IN PRACTICE

A55

'READY FOR WINTER': THE BENEFITS OF UTILISING LOW-FIDELITY 'TEA-TROLLEY' SIMULATION TO DELIVER EDUCATION ON PREPARING FOR THE EMERGENCY INTUBATION OF A BRONCHIOLITIC BABY

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10.54531/MAWU3732

Introduction: It was identified in our hospital trust that emergency paediatric intubations were infrequently encountered by staff across the year, resulting in low levels of confidence in management. With winter approaching, it felt pertinent to design and deliver teaching on this topic, simulating the preparation for intubating a bronchiolitic baby. The learning objectives were to increase confidence and knowledge, and also signpost candidates to relevant guidelines [1]. The aim was to capture as many anaesthetic and theatre staff as possible, utilising tea-trolley simulation to allow for multi-disciplinary (MDT) candidates to attend each session.

Methods: The session-design discussed a simulated case of an ex-premature bronchiolitic baby requiring intubation.

Permission was gained from theatre matrons to deliver this in the main-theatres of the trust's 2 acute sites across 4 days. Both anaesthetists and theatre practitioners were invited to attend. Candidates completed a pre-session questionnaire regarding confidence in management, clinical knowledge and awareness of guidelines. The session lasted 45 minutes, using table-top discussion to talk through the scenario in a learner-led way, with a facilitator present. A post-session candidate questionnaire was then completed.

Results: A total of 73 staff attended as candidates. 46.6% were theatre practitioners and 53.4% anaesthetists of different grades. The post-session questionnaire reported an increase in confidence levels in; equipment preparation (41.1% - 84.8%); drug preparation (32.9% - 73.8%); ventilator set up (19.1% - 67.7%). A comparison of the findings, including verbal feedback, is summarised in Table 1.

Discussion: The results demonstrate a clear improvement in confidence levels in knowledge of all topics covered relating to the preparation for intubating a bronchiolitic baby, as well as an almost complete download of the relevant guidelines. It is testament to the effectiveness of low-fidelity table-top simulation as a means to facilitate effective and relevant education. By delivering this 'tea-trolley style' intervention in main theatres on each site, it enabled far greater capture of the target candidates, avoiding the barriers often encountered when learners have to attend a remote location, whilst also utilising the shared learning of an MDT. A limitation of this intervention was that it only focussed on

one topic, and candidate feedback requested a wider range of topics to be covered. Feedback did however recognise the relevance of this topic, therefore planning is underway to embed this as an annual educational intervention within the trust, ensuring staff remain upskilled in dealing with these acute presentations.

Ethics Statement: As the submitting author, I can confirm that all relevant ethical standards of research and dissemination have been met. Additionally, I can confirm

that the necessary ethical approval has been obtained, where applicable.

REFERENCES

Lillie J, Lambert J. Paediatric Critical Care, Severe Bronchiolitis [Internet].
Place of publication: GTi Clinical Guidance Database and Evelina
London Website. 2022 Sept 14th. [Cited 2025 Mar 31]. Available from:
https://www.evelinalondon.nhs.uk/resources/our-services/hospital/south-thames-retrieval-service/Severe-bronchiolitis.pdf

SUPPORTING DOCUMENTS - TABLE 1-A55

Table 1

	% Confident/Very confident in airway equipment preparation	% Confident/Very confident in drug preparation	% Confident/Very confident in ventilator setup	% Download of correct guidelines
Pre-session questionnaire	41.1%	32.9%	19.1%	63%
Post-session questionnaire	84.8%	73.8%	67.7%	97%
Verbal feedback	"Great exposure to small paeds, all of session was massive learning experience"	"Very helpful to drill through the scenario and practise the calculations that we don't do frequently"	"Walking through the kit. De-mystified elements"	"Having a variety of people with different skill level to give opinions"