

Do not disturb!

The impact of wearing red aprons on medication administration in PICU



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INTRODUCTION

Medication errors cause significant morbidity and mortality to patients. A reported financial cost to the NHS annually is £1 billion, but in reality could be as much as £2.5 billion (Frontier Economics 2014).

Medication errors are one of the most frequently reported incidents on paediatric intensive care (PIC). Currently, there is limited evidence supporting effective interventions that prevent medication errors. However, introducing the use of red aprons, worn during medication administration, can facilitate protected and uninterrupted dedicated time for nurses to prepare medications. The effectiveness of this intervention on minimising medication administration errors in PIC is unknown.

AIM

To evaluate PIC medication administration errors after the introduction and implementation of using of red aprons during medication preparation and administration.

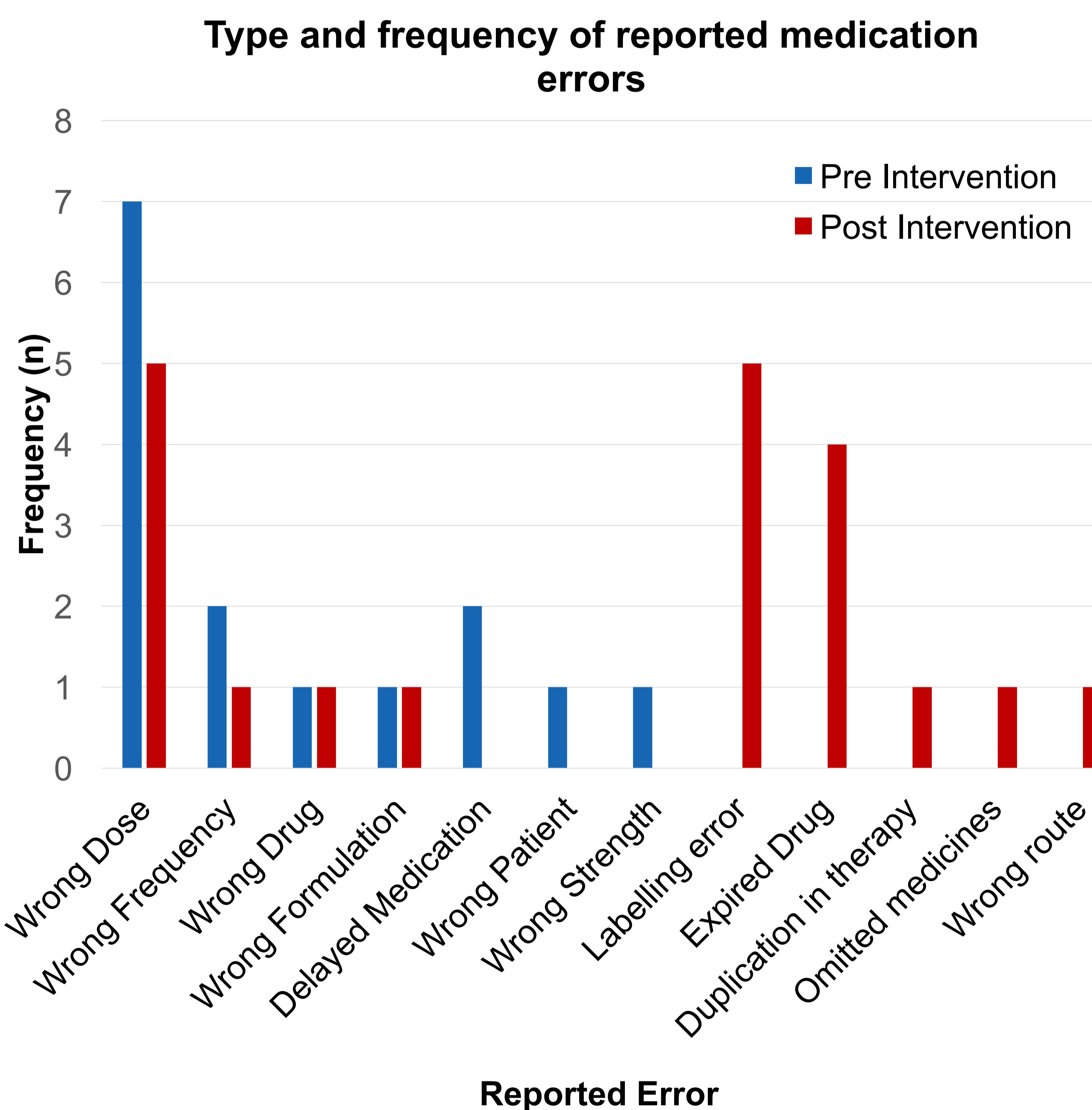


METHOD

This retrospective review investigated PIC medication administration incidents reported during two six-month periods. Before (November 2015-April 2016) and after (November 2016-April 2017) the introduction of the red apron intervention and the promotion of safe medication management. Type and frequency of incidents occurring pre- and post- intervention were compared.

RESULTS

Fifteen medication errors were reported during the six-month study period before the intervention. This increased to 20 during the post intervention time period. Interestingly, as shown in the figure below, three types of errors that were reported before the introduction of the intervention did not occur after, however five new error types were only reported post intervention introduction. Four error types were reported at similar frequencies before and after the introduction of the intervention.



CONCLUSION

This study provides valuable insight into medication administration error reporting. It appears that this intervention may not reduce errors in the short term, but may have an effect on the culture and behaviour of medication error reporting. This includes raising awareness of medication errors amongst staff, and highlighting the importance of and support for safe administration of medications and reporting of errors. Further research will examine the benefits of and barriers to implementing interventions aimed at improving medication safety for PIC children.

FURTHER INFORMATION

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REFERENCES

Frontier Economics (2014) Exploring the costs of unsafe care in the NHS. A Report Prepared for the department of health. London: Frontier Economic.