SJIF Impact Factor: 6.711

WORLD JOURNAL OF ADVANCE HEALTHCARE RESEARCH

ISSN: 2457-0400
Volume: 9.
Issue: 10
Page N. 14-15
Year: 2025

Review Article www.wjahr.com

LOOKING BACK AT THE STUDY BY FLEMING ET AL. (2006), ITS INSIGHTS REMAIN HIGHLY RELEVANT TODAY

***Dr. Guiomar Dos Anjos Correia. MD Cardiothoracic surgeon**

Complexo Hospitalar de Doenças Cardio-Pulmonares CDAN- Cardiothoracic Surgery Department.

Article Received date: 10 August 2025 **Article Revised date:** 31 August 2025 **Article Accepted date:** 21 September 2025

***Corresponding Author: Dr. Guiomar Dos Anjos Correia. MD Cardiothoracic Surgeon**

Complexo Hospitalar de Doenças Cardio-Pulmonares CDAN- Cardiothoracic Surgery Department.

DOI: https://doi.org/10.5281/zenodo.17224175

Dear Editor,

More than a decade has passed since the publication of *"Investigating interpersonal competencies of cardiac surgery teams"* by Fleming et al. (Can J Surg, 2006)[1], and we continue to be guided by, and to debate, this important work, which has undoubtedly changed the way many cardiac surgery centers around the world think about teamwork and patient safety.[1,2] The study offers valuable insight into an aspect of cardiac surgery that is too often overlooked: the interpersonal and communication skills that are essential for safe and effective team performance.

Cardiac surgery requires the seamless coordination of surgeons, anesthesiologists, perfusionists, nurses, and residents in a highly complex and time-pressured environment. As Fleming et al emphasize, technical proficiency alone does not guarantee patient safety. Instead, adverse outcomes frequently result from failures of communication, breakdowns in leadership, or incomplete adherence to procedures. Indeed, the study found that errors most often observed in the operating room were related to miscommunication, failure to follow established protocols, incorrect medication use, and poor equipment preparation.

What is particularly striking is the cultural gap between senior and junior staff in their perceptions of leadership and communication.[3] Although senior physicians report being open to questions and challenges, junior staff members remain hesitant to speak up or take initiative during critical situations. This disconnect has serious implications, as it may prevent timely interventions that could avert adverse events. i would like to mention that the abcense of senior staff in some teams can implicate Higher likelihood of adverse outcomes, limited expertise for complex cases and restricted surgical repertoir.

Fleming and associetes[1] rightly recommend structured strategies to address these vulnerabilities. Evidence from high-reliability industries such as aviation[6], demonstrates the effectiveness of tools like preoperative briefings, standardized checklists, and closed-loop communication practices. Equally important are institutional efforts to encourage reporting of errors and near-misses, using these as learning opportunities rather than grounds for blame. A culture that values openness and collaboration will ultimately enhance both team morale and patient safety.

Using the same principles, In Denmark Østergaard and associates implemented team training in medical education.[4] Using simulation as the unchor principles training is done with learning objectives educational tools and evaluation. There is no doubt that full-scale simulation training improves outcomes for learners.[5]

This pilot study is an important step in highlighting the need for systematic integration of human factors and teamwork training into surgical practic.

From a psychological perspective, the study is even more important. The recognition that fatigue, stress, and hierarchical barriers impair judgment and communication aligns with what human factors research has shown for decades. Surgeons and trainees are not immune to cognitive overload, attentional lapses, or the effects of emotional stress.[7] Yet, many professional cultures in medicine still undervalue the impact of these psychological realities. Frick SL and associeties in is work (Building High-performance Teams in Pediatric Orthopaedic Surgery: The Importance of Psychological Safety and Creating a Trusting Environment) underlined

confidence assertion, willingness to question authority, and openness to feedback—shape real behavior in the operating room.

In conclusion such work have given us opportunity to have a close look into cardiac surgery team behaviour and will be crucial in guiding the development of best practices and ensuring that technical excellence in cardiac surgery is matched by equally strong competencies in communication, leadership, and teamwork.

Competing interests: None declared.

REFERENCE

1. Fleming M, Smith S, Slaunwhite J, et al. Investigating interpersonal competencies of cardiac surgery teams. *Can J Surg*, 2006; 49(1): 22-30.
2. Kohn LT, Corrigan JM, Donaldson MS. *To err is human: building a safer health system*. Washington: National Academy Press, 1999.
3. Baker GR, Norton P, Flintoff V, et al. The Canadian Adverse Events Study: the incidence of adverse events among hospital patients in Canada. *CMAJ*, 2004; 170: 1678-86.
4. Østergaard HT, Østergaard D, Lippert A. Implementation of team training in medical education in Denmark. *Qual Saf Health Care*, 2004; 13: 91-5.
5. Baker, D. P., Prince, C., Shrestha, L., Oser, R., & Salas, E. (1993). Aviation computer games for crew resource management training. *International Journal of Aviation Psychology*, 3: 143–156.
6. Chidester, T. R., Helmreich, R. L., Gregorich, S. E., & Geis, C. E. (1991). Pilot personality and crew coordination: Implications for training and selection. *International Journal of Aviation Psychology*, 1: 25–44.
7. Building High-performance Teams in Pediatric Orthopaedic Surgery: The Importance of Psychological Safety and Creating a Trusting Environment. Frick SL, Casey VF, Shore BJ, Waters PM.J Pediatr Soc North Am, 2024 Oct 29; 9: 100132.