options when oral bioavailability is decreased. Further research is needed to fill the gap of ivermectin administration in patients with compromised enteral absorption.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-188 AN AUDIT OF PRESCRIBING, ADMINISTRATION AND STORAGE OF CONCENTRATED ELECTROLYTES

A Beakey*, K Holacka, M Kieran, J Brown. *Mater Misericordiae University Hospital, Pharmacy Department, Dublin, Ireland*

10.1136/ejhp-pharm-2021-eahpconf.307

Background and importance Concentrated electrolytes can be fatal if administered inappropriately. Local hospital policies and protocols exist to ensure appropriate concentrated electrolyte treatment for patients, while reducing the risk of inappropriate or incorrect administration. Patient safety is optimised by using ready mixed bags where possible and ensuring correct storage of intravenous (IV) electrolytes, both concentrated electrolyte ampoules and non-concentrated ready mixed bags, at ward level to reduce the risk of mis-selection and drug error. Local incident reports indicated poor compliance with hospital concentrated electrolyte policies and protocols and so an audit was undertaken to assess this.

Aim and objectives This study aimed to audit the prescribing, administration and storage of concentrated electrolytes in a large teaching hospital.

Material and methods Adherence to hospital concentrated electrolyte protocols and guidelines was determined by a point prevalence audit undertaken in February 2019. Data were collected by clinical pharmacists on a single day and included review of prescriptions from the preceding 7 days.

Results

- There were 133 prescriptions for IV electrolytes on 14 wards.
- Prescribing and administration was appropriate in 32% (n=43) of cases.
- Appropriate storage of concentrated electrolyte ampoules was noted on 95% of the wards. Segregated storage of ready mixed electrolyte bags was found on 30% of the wards.
- Of the 94 potassium chloride prescriptions, ampoules were administered in 78% (n=73) of cases and ready mixed bags were administered in 21% (n=20) of cases. No inappropriate use was identified; however, in 43% (n=31) of cases, no diluent or volume was specified and therefore it was unclear if use of ampoules was clinically indicated. These instances were due to 'as required' prescribing of concentrated electrolytes in the cardiothoracic patient cohort, which requires follow-up.

The Drug Safety Service analysed and circulated the audit results to pharmacy, nursing and medical staff to highlight the main findings and recommendations.

Conclusion and relevance A number of improvement areas were identified:

- Complete concentrated electrolyte prescriptions in accordance with hospital protocols, avoiding 'as required' incomplete prescriptions.
- Define parameters for IV electrolyte replacement postoperatively in cardiothoracic patients.

- More clearly define 'segregated storage' of ready mixed potassium chloride bags.
- Re-audit; undertaken in July 2020, the results of which are currently being analysed.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-189 NEAR MISS LOOKALIKE AND SOUNDALIKE INTRAVENOUS MEDICATION ERROR: A 12 MONTH RETROSPECTIVE STUDY

¹R Aljaber*, ²J Waterson. ¹*King Faisal Specialist Hospital and Research Centre, Pharmaceutical Care Division, Riyadh, Saudi Arabia;* ²*Bd, Medication Management System, Dubai, United Arab Emirates*

10.1136/ejhp-pharm-2021-eahpconf.308

Background and importance There is little quantitative evidence in the current literature on the incidence of incorrect medication administration of intravenous medications by clinicians. Analysis of infusion pump medication library alert-logs for user initiated corrections of erroneous medication selections adds quantitative data to the investigation of the incidence of lookalike-soundalike intravenous medication administration errors.

Aim and objectives To establish baseline data from infusion pump medication library alert-logs on near miss and user correction lookalike-soundalike medication selection errors during intravenous medication administration.

Material and methods A 12 month facility wide retrospective review of infusion pump medication library alert-logs was conducted to obtain metrics on the set-up phase of intravenous medication administration. Cancelled infusions and user initiated resolutions of incorrect medication selections were analysed. Decision times of clinicians were calculated from the time-date stamps of the pumps' alert-logs.

Results Incorrect medication selection represented 3.45% (10 017/290 807) of all medication library alerts and 22.40% (10 017/44 721) of all cancelled infusions. Average selection error recognition to cancellation and correction time was 27.00 s (SD 22.25). Medications with longer names were more prevalent among the initial selection errors. Users were more likely to make selection errors with the first part of the medication names (6991/10 017, 69.79%) while the middle part of the medication names were the next most likely to be misidentified (2144/10 017, 21.40%), with name ending confusion being responsible for 8.80% of errors (882/10 017).

Conclusion and relevance The study provides a quantitative appraisal of an area that has been resistant to measurement, and identified a high number of near miss lookalike-soundalike errors. This phenomenon, while largely centred on initial misreading of the beginning of the medication name, also ran through the middle and end portions of medication nomenclature. The value of an infusion pump showing the entire medication name complete with TALLman lettering on the user interface, so that the selection fully matches that of the medication's pharmacy label, is supported by these findings. FMEA type infusion pump strategies that use multiple distinct user confirmation steps (eg, medication selection followed by therapy selection, and user confirmation of clinical advisories) may reduce the risk of incorrect medication selection, as