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EDITORIAL

The importance of critical incident reporting in anaesthesia

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As a cornerstone of modern surgical and perioperative practice, anaesthesiologists are tasked with ensuring patient comfort and procedural safety during the perioperative period. Anaesthesia, however, remains a high-risk specialty where even minor lapses can lead to catastrophic outcomes. During the last three decades, critical incident reporting (CIR) has emerged as a vital tool in improving patient safety and refining anaesthetic practices. Despite its proven learning benefits, barriers remain within the anaesthetic community of practice in the implementation of CIR procedures. To address these obstacles, it first requires identification of specific barriers relevant to our own context, followed by cultivating a shift toward transparency, accountability, and continuous learning.

CRI involves the systematic documentation and analysis of adverse events, near misses, or errors during anaesthesia administration. Such reporting helps identify patterns, root causes, and system vulnerabilities that may not be apparent in routine practice. By recognising and analysing these events, healthcare institutions can implement preventive measures, refine protocols, and enhance overall patient safety.^{3,4}

The aviation industry provides a model for effective CIR. Pilots and airline personnel routinely report near misses and errors without fear of punitive action, fostering a culture of safety over blame. In line with such industries where models of effective CIR have been proven, healthcare systems worldwide have adopted a similar approach with the aim to ensure that incident reporting translates into practical safety improvements rather than serving merely as a bureaucratic exercise.⁵

Despite its importance in continued learning, CIR in anaesthesia faces numerous challenges. Chief among them is underreporting due to the fear of blame and professional repercussions. Many anaesthesiologists hesitate to report incidents due to concerns about litigation, disciplinary action, or damage to their reputation. Additionally, reporting systems are often cumbersome, time-consuming, and lack standardisation, discouraging practitioners from actively engaging in the process.

Another major barrier is the perception that CIR does not lead to meaningful change. If reported incidents do not result in visible improvements in practice or patient safety, clinicians may view the process as futile. Institutional inertia, inadequate feedback mechanisms, and lack of leadership commitment further exacerbate this issue.⁸

The research article by Richards-Edwards and Gopalan in this edition of SAJAA presents local, context-relevant insights into barriers to CIR reporting.⁹ They identify the most prevalent, existing barriers and explore the attitudes of both trainees and practising specialists towards the barriers.

Anaesthesia-related CRI is an indispensable tool for continued healthcare education, patient safety and quality improvement. Overcoming the barriers of fear, inefficiency, and lack of follow-through requires a commitment to fostering a culture of openness, support, and proactive learning. By prioritising CIR in anaesthetic practice, we can move toward a safer, more accountable, and more effective healthcare environment, ultimately benefiting both practitioners and patients alike.

References

- Runciman WB. Lessons from the Australian Patient Safety Foundation: setting up a national patient safety surveillance system - is this the right model? Qual Saf Health Care. 2002;11:246-51. https://doi.org/10.1136/qhc.11.3.246.
- Beckmann U, Bohringer C, Carless R, et al. Evaluation of two methods for quality improvement in intensive care: facilitated incident monitoring and retrospective medical chart review. Crit Care Med. 2003;31:1006-11. https://doi. org/10.1097/01.CCM.0000060016.21525.3C.
- Mahajan RP. Critical incident reporting and learning. Br J Anaesth. 2010;105(1):69-75. https://doi.org/10.1093/bja/aeq133
- Reason J. Human error: models and management. Br Med J. 2000;320:768-770. https://doi.org/10.1136/bmj.320.7237.768.
- Helmreich RL. On error management: lessons from aviation. Br Med J. 2000;320:781-785. https://doi.org/10.1136/bmj.320.7237.781.
- Bielka K, Kuchyn I, Frank M, et al. Critical incidents during anesthesia: prospective audit. BMC Anesthesiol. 2023;23(206):1-8. https://doi.org/10.1186/ s12871-023-02171-4.
- Leape LL. Error in medicine. JAMA. 1994;272(23):1851-1857. https://doi. org/10.1001/jama.1994.03520230061039.
- Waring JJ. Beyond blame: cultural barriers to medical incident reporting. Soc Sci Med. 2005;60(9):1927-1935. https://doi.org/10.1016/j.socscimed.2004.08.055.
- Richards-Edwards CL, Gopalan PD. An investigation of barriers to reporting anaesthesia-related critical incidents using the National Guideline for Patient Safety Incident Reporting and Learning. S Afr J Anaesth Analg. 2025;31(1):11-16.