

IN PRACTICE

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INSITU SIMULATION: STRENGTHENING CLINICAL TEAM PERFORMANCE AND IMPROVING SAFETY IN REMOTE PERIOPERATIVE SETTING

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10.54531/UZLS5296

Introduction: Provision of safe perioperative care in remote theatre locations has many challenges. NAP 4 identified airway management in remote sites is associated with increased risk of morbidity and mortality [1]. Simulation training can aid preparedness to manage infrequent but highly critical events. Simulation training is often recommended following a critical events [2]. Insitu Simulation (ISS) undertaken in a clinical team's own workplace provides a safe learning environment, improves team work and performance and identifies latent safety threats [3]. We organised ISS training in our dental DPU for the clinical team after review of learning needs and following recommendations from a critical event.

Methods: Protected time for ISS was secured through list cancellation in dental DPU. Scenarios were built around agreed learning outcomes (LOs) and specific critical events. Mannequins and portable simulation patient monitors were used. An eFONA workshop was also delivered. The ISS organised session was run twice, morning and afternoon to facilitate smaller groups and reflective of healthcare team working in theatre and recovery on a standard day. Each group rotated through scenarios in main DPU theatre, dental chair theatre and recovery. Scenarios included CICO, anaphylaxis, choking under sedation, post op bleeding in oral cavity and emergency airway management in recovery. Communications systems were tested to seek assistance from main hospital site. Each scenario was preceded by team brief and followed by structured debrief. Feedback questionnaire was distributed to team members after event.

Results: Received an 80% response to the feedback survey. Those who responded 100% agreed or strongly agreed ISS was a psychologically safe learning environment. 100% agreed or strongly agreed improved communication, team work, confidence, clinical skills and feeling of preparedness. Team members were able to identify areas for improvement and deficits in resources.

83% suggested ISS should be delivered more frequently, 50% indicated at least twice yearly.

Discussion: Feedback indicates ISS was valuable to the clinical team in our dental DPU. Debrief sessions helped identify areas of latent safety threats and areas for improvement. Familiarising with airway drills and eFONA skills with the clinical team may be helpful in difficult airway management or CICO situation for any anaesthetist working alone in a remote setting.

Time pressures in clinical environments impede ISS which leads to difficulty in showing improvement in patient outcomes. However, if recommended in a critical event report

this is a powerful tool for stakeholders to secure protected time for ISS training.

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.

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