Table 1: Questions of the survey on the supply chain of unlicensed paediatric drugs at the transition point from hospital to home care in Switzerland

Results

27 replies (8 cantonal, 19 hospital) were obtained out of 18 different cantons (40% turnout; 8 feedbacks from chief pharmacists of hospitals without paediatric units were considered as unanswered questionnaires).

Figure 1: Organisation of the supply chain of unlicensed paediatric drugs at the transition point from hospital to home care

- A) The paediatrician's prescription is directly given to the parents who get the drugs in the community pharmacy.
- B) The paediatric nurse organized the hospital discharge by contacting the community pharmacy and forwarding the paediatrician's prescription to it.
- C) The paediatric nurse organized the hospital discharge by giving the necessary amount of drugs to the parents until the community pharmacy supplies the drug.
- D) The hospital pharmacy dispenses the necessary amount of drugs to the parents until the community pharmacy supplies the drug.
- E) Others



1) Unlicensed paediatric drugs are distributed by different ways at hospital discharge: 53% (n=14) by community pharmacies without special management, 33% (n=9) at hospital either by a paediatric nurse (n=6) or by the hospital pharmacy (n=3) for the first treatment days after discharge, 7% (n=2) by community pharmacies after transmission of the prescription by the nurse before discharge (figure 1).

2) and 3) Supply shortfalls of imported and manufactured drugs are deemed to occur "often" in 33% (n=9) and 26% (n=7), respectively (figure 2). However, there is no obvious relationship between the type of drug distribution and the drug shortfalls.

4) Regarding drug manufacturing, most hospital pharmacies provide their production specifications as printed version (n=19) on demand or by the internet (n=2).

5) Manufacturing of drugs prescribed at hospital discharge is mainly undertaken by community pharmacies (77%, n=20) and only in 11% (n=3) by hospital pharmacies (other answer: 11%, n=3). A network of community pharmacies for drug manufacturing exists only in canton Vaud.

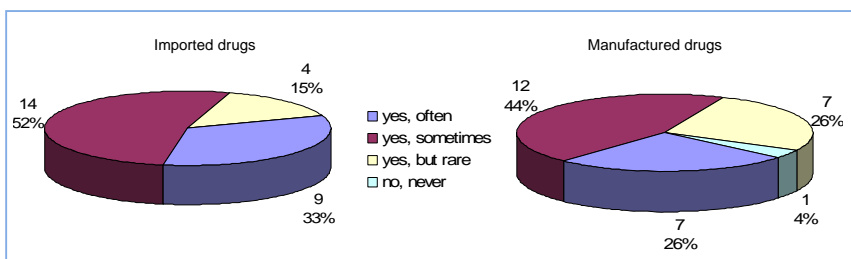


Figure 2: Estimation of the supply shortfalls of imported and manufactured drugs

Discussion

Different ways for drug supply of unlicensed drugs at hospital discharge of children are undertaken in Switzerland. However, the continuity of care is sometimes disrupted due to drug shortfalls.

Seamless care of children with unlicensed drugs is an ambitious aim. Special efforts and an increase in collaboration between hospital and community pharmacies should be discussed in the future.

References

- [1] Di Paolo ER et al. Swiss Med Wkly. 2006. 136:118-22.
- [2] Fonzo-Christe C et al. (GSASA Paediatric working group, GSASA, Switzerland). GSASA Sion 2010. (http://pharmacie.hug-ge.ch/rd/posters/JFSPH2010_unlicensed_pediatric_cf.pdf)

Disclosure of conflict of interest: none