safety of intravenous drugs, they are still rarely used in our country.

Aim and Objectives The aim of our project was to compare the drug costs and medication safety risks associated with the use of atropine ampoules and atropine prefilled syringes to treat acute bradycardia in ocular surgery.

Material and Methods First, the effects of prefilled syringes on drug costs were investigated by a literature search and by gathering data from other surgical units that already used prefilled syringes. Atropin-related drug costs of other surgical units were calculated before and after transition to prefilled syringes. After that, a Failure Mode and Effects Analysis 'FMEA' conducted by an interprofessional expert group was used to evaluate risks associated with the medication management and use process of both atropine products.

Results The introduction of prefilled syringes had decreased the costs of atropine injections in other surgical units more than 50% in average when compared to atropine ampoules. The savings we observed resulted mainly from wastage minimisation, because the shelf life of ampoule-drawn atropine injection is limited. Our literature search supported this observation. The FMEA analysis identified more medication safety risks related to the use of atropine ampoules (n=14, risk profile number 'RPN' 297) when compared to the prefilled syringes (n=7, RPN 74). The most significant difference came from the risks related to preparation of atropine injection (i.e. limited shelf life) and look-alike, sound-alike 'LASA'-risks associated with the use of atropine ampoules.

Conclusion and Relevance Based on cost analysis and proactive risk assessment by FMEA the transition to prefilled syringes appears to decrease costs and increase medication safety.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

5PSQ-042 FOCUS ON MEDICATION ERRORS ON HIGH-RISK MEDICATIONS IN A HOSPITAL'S ELECTRONIC INCIDENT REPORTING SYSTEM

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Background and Importance High-risk medications, i.e. anticoagulants, digoxin, gentamicin, insulin, potassium, opioids and low-dose methotrexate, have an increased risk of causing patient harm when used incorrectly.

Barcode medication administration (BCMA) systems can reduce the risk of medication errors by focusing on the five R's in medication management, i.e., the right patient, the right drug, the right dose, the right route, and the right time.

Aim and Objectives The aims were 1) to analyse and quantify medication errors in an electronic reporting system handling adverse events in a hospital with BMCA, and 2) to quantify the extent of high-risk medications that lacked a barcode at medicine unit level.

Material and Methods We analysed medication errors reported by hospital employees in the hospital's electronic incident reporting system that handles adverse events. We have read and categorised the errors carefully in terms of type, frequency and where in drug handling the errors had occurred.

Results Hospital staff reported 1,777 medication errors and nearly 30% (n=467) were associated with high-risk medications. Most errors occurred during prescribing (n=133, 28%) and drug administration (n=189, 40%). Anticoagulants and opioids were most frequently reported. This also corresponds with that 14% (n=41) of the 293 different high-risk medication packages lacked barcodes at medicine unit level, most of which were anticoagulants and opioids.

Conclusion and Relevance Assigning a barcode to all high-risk medication packages, so high-risk medications can be scanned, can prevent future medication errors. Labelling barcodes at medicines unit level on anticoagulants and opioids should be prioritised.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

5PSQ-043 DESCRIPTIVE STUDY OF MARKETED MEDICINES CONTAINING ASPARTAME

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Background and Importance Recently, the International Agency for Research on Cancer (IARC) has classified aspartame as possibly carcinogenic to humans. Furthermore, the Joint Expert Committee on Food Additives (JECFA) administered by the Food and Agriculture Organization of the United Nations in partnership with the World Health Organization has accepted a daily intake of 40 mg/kg body weight as safety threshold.

Aim and Objectives The primary objective was to compare the maximum daily intake of aspartame (MDIa) for every oral medicine marketed in our country with the safety threshold established by the JECFA. MDIa was defined as the daily amount of aspartame taken if using the maximum dose of the corresponding drug according to its label dosage recommendations.

Secondary objectives included describing the main features of these medicines and analysing their association with MDIa.

Material and Methods Bibliographic unicentric study carried out in a tertiary hospital.

Collected variables included medicine name, dosage form, authorised indication and milligrams of aspartame per unit in solid forms or per millilitre in liquid forms. Data were expressed as amount (percentage) for qualitative variables and median (interquartile range) for quantitative variables. Difference of medians was assessed through Mann-Whitney U test.

Results 370 medicines declared containing aspartame. According to their respective authorised indications, 222 (60.0%) were considered medication for chronic use and 148 (40.0%) acute care drugs. Regarding dosage form, 283 (76.5%) were fast disintegrating tablets, 68 (18.4%) oral solutions/suspensions or powders for oral solution/suspension and 19 (5.1%) other.

Median dose of aspartame was 3.0 mg/unit (1.3–8.0) for solid forms, and 12.5 mg/mL (5.0–30.0) for liquid forms. For the total population of study, MDIa was 9.0 mg per unit or mL (3.0–20.8) and the absolute largest observation was 420.0 mg/mL. Specifically, median MDIa for solid forms was 8.0 mg/unit (2.1–11.2) and for liquid forms was 75.0 mg/mL