IN PRACTICE

A85

A PROGRESSIVE SIMULATION STRATEGY THAT IMPROVES THE CONFIDENCE LEVELS AND NON-TECHNICAL SKILLS IN ANAESTHETIC CORE TRAINEES AND THE MULTI-DISCIPLINARY TEAM

Claire Johnson[1], Mo Elreidy[1]; [1]*University Hospitals Of Derby And Burton, Burton-on-Trent, United Kingdom*

Correspondence: claire.johnson72@nhs.net

10.54531/HMRA6561

Introduction: The Royal College of Anaesthetists (RCoA) require Core Level Trainees to be able recognise and manage critical incidents. As many of these critical incidents may not be encountered in clinical practice, the RCoA advise the use of simulation to assist teaching and assessment [1]. The RCoA expects anaesthetic trainees to have an awareness of human factors and understand the importance of non-technical skills to ensure consistent high performance [2].

Methods: Anaesthetic and acute core stem emergency medicine novice trainees attended four training days in the simulation suite and theatre department over a four-month period. The simulation strategy was structured so the trainees progressed from clinical skills teaching on part task trainers and low-fidelity simulations to challenging high-fidelity anaesthetic and critical incident simulations, building on gaining deeper insight about human factors/ergonomics and non-technical skills. After each simulation, a debrief was held and at the end of each day evaluation forms were given to the trainees to complete.

Results: Primarily, the training focused on exploring essential skills required for the management of clinical anaesthetic emergencies. This included both technical and non-technical skills such as, situational awareness, effective communication, navigating uncertainty, and fostering self-awareness. Trainees found the debrief discussions particularly beneficial, as they shed light on the significant impact of human factors, shared lessons learned from peers and heard the reflections of real-life experiences from the faculty. Feedback showed increased learners' confidence in managing these cases especially developing a greater awareness of human factors/ergonomics, non-technical skills, and methods to decrease cognitive load during emergencies e.g. Association of Anaesthetists Quick Reference Handbook [3]. They also appreciated the progressive approach as it provided a structured method for learning and contributed to building a sense of psychological safety during simulation-based learning.

Discussion: The structured and progressively challenging approach of the simulation strategy ensured the trainees were led through their zone of proximal development with the support and guidance of experienced faculty to promote confidence and skill development across a spectrum of scenarios. This simulation strategy enhanced the adaptability, preparedness and fostered a proactive approach to handling challenges and uncertainty of the trainees. Additionally, there was a noticeable improvement in confidence levels in not only the trainees but also in the faculty. Overall, the crucial aspect of the training days was the simulation strategy that allowed the trainees to progress from skill training to high-fidelity and challenging scenarios with guidance and support.

Ethics statement: Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

REFERENCES

1. Royal College of Anaesthetists. 2010 Curriculum. Royal College of Anaesthetists. September 9th, 2020. Available from: https://www.rcoa.ac.uk/documents/2010-curriculum/annex-b-core-level-training. [Accessed 3 October 2023].
2. Kelly EF, Frerk C, Bailey CR, et al. Human Factors in anaesthesia: a narrative review. Anaesthesia. 2023;78:479–490.
3. Anaesthesia Emergencies. Quick Reference Handbook. Association of Anaesthesia, Updated June, 2023. Available from: https://anaesthetists.org/Portals/0/PDFs/QRH/QRH_complete_June_2023.pdf?ver=2023-06-23-141011-603. [Accessed 19 April 2024].

1.