Department B which has 45 beds and is dispensed on a weekly basis, the ALOS is 48 days, with 185,990 dose units dispensed for 1,019 references. Medication waste represented 47.9 kg divided into 42% tubular bags, 31.5% lids, 14% glass bottles and 12.5% other, with a bin fill rate of 85%.

For the pharmacy, waste represented 177.4 kg divided into 34.5% glass bottles, 31.3% lids, 10.5% glass ampoules and 23.7% other, with a bin fill rate of 79%.

Conclusion and Relevance The pharmacy is the backbone of the hospital's medication circuit and must therefore take steps to eliminate medicinal waste in an ecologically responsible way. To do this, it is essential to know the amount of waste and the specific characteristics of each department. The main areas for improvement in reducing our waste are optimising the filling of bins, developing specific sorting channels and starting work on wasting medicines.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

2SPD-011 AVAILABILITY OF LIQUID ANTIMICROBIALS – A NATIONAL ANALYSIS OF THE CURRENT SUPPLY SITUATION

[1]N Riesenhuber*, [1]M Krauss, [1]K Mossburger, [2]C Gradwohl, [1]G Stemer. *[1]University Hospital Vienna, Pharmacy, Vienna, Austria; [2]St. Anna Children's Hospital, Paediatrics, Vienna, Austria*

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Background and Importance Oral liquid dosage forms of various antimicrobials represent the mainstay of therapy for paediatric infections, especially in infants and young children. However, shortages of such preparations have dramatically increased over the past year, challenging adequate therapy, especially in the community setting.

Aim and Objectives The aim of this study was to assess the supply situation of various antimicrobials in liquid dosage forms in Austria.

Material and Methods The availability of antimicrobials in liquid dosage forms was examined over a period of 27 weeks (February to August 2023). Actual supply data were extracted once weekly from a major Austrian full-service pharmaceutical wholesaler database and the availability of all liquid antimicrobials authorised in Austria was analysed.

Results A total of 42 products containing 15 different antimicrobials in liquid dosage forms are authorised in Austria. During the time period investigated, 34 products (81.0%) were not available for over 50% of the time; eight of those (19.0%) experienced complete unavailability. Only four products (9.5%) demonstrated continuous availability (i.e. preparations containing fluconazole, oseltamivir, and voriconazole).

Availability of cephalosporin antibiotics was specifically limited, with first-generation cephalosporins, being unavailable for prescription in 74.1% of the observation period (20 weeks). Cefpodoxime remained inaccessible for 96.3% of the investigated period (26 weeks), cefaclor and cefalexin for 85.2% (23 weeks) and 74.1% (20 weeks), respectively. Cefixime showed better availability, experiencing stockouts for only 44.4% of the time (12 weeks).

Regarding penicillin antibiotics, amoxicillin was not available for 77.8% of the time (21 weeks) and amoxicillin/clavulanic acid for 59.3% (16 weeks). Penicillin V showed better availability, being out of stock only for 37.0% of the time (10 weeks). Regarding macrolide antibiotics, azithromycin was not available for 63.0% of the time (17 weeks), while clarithromycin experienced 37.0% unavailability (10 weeks).

Conclusion and Relevance Medicines shortages, especially involving antibiotics, pose a global public health dilemma that can lead to adverse health outcomes. Regular monitoring of availability status can help mitigate this issue; however, cross-national strategies are urgently needed to guarantee a constant supply in the future.

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Conflict of Interest No conflict of interest.

2SPD-012 APPLICATION OF FAILURE MODE AND EFFECTS ANALYSIS TO IMPROVE AUTOMATED DISPENSING CABINETS' DRUG STOCK MANAGEMENT PROCESSES

M Fernández González, HL Acosta García, P Suárez Casillas*, JL Pérez Blanco, JP Quintero García, MV Gil Navarro. *Hospital Universitario Virgen del Rocío, Pharmacy, Sevilla, Spain*

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Background and Importance Logistics processes for drug stock management are critical in the organisation of pharmacy services. Automated dispensing cabinets (ADCs) allow for better control of these processes, increasing patient safety, optimising drug consumption and costs. However, the use of these devices is not always the most appropriate, compromising its advantages.

Aim and Objectives To carry out a failure mode and effects analysis (FMEA) to optimise the use of ADCs by all stakeholders (pharmacists, pharmacy technicians and nurses).

Material and Methods A multidisciplinary team was established to perform an analysis using FMEA methodology (pharmacists, nurses, and pharmacy technicians). They defined all related failure modes that could occur, indicating causes and consequences through brainstorming meetings. Five risk maps were performed on the following processes: Resupply of ADCs, in floor return of drugs to ADCs, restock of temporary transfer cabinets, review of drugs expiration date, and drug dispensing through ADCs. The risk priority number (RPN) was calculated according to the following indices: Severity x Frequency x Detectability, assigning values from 1 to 10 to each index. Median RPN values were used to prioritise. Preventive and corrective actions were proposed.

Results A total of 27 failure modes were defined, accumulating 3,553 points of RPN (values ranged 9–300). The process 'drug dispensing through ADCs' obtained the highest median RPN value (192, 126–246). The number of failure modes with a RPN >200 was 6. After prioritisation, an action plan consisting of several activities, based on good practices guidelines from the Institute for Safe Medication Practices (ISMP) was proposed. A training programme for nurses on the use of ADCs was designed and implemented to ensure correct use on the hospitalisation floor. A reception plan for new pharmacy technicians, consisting of training documents, was elaborated. Finally, a plan for ADCs' setup and regular stock review by specialist pharmacists was designed. After 6 months, a new analysis was performed, and all the failure modes evaluated scored a RPN value <200.

Conclusion and Relevance The FMEA methodology allowed us to detect and evaluate failure modes and its effects, implementing an action plan to optimise the use of ADCs. In the