there may be a lack of uniformity in drop volume delivered which could lead to dose variability.

Conclusion Despite the increasing availability of licensed preparations with assured quality, use of unlicensed preparations to fulfil VDO prescriptions has continued in primary care in England. Unlicensed VDO preparations marketed showed wide variations between measured and declared vitamin D contents. Younger children who are more vulnerable to harm are thus exposed to unnecessary risks of under- and over-supplementation.

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P14 IDENTIFICATION OF PRESCRIBING ERRORS IN A PAEDIATRIC INTENSIVE CARE UNIT (PICU): AN AUDIT

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Aim To identify the nature, frequency and incidence of prescribing errors on a PICU.

Method Electronic intervention data was collected over a two-week period for all patients admitted to or currently on the PICU. A purposefully designed electronic data collection form was developed using Microsoft Excel and piloted by the researchers in advance of commencing the audit to ensure fitness for use. Data was collected in the moment and retrospectively as outlined below. A daily patient list was generated, and the following information extracted from the patient's medication chart; total number of items prescribed each day and the proportion of those that were new. Only patients present in the unit were included in the data collection. Pharmacist interventions are recorded electronically each day. The numbers of interventions reported daily for the study were collected retrospectively from the pharmacy intervention system. The route of administration, type of error, drug, category of harm and prescriber identity to ascertain which shift the error occurred on were also extracted.

Results PICU did not operate at full capacity (24 beds) during the audit period, overall data for 39 patients was captured. Patients ranged from 0 to 15 years of age and had been admitted to the unit for a variety of surgical, medical and trauma-related reasons. A total of 36 interventions were reported giving an intervention rate of 92% per patient and 2.3% per number of prescriptions reviewed. The number of interventions appeared to correlate with the number of items prescribed (none of the prescriptions with 15 or less items required intervention). Many patients within the unit are nil-by-mouth and 77.5% (n=31) of the interventions reported were associated with medicines prescribed via the intravenous route with intravenous antibiotics accounting for 52.5% (n=21) of the total interventions reported. Most errors occurred during a long day shift and were near misses that did not reach the patient.

Conclusion The results show that the incidence of prescribing errors per patient was high but per number of prescriptions this is lower than comparable studies.[1] Prescribing errors were most common for antimicrobial and intravenous medication and therefore these should be the focus of future reforms. The next steps will include a multidisciplinary team meeting to identify potential causes of error and solutions to overcome these. These are likely to reflect those reported in the literature such as raising awareness of errors, educational prescribing sessions, introduction of prescribing prompts, and a new system approach such as electronic medicines administration and prescribing systems, all of which have proven efficacious in reducing prescribing errors on PICUs.[2] In order to implement and determine the impact of any changes a quality improvement approach of plan-do-study-act cycles will be adopted.[3] This will help us meet the Trust target of a 20% reduction in errors.

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P15 FEASIBILITY OF THE INTRODUCTION OF ASEPTICALLY PREPARED DOSE BANDED ANTIMICROBIALS IN A PAEDIATRIC HOSPITAL

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Aim In 2007 the National Patient Safety Agency issued an alert entitled 'Safer Use of Injectable Medicines'. In response to this alert a number of hospitals have set up Centralised Intravenous Additive Services (CIVAS) to provide ready to use syringes for commonly prescribed intravenous (IV) medications to the wards. It offers a number of advantages including: saving nursing time, reducing risk of calculation and manipulation errors, improving infection prevention and control and leading to potential cost saving (vial sharing). A recent audit in our hospital identified 20% of wastage of ready to use syringes associated with significant cost. One way in which to address the issue is produce batches of ready to use syringes of dose banded antimicrobial. Also, the Peadiatric Sepsis 6 Initiative states that intravenous antibiotics should be given to the patients within the hour. Dose-banded antimicrobial preparation could also assist the paediatric emergency department to reduce the patient's wait. The aims of the study was to review the current practice of other paedatric hospitals in order to analyze the feasibility of introducing batch production of dose-banded antimicrobials.

Method We conducted a 20-question survey sent from the 18th of February until the 7th of April 2021 to the Neonatal and Paediatric Pharmacy Group (NPPG), French Society of Clinical Pharmacy (SFPC), European Association of Hospital Pharmacy (EAHP) and other hospital pharmacists from Belgium and Switzerland.

Results Forty-eight pharmacists from 44 paediatric hospitals and 8 different country participated to the survey. Seventeen (36%) were from the United Kingdom, n=16 (32.7%) from France, n=7 (14.3%) from Belgium, n=4 (8.2%) from Switzerland, n=1 (2%) from Canada, n=1 (2%) from Finland, n=1 (2%) from Ireland and n=1 (2%) from Russia. Almost all the participants have heard about dose banding before

(n=45; 94%). Only n=13 (31%) hospitals prescribed medications with dose bands such as IV chemotherapies (n=27; 64.3%), antimicrobials (n=9; 21.4%) and other type of drugs (n=6; 14.3%). The dose banded antimicrobials were cefotaxime, ceftriaxone, piperacillin/tazobactam and benzylpenicillin. Almost all of the participants agreed that it could reduce prescription errors (n=37; 77.1%), save nursing time (n=37; 77.1%) or reduce wastage by reassigning the syringe to another patient (n=32; 66.7%). On the other hand, n=13 (27.1%) participants thought dose banding can expose to risks of drug inefficacy or toxicity by not giving the exact dose (milligram-per-weight) and n=8 (16.7%) thought it can increase wastage (because of the batch production and the expiry date). Only 13 hospitals (29%) prepared some antimicrobial in the centralized aseptic unit with milligram-per-weight doses.

Conclusion Some paediatric hospitals have experienced dose banding for IV antimicrobials such as cefotaxime, ceftriaxone, piperacillin/tazobactam and benzylpenicillin. The participants of the survey thought that it was very attractive in order to reduce wastage and the prescription errors. On the other hand, there was no paediatric hospitals currently producing batches of IV antimicrobials in the CIVAS. Introducing batches of dose banded antimicrobials will needs further studies about time and cost saving as well as stability of some IV antimicrobials syringes.

P17 DOSE RANGE CHECKING (DRC) IN PAEDIATRIC ELECTRONIC PRESCRIBING; AN EFFECTIVE TOOL IN REDUCING PRESCRIBING ERRORS?

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Aim DRC software aims to reduce dosing errors,[1] however, it has been linked to 'alert fatigue', a phenomenon which causes prescribers to potentially override alerts despite being clinically relevant.[2 3] The project aim is to determine the effectiveness of the DRC software implemented into the electronic prescribing software used in a paediatric tertiary hospital.

Method A retrospective clinical audit was undertaken to investigate the DRC alerts produced during July and August 2020. The DRC alert subtypes and the top 10 drugs that produced alerts were described. Alerts generated due to a 'missing value' (height, weight, or dose unit) were counted but not analysed further. Dose-based alerts were clinically screened to ascertain whether they were appropriately or inappropriately overridden. This involved considering whether the DRC recommendations differed from BNFc recommendations, local in-house guidance, or deviations occurred due to individual patient idiosyncrasies or specialist prescribing. Data from dose-based alerts was interrogated to determine whether increasing the acceptable dose range limit from 5% to 10% would have significantly reduced the number of alerts fired. Alerts that were inappropriately overridden and resulted in a medication error were categorised by severity using the EQUIP study scoring tool.[3]

Results 1778 alerts generated in July and August 2020 were analysed. 48% (n=846) of those alerts were produced due to a 'missing value'. The DRC software did not recognise whether the alerted drug was recorded at the same dose in the patients' 'home medications' (verified drug history) or whether in-house dose guidance was used. If recognised, the number of alerts would have reduced by 21.4% (n=200). Conversely, increasing the DRC acceptable dose range from 5 to 10% would have reduced the number of alerts only by 4.5% (n=42).

Overall, 741 alerts were clinically screened. 95% (n=704) of these were not actioned by prescribers. Of those alerts 5.2% (n=37) should have been acted upon and this led to medication errors. 35% (n=13) of the errors were significant and 22% (n=8) were serious according to the EQUIP study tool. 62.5% (n=5) of serious medication errors involved a 'Narrow Therapeutic Index' drug, such as gentamicin and liposomal amphotericin. 38% (n=5) of significant errors related to no prescribed maximum frequency for intravenous ondansetron.

Conclusion DRC systems are effective tools for preventing prescribing errors,[1] but it is concerning to see that several significant and serious prescribing errors occurred despite an alert generation. This potentially suggests that alert fatigue may counteract the error preventing effects of DRC alerts. Therefore, further refinement of DRC systems is required to reduce alert fatigue. Unfortunately, increasing the acceptable dose range limits from 5 to 10% does not appear to be a simple way of sorting this problem. Removing 'missing value' alerts would significantly reduce the number of alerts generated. Including in-house guidelines alongside BNFc dose recommendations into the DRC software would also reduce unnecessary alerts.

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P18 ROLE OF THE PHARMACY TEAM IN PAEDIATRIC PALLIATIVE CARE

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Background In 2016, NICE published a guideline on 'End of life care for infants, children and young people with life-limiting conditions: planning and management'.[1] These guidelines recommended that pharmacists should be embedded in every paediatric palliative care team.

Aim To identify the roles of pharmacy teams in paediatric palliative (PP) care and examine the effectiveness of their services as perceived by PP doctors and nurses. To compare 2020 survey results with a study conducted in 2014 by Khan et al,[2] to assess whether any changes could be observed.

Method This was a repeat of the study conducted in 2014 by Khan et al. A SurveyMonkey link was emailed to members of the APPM (Association for Paediatric Palliative Medicine) and NPPG (Neonatal and Paediatric Pharmacists Group) as well as to community pharmacies working closely with local children's