ABSTRACTS FROM THE NEONATAL AND PAEDIATRIC PHARMACISTS CONFERENCE 2021

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Oral presentations

**SP1** USING KOTTER’S CHANGE MODEL TO REDUCE PAEDIATRIC PRESCRIBING ERRORS

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**Aim** We describe a quality improvement project to reduce the paediatric prescribing error rate on a paediatric ward in a district general hospital. The project is called STAMP (Safe Treatment and Administration of Medicine in Paediatrics) and was started in 2016. In 2017 the local error rate was 5.2% (average monthly error rate) and decreased to 3.8% in 2019. Despite these earlier interventions the error rate has since not improved and in 2020 the error rate increased to 4.4%. Using Kotter’s Change Management model1 our aim was to decrease the prescribing error rate by 20% (from 4.4% to a target of 3.5%) by August 2021.

**Method** The paediatric pharmacy team collected weekly error data from December 2016 to August 2021. Reynolds et al2 report that hospital doctors are often unaware of their errors. As a result of this Reynolds et al developed a questionnaire to better understand the attitudes and perceptions of prescribers with regards to prescribing errors. Permission was asked if we could use the questionnaire locally and this was given to us.

The questionnaire was emailed to all paediatric prescribers, including non-medical prescribers, in September 2020. 97% (30/31) of respondents felt that the number of prescribing errors can be reduced. However, 65% (20/31) of prescribers said that they feel they do not make a significant number of prescribing errors. The results of the questionnaire helped us to better understand why prescribing errors happen and changed the way errors were feedback to prescribers. Interventions included paediatric pharmacy teaching at induction, reporting of weekly error rate, ‘spot the error’ quizzes and individual feedback given to prescribers. Prescribers were asked if they were happy to receive feedback via email if we were not able to give face to face feedback.

**Results** The project has been able to achieve a reduction in error rate to an average of 2.1% (from September 2020 – July 2021) compared to an average error rate of 4.4% the previous year. The aim was to reduce the error rate to 3.5% or below and we have been able to achieve this consistently since October 2020. There have been four weeks where there have been no errors on the ward.

**Conclusion** This project demonstrates that Kotter’s model can successfully be used in healthcare to reduce prescribing errors. Our most successful interventions have been paediatric pharmacy teaching at induction and emailing individual feedback to prescribers.

**REFERENCES**


concentration, or a different strength being more suitable for administration.

Suggestions to aid implementation of future recommendations included ensuring dissemination to community-based practitioners, and providing clearer detail on the rationale behind choice of a concentration.

**Conclusion** The NPPG/RCPCH position statement has helped drive standardisation to some extent, though work is needed to understand how best to support practitioners implementing these and any future recommendations.

**REFERENCE**

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**Abstracts**

**SP3 UNDERSTANDING LIVED EXPERIENCES: A NOVEL UNDERGRADUATE PAEDIATRIC WORK-BASED LEARNING PLACEMENT**

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**Introduction and Aim** Pharmacy undergraduate education and training is undergoing a transformation as placement providers and Schools of Pharmacy look to create more meaningful learning experiences. Work-based learning involves the placement of students within a work environment to experience and take part in work-related activities. In the majority these experiences are within adult care.

The aim of this placement was to provide pharmacy students with paediatric specific education with the focus on patient and family centred care.

**Method** A novel work-based learning placement was designed for year 4 undergraduate pharmacy students within a paediatric hospital in North-East England. Students attended one three-hour session on alternate weeks to a total of five. The premise was for students to work in pairs on a paediatric ward to talk to children, families, and carers about their lived experiences of the child’s condition, and care. The focus was not to give advice or to focus on medication use, but rather the experience was intentionally unstructured so that the students could discuss broader topics with the aim of understanding the families’ experiences to develop their patient-centred approach to consultations. Students document their conversations and reported back to a session supervisor (a clinical pharmacist) who conducted a debrief. This work represents a content analysis of the activities of the students to present this innovative educational intervention; no ethical approval was required.

**Results** A total of 42 year 4 students took part in the placement between January and May 2021. Students worked across a mixture of five wards including respiratory, neurology and surgery. Students spoke to a mixture of child inpatients, families including parents, siblings, and extended family, and carers/other legal guardians. Topics varied and included: medicine use, explanation of diseases and non-pharmaceutical treatments by the families to the students, discussion of the impact on the child’s education, parental work, homelife and siblings. The students were exposed to a range of circumstances of the families e.g. low income, ethnic minority and cared for children, and also a range in the seriousness and longevity of the admission e.g. end of life care, tonsilitis and appendectomy, Crohn’s disease, asthma and bronchiolitis, epilepsy and varied genetic conditions and illnesses.

The students appeared to have a greater awareness of paediatric care and treatments and appeared to grow in confidence in talking to children directly and to family members/carers. The families also engaged and were willing to share their experiences and at times spent long periods with the students with some taking ownership of teaching them. It appears that the families recognised this as an opportunity to raise awareness of their child’s disease and to teach future professionals.

**Conclusion** This work demonstrates a novel placement in paediatric education and training. The students demonstrated improved confidence in paediatric consultations and a greater awareness of paediatric care through being exposed to a range of clinical areas, and types of patients and families. The families also appeared to enjoy sharing their experiences.

**SP4 IMPLEMENTATION OF SMART-PUMPS AND STANDARD CONCENTRATION INFUSIONS ACROSS A PAEDIATRIC HOSPITAL GROUP – A TRAINING AND EVALUATION MODEL**

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**Aim** To implement and train staff in the use of a smart-pump drug library across all clinical areas of the four sites of a large paediatric hospital group.

**Method** A multi-disciplinary steering group was devised with representation from each site to co-ordinate the implementation of a smart-pump drug library and smart-pumps across the entire organisation. Two stages of training were identified: Phase 1: smart-infusion pump training to new users; Phase 2: drug library education. Phase 2 training was co-ordinated by a dedicated smart-pump team nurse educator, supported by six nursing staff seconded to the project on a short-term basis. A comprehensive training package and support documentation were developed. Drug library education sessions involved interactive practical teaching sessions in use of the drug library, followed by completion of a self-assessment competency tool. Staff training was recorded in a training record database. Implementation into each clinical area occurred once 80% of staff had attained competency in both pump and drug library training. Amended training sessions were offered to pharmacy staff and to nursing students. A 12-month fixed term full-time Smart-Pump Support Clinical Nurse Manager post was created and filled in Q3 2020 to support staff and the smart-pump team and to conduct post-implementation audit. Efficacy of training and compliance of drug library use were evaluated at 3-month and 9-month intervals using staff satisfaction surveys and direct observational study.

**Results** Drug library training was delivered to over 800 nursing staff between June 2020 and August 2021. The drug library has been implemented in all clinical areas across four sites. Processes for on-going training support have been established.

Preliminary direct observational study results indicate that drug library use increased from 41.2% to 73.5% at 3 months and 9 months respectively. Where the drug library was used, no clinically significant programming errors were identified. IV