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IN SITU SIMULATION TO FACILITATE INTRODUCTION OF A NEW OBSTETRIC RAPID SEQUENCE OF ANAESTHESIA GUIDELINE

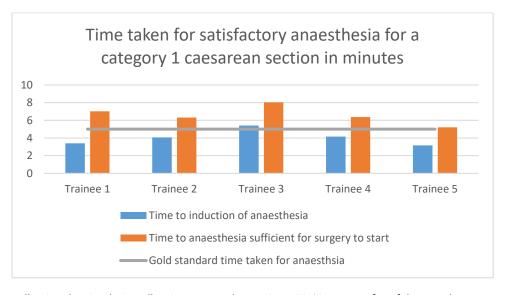
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Introduction: The recent Difficult Airway Society (DAS) guidelines indicated that there is an increased risk of awareness in obstetric patients undergoing general anaesthesia in the emergency setting¹. There is a nationally accepted classification of caesarean sections in terms of their urgency². A category 1 caesarean section means there is an immediate threat to life of the mother and/or foetus, therefore a caesarean section should be performed within 30 minutes of decision to proceed. As such we introduced a new guideline for use in our delivery suite and used in situ simulation to test its practical application, timing of general anaesthesia and highlight any potential risks to patient safety.

Methods: We conducted regional surveys regarding emergency obstetric general anaesthetic and this process was then reviewed at each step to determine how it could be improved. We applied the available evidence base to produce a comprehensive guideline which was widely circulated. Following this we invited trainee anaesthetists to participate in one-to-one in situ simulation scenarios to become familiar with the guideline and improve their skills. A high fidelity manikin was used in a real labour ward theatre and trainees were observed and timed throughout the process. A total of five trainee anaesthetists participated. They completed a pre and post simulation questionnaire feedback form.

Results: In the pre simulation questionnaire 80% of trainees were familiar with the new anaesthesia guideline and all of them expressed concerns about following the guideline, as it differed from their usual practice. The graph shows the time taken for trainees to achieve satisfactory general anaesthesia for surgery to proceed. All trainees failed to achieve satisfactory anaesthesia within 5 minutes, with a range of 5.21 to 8.04 minutes.



Following the simulation all trainees gave the session 100% in terms of usefulness, relevance and teaching.

Conclusions: This in situ simulation provided us with some findings for further development and training. It was useful to discover what aspects of the guideline trainees were apprehensive about so that we can tailor further teaching to address this. With regards to the time for satisfactory anaesthesia this aspect is critical for patient safety. Although all of our trainees failed to achieve anaesthesia in our 'gold standard' time of five minutes, it was the first time they had performed anaesthesia using this guideline and it highlighted areas of their practice they can improve on. We also must bear in mind that they were using a manikin, as opposed to a real patient and did not have a team presence to help them in their actions. Moving forward we aim to continue to run in situ simulation sessions to aid training, increase the number of trainees for our data collection and fundamentally improve safety for obstetric patients in our hospital.

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References

- 1. Pandit JJ, Andrade J, Bogod DG et al, The 5th National Audit Project (NAP5) on accidental awareness during general anaesthesia. *Anaesthesia* (2014) **69**:1078-88
- 2. Lucas DN, Yentis SM, Kinsella SM et al. Urgency of caesarean section: a new classification. J R Soc Med (2000) **93**:346–50.