



Editorial

The silent threat: Fatigue, burnout, and patient safety in anaesthesia

Lalit Gupta ¹*

¹Dept. of Anesthesiology and Intensive Care, Maulana Azad Medical College (MAMC), New Delhi, India



ARTICLE INFO

Article history:

Received 20-07-2024

Accepted 30-07-2024

Available online 30-08-2024

This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprint@ipinnovative.com

1. Introduction

Anaesthetists are major players in patient safety and successful surgical outcomes. Job demands of long working hours, difficult shift work, and high levels of demands at work expose them to an increased risk of both fatigue and burnout. These issues pose a significant contemporaneous threat to the well-being of an anaesthetist and the safety of his or her patients. The editorial aims to bring attention to the burden and effects of fatigue and burnout in the practice of anaesthesia and to call for comprehensive strategies that work toward mitigating these risks, ensuring the health and safety of both the practitioners and their patients.

2. The Nature of Anaesthesia Work

Anaesthesia is an exacting specialty for which high levels of cognitive function, vigilance, and decision-making skills are required.^{1,2} Anaesthetists are responsible for the comprehensive care of patients before, during, and after surgery. They administer anaesthesia, meticulously monitor vital signs, and swiftly respond to any changes in the patient's condition. Additionally, they manage pain relief, provide critical life support, and ensure patient safety throughout the perioperative period, demonstrating their crucial role and high workload in patient care. Long working hours, more than 24 hours in a row, are common, with

erratic shift patterns that without any doubt will disturb sleep and the body's circadian rhythm. Besides, the high level of stress involved in an operating room environment, along with possible complications and emergencies, means that their work is relevantly related to mental and physical health for anaesthetists. The harsh realities of long working hours, sleep deprivation, and burnout pose a grave threat to the well-being of anaesthesia providers and the safety of their patients.³

3. Fatigue in Anaesthesia

Fatigue in the case of anaesthetists is a very prevalent problem. Various studies have shown that up to 60.8% of them suffer from severe excessive daytime sleepiness.⁴ Factors contributing to fatigue may include long working hours, irregular shift patterns, mental stress and high workload. This can result in poor cognitive functioning and performance, decreasing vigilance, impairing decision-making, and reducing psychomotor skills.^{3,5} Anaesthesia residents have stated that fatigue interferes with both their professional and personal lives, with negative effects on their physical health.⁴

In a study by Kothari et al., it was concluded that there is a relationship between fatigue among anaesthetists and a higher incidence of medication errors and other adverse events.⁶ On the other hand, Stahel et al. concluded that the non-technical skills, such as communication and teamwork—who stand central in the forefront

* Corresponding author.

E-mail address: lalit.doc@gmail.com (L. Gupta).

of patient safety—deteriorate because of tiredness.⁷ Fatigued anesthesiologists also exhibit decreased vigilance, psychomotor skills, and the ability to make sound clinical decisions.⁴

4. Burnout in Anaesthesia

Another major problem bothering anesthetists is burnout. According to studies, it represents as much as 54% of them who often experience this symptom.⁸ Burnout can be defined as emotional exhaustion, depersonalization, and reduced accomplishment related to personal views. The risks of developing these can be analytically directly linked to chronic stress, emotional requirements at work, and poor balance between work and private life.

Serious consequences of burnout in anaesthetists could include mental health problems or a long career that is nonsurvivable. Burnout significantly increases the risk of suicidal ideation among anesthesiologists. Evidence indicates that healthcare professionals have a heightened risk of suicide, with anesthetists being particularly vulnerable.⁹ In another research undertaken, burnout was a large predictor of early retirement among anaesthesiologists.¹⁰

Burnout can also affect patient safety, in which case anesthetists experiencing burnout may be more likely to make mistakes and deliver suboptimal care. It is also associated with an increased frequency of patient safety incidents and reduced patient satisfaction scores.¹¹

5. Current Mitigation Strategies

The risks of fatigue and burnout are being addressed through a number of strategies, such as work hour regulations like the European Working Time Directive, which aims to restrict hours with provisions to provide adequate rest periods.¹² Fatigue management programs, like the Australian and New Zealand College of Anaesthetists, have provided education and resources for an anaesthetist to recognize and manage their own fatigue.¹³

The wellness provisions in a healthcare institution only underscore the need for the provision of stress management workshops and mindfulness programs, among others, to help in the promotion of mental health and well-being among anaesthetists. These join a long list that requires much more comprehensive and systemic attention.¹⁴

6. Future Directions and Recommendations

Further studies are indicated to learn more about prevalence and impact characteristics of fatigue and burnout concerning anaesthetists and to determine the Strategic mitigation measures. Policy changes mandating rest periods, limiting work hours, and implementing other measures are essential to ensure the health and safety of anesthetists. These changes aim to alleviate risks and reduce the incidence

of burnout and its associated consequences. This requires that hospitals and anesthesiology departments create a work environment in which open discussions of fatigue are acceptable, mental health resources are accessible, and mutual support and self-care are encouraged.^{4,15} This will empower anesthesiologists and enable them to make decisions about their welfare without the fear of stigma and professional reprisal.

7. Conclusion

The alarming prevalence of fatigue among anesthesia providers and its detrimental impact on patient safety can no longer be ignored. Anesthesiologists, healthcare organizations, and regulatory bodies must work together to implement comprehensive strategies to mitigate fatigue and protect the well-being of both providers and patients. Addressing these issues requires an inclusive and systemic approach that prioritizes the health and safety of both anaesthetists and their patients. By working together, we can create a safer and more sustainable healthcare system for all.

It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change.

— Darwin

8. Source of Funding

None.

9. Conflict of Interest

None.

References

1. Nair B, Gabel E, Hofer I, Schwid H, Cannesson M. Intraoperative clinical decision support for anesthesia: A narrative review of available system. *Anesth Analg*. 2017;124(2):603–17.
2. Alshaalan AA, Alharbi MK, Alattas KA. Preference of cognitive approaches for decision making among anesthesiologists' in Saudi Arabia. *Saudi J Anaesth*. 2019;13(3):191–6.
3. Sinha A, Singh A, Tewari A. The fatigued anesthesiologist: A threat to patient safety? *J Anaesthesiol Clin Pharmacol*. 2013;29(2):151–9.
4. Scholliers A, Cornelis S, Tosi M, Opsomer T, Shaproski D, Vanlersberghe C, et al. Impact of fatigue on anaesthesia providers: a scoping review. *Br J Anaesth*. 2023;130(5):622–35.
5. Ippolito M, Einav S, Giarratano A, Cortegiani A. Effects of fatigue on anaesthetist well-being and patient safety: a narrative review. *Br J Anaesth*. 2024;133(1):111–7.
6. Kothari D, Gupta S, Sharma C, Kothari S. Medication error in anaesthesia and critical care: A cause for concern. *Indian J Anaesth*. 2010;54(3):187–92.
7. Stahel PF, Cobiainchi L, Mas FD, Paterson-Brown S, Sakakushev BE, Nguyen C, et al. The role of teamwork and non-technical skills for improving emergency surgical outcomes: an international perspective. *Patient Saf Surg*. 2022;16(1):8.
8. Berger-Estilita J, Salvisberg D, Köseleli E, Haupt S, Meço BC. Impact of Burnout on Anaesthesiologists. *Turk J Anaesthesiol Reanim*. 2024;52(2):54–9.
9. Plunkett E, Costello A, Yentis SM, Hawton K. Suicide in anaesthetists: a systematic review. *Anaesthesia*. 2021;76(10):1392–1403.

10. Sousa ARC, Mourão J. Burnout in anesthesiology. *Braz J Anesthesiol*. 2018;68(5):507–17.
11. Garcia CL, Abreu LC, Ramos JLS, Castro C, Smiderle FRN, Santos JAD, et al. Influence of Burnout on Patient Safety: Systematic Review and Meta-Analysis. *Medicina (Kaunas)*. 2019;55(9):553.
12. Cabrera J, Torres-Reveña Y. Opting out of the European Working Time Directive. Eurofound; 2015. Available from: <https://www.eurofound.europa.eu/en/publications/2015/optiming-out-european-working-time-directive>.
13. Australia H. ANZCA – Australian and New Zealand College of Anaesthetists. Australia: Healthdirect; 2023. Available from: <https://www.healthdirect.gov.au/partners/anzca-australian-and-new-zealand-college-of-anaesthetists>.
14. Nwobodo EP, Strukcinskiene B, Razbadauskas A, Grigoliene R, Agostinis-Sobrinho C. Stress Management in Healthcare Organizations: The Nigerian Context. *Healthcare (Basel)*. 2023;11(21):2815.
15. Gupta N, Gupta A, Garg R. Professional burnout in anaesthesia and critical care - How to decrease it. *J Anesth Crit Care Open Access*. 2015;2:56.

Author biography

Lalit Gupta, Professor  <https://orcid.org/0000-0001-7291-5961>

Cite this article: Gupta L. The silent threat: Fatigue, burnout, and patient safety in anaesthesia. *Indian J Clin Anaesth* 2024;11(3):271-273.