



EDITORIAL

Understanding Honest Mistakes, Second Victims and Just Culture for Patient Safety

Errores Honestos y Segundas Víctimas: Hacia una Cultura Justa para la Seguridad del Paciente

José Joaquín Mira

Chair ERNST Consortium (funded by European Cooperation in Science and Technology, COST Action 19113). ATENEA Research Group Director, FISABIO. Professor at Miguel Hernández University of Elche

Recibido el 31 de julio de 2023; aceptado el 2 de agosto de 2023

After the Chernobyl nuclear disaster in 1986, the relationship between safety culture and the risk of adverse outcomes came to the forefront.¹ Since then, industries requiring high reliability, such as energy, chemical or petrochemical industries, transportation, and healthcare, have understood the impact of their members' attitudes on operational safety.^{2–4}

Safety culture refers to the set of norms, beliefs, values, attitudes, and assumptions inherent in the daily functioning of individuals, teams, or organizations. It reflects whether safety is considered a core value in their activities, how they identify and implement safe practices, and how they respond to safety incidents.^{5–8} Creating an environment of transparency and trust (psychological safety⁹) involving all staff, along with promoting the principles of a just culture (supporting professionals after incidents), have been identified as critical elements of a safety-generating culture.^{10,11} Conversely, complacency, taking things for granted, fear of speaking openly about occurrences, ignoring professionals' fatigue or mental and physical overload, contribute to safety incidents.

Following a significant event in these industries, detailed analysis is conducted, and recommendations for procedures, behaviors, and equipment are generated, ultimately becoming guidelines.^{12,13} However, changing attitudes is not as straightforward. To advance from a reactive (or, at best,

proactive) culture to one that generates safety,¹⁴ there are essential issues to consider.

I. Safe practices have been implemented and expanded, but intra and extramural attitudes within healthcare institutions have not undergone the expected changes. The widespread belief that removing the rotten apple from the basket will solve everything is unrealistic and poses a risk to patient safety. The view of errors as "deviations from the norm" needs to change because it hinders the implementation of safe practices, risk management, and victimizes professionals.^{15–17}

A **broad social commitment** is necessary to consolidate progress and promote a safety-generating culture from all angles.¹⁸ While intramural activities have been diverse and effective, extramural efforts are still lacking and should be addressed. This commitment could begin in higher education, by reviewing the current deficiencies¹⁹ in the training of future generations of healthcare professionals regarding patient care quality and safety.

II. To foster a safety-generating culture, leaders must strike a balance between the system's responsibilities, individual responsibilities, and the environment. This involves ensuring accountability and empowering professionals to learn from their mistakes.²⁰ An open and honest environment is crucial, where **professionals feel evaluated and treated in a consistent, constructive, and fair manner**, particularly when directly impacted (second victims²¹). For professionals, it means implementing the "duty of care"

Correo electrónico: jose.mira@umh.es

by following procedures, guidelines, and standards correctly and seeking ways to create increasingly safe environments.

III. Evidence suggests that applying the principles of a just culture ²²⁻²⁴ can lead to more profound and lasting transformations in safety culture, **managing inherent human fallibility in complex environments**. These principles, based on Reason's model, ²⁵ emphasize not holding professionals (individuals or teams) responsible for system failures, communication issues, or working conditions (e.g., fatigue, pressure, or overload) beyond their control (honest mistakes). At the same time, reckless behavior and negligence are not tolerated. ²⁶⁻²⁸ Honest mistakes may fit within the category of non-negligent minor imprudence.

IV. Consensual mechanisms should be established to differentiate honest mistakes (without intention) from intentional acts. The National Patient Safety Foundation proposed a logical, straightforward, and effective scheme in 2016 to distinguish between honest mistakes and unacceptable conduct, similar to Eurocontrol's proposal for introducing just culture principles in Europe (Regulation (EU) No 376/2014). Basically, after each incident, one can ask whether other members of the team or staff, with similar qualifications and training, would have done the same (substitution test) and whether the professional(s) were aware of violating preset standards (intention test). While the underlying logic of this proposal is easy to accept, ²⁹ there are many situations where drawing a clear line between what is acceptable and what is not remains difficult. Experiences from other industries (e.g., Spain's State Program of Operational Safety for Civil Aviation, Law 1/2011 of March 4), No-Fault systems (e.g., New Zealand or Denmark), or mediation programs (CONAMED in Mexico or the experience in France) may serve as references for this analysis.

V. Healthcare professions experience high levels of stress and emotional involvement in their work. ³⁰⁻³³ During the COVID period, an unprecedented institutional response was mobilized to support the morale and workforce of this group, acknowledging their situation. ³⁴ However, only 40% of countries have established a national program on occupational health and safety for healthcare workers, according to WHO recommendations. ³⁵ **The second victim syndrome should be recognized as a workplace problem** and not solely a mental health issue. Feeling responsible for an unintentional error, worrying about a patient with a complicated course, or feeling that they have not done enough for a patient are all part of the emotional response of healthcare personnel. This experience limits responsiveness, decision-making, and practice. For instance, defensive practices increase when the environment is not conducive to a safety culture. Therefore, providing support to second victims contributes to increasing patient safety. ²¹

VI. Programs that support second victims have a different approach when applied in countries with No-Fault systems, where there is no criminal intent ³⁶ (e.g., RISE ³⁷ programs in the US and BUDDY ³⁸ in Denmark). These emotional support programs have started to expand with the inclusion of this objective in national patient safety strategies. ³⁹ However, they currently face limitations due to the legal route that adverse events follow. **The design and conceptualization of these programs should be based on just culture principles.** ^{40,41}

VII. We need a **new regulatory framework** that provides legal guarantees that reporting an incident cannot lead to legal or disciplinary action, except in cases of clearly intentional conduct. ⁴² Similar legal privilege is needed for those who analyze the immediate and remote causes of safety incidents, collaborate in second victim support programs, or are involved in honest mistakes. This regulatory framework must not forget that citizens also require fair compensation (including knowing why the event occurred and what will be done to prevent recurrence) after a serious adverse event. ⁴³

Safety culture improves health outcomes, and as outcomes improve, the safety culture of healthcare institutions also improves. ⁴⁴ In recent years, we have shifted from merely avoiding things going wrong to doing everything possible to ensure everything goes well. ⁴⁵ There is no turning back, but certain changes are necessary for total credibility within the sector. Feelings of shame, fear of unforeseen consequences, or learning solely from experience after an adverse event should be definitively left behind if we want to overcome the prevailing attitudinal barriers and achieve the full engagement of healthcare professionals.

During the execution of this document, J.J.M. enjoyed a research activity intensification contract funded by the Carlos III Health Institute (reference INT22/00012).

Bibliografía

1. Nuclear Safety. Technical Progress Journal, April-June 1993: Volume 34, No. 2.
2. Pidgeon NF. Safety Culture and Risk Management in Organizations. *J Cross-Cultural Psych.* 1991;22(1):129-40.
3. DiCuccio MH. The Relationship Between Patient Safety Culture and Patient Outcomes: A Systematic Review. *J Patient Saf.* 2015;11(3):135-42.
4. Weaver SJ, Lubomksi LH, Wilson RF, Pfoh ER, Martinez KA, Dy SM. Promoting a culture of safety as a patient safety strategy: a systematic review. *Ann Intern Med.* 2013;158 5 Pt 2:369-74.
5. Zhang H, Wiegmann DA, von Thaden TL, Sharma G, Mitchell AA. Safety Culture: A Concept in Chaos? *Proceedings of the Human Factors and Ergonomics Society Annual Meeting.* 2002;46(15):1404-8.
6. Douglas A. Wiegmann, Hui Zhang, Terry L. von Thaden, Gunjan Sharma & Alyssa Mitchell Gibbons (2004) Safety Culture: An Integrative Review, *The International Journal of Aviation Psychology*, 14:2, 117-34.
7. Goodheart BJ, Smith MO. Measurable Outcomes of Safety Culture in Aviation - A Meta- Analytic Review. *International Journal of Aviation, Aeronautics, and Aerospace.* 2014;1(4).
8. Nieva VF, Sorra J. Safety culture assessment: a tool for improving patient safety in healthcare organizations. *Qual Saf Health Care.* 2003;12 Suppl II:ii17-23.
9. Edmondson AC. Psychological safety and learning behavior in work teams. *Adm. Sci. Q.* 1999;44:350-83.
10. Hudson P. Implementing a safety culture in a major multinational Saf. *Sci.* 2007;45:697-722.
11. Shahid A, Zaidi MS, Azizan R. A road map to generative safety culture: An integrated conceptual model. *IOP Conf. Ser.: Mater. Sci. Eng.* 2019;702, 012051.
12. Plan global para la seguridad de la aviación (GASeP) adoptado por el Consejo de la OACI el 10 de noviembre de 2017.
13. European Organisation for the Safety of Air Navigation (EUROCONTROL). European Safety Regulatory Requirements (ESARRs); 2011.

14. Mearns K, Kirwan B, Reader TW, Jackson J, Kennedy R, Gordon R. Development of a methodology for understanding and enhancing safety culture in Air Traffic Management. *Safety Science*. 2013;53:123–33.
15. Petschonek S, Burlison J, Cross C, Martin K, Laver J, Landis RS, Hoffman J. Development of the just culture assessment tool: Measuring the perceptions of health-care professionals in hospitals. *Journal of Patient Safety*. 2013;9(4):190–7.
16. Ullström S, Sachs MA, Hansson J, Øvretveit J, Brommels M. Suffering in silence: a qualitative study of second victims of adverse events. *BMJ Qual Saf*. 2014;23(4):325–31.
17. Volkar JK, Phrampus P, English D, Johnson R, Medeiros A, Zacharia M, Beigi R. Institution of Just Culture Physician Peer Review in an Academic Medical Center. *J Patient Saf*. 2021;17(7):e689–93.
18. Gupta B, Guleria K, Arora R. Patient safety in obstetrics and gynecology departments of two teaching hospitals in Delhi. *Indian Journal of Community Medicine*. 2015;41(3.).
19. Sánchez-García A, et al. Patient safety topics, especially the second victim phenomenon, are neglected in undergraduate medical and nursing curricula in Europe: An Online Observational Study. *BMC Nursing*. 2023;22:283.
20. Wu AW, Pham JC. How does it feel? The system-person paradox of medical error. *Emerg Med J*. 2023;40(5):318–9.
21. Vanhaecht K, Seys D, Russotto S, Strametz R, Mira J, Sigurgeirsdóttir S, Wu AW, Pölluste K, Popovici DG, Sfetcu R, Kurt S, Panella M, on behalf of European Researchers' Network Working on Second Victims (ERNST). An Evidence and Consensus-Based Definition of Second Victim: A Strategic Topic in Healthcare Quality, Patient Safety, Person-Centeredness and Human Resource Management. *International Journal of Environmental Research and Public Health*. 2022;19(24):16869.
22. Turner K, Svetcic J, Grice D, et al. Restorative just culture significantly improves stakeholder inclusion, second victim experiences and quality of recommendations in incident responses. *Journal of Hospital Administration*. 2022;11:8–17.
23. Leonard MW, Frankel A. The path to safe and reliable health-care. *Patient Educ Couns*. 2010;80(3):288–92.
24. Boysen PG 2nd. Just culture: a foundation for balanced accountability and patient safety. *Ochsner J*. 2013;13(3):400–6. Fall;.
25. Reason J. *Human Error*. New York, NY: Cambridge University Press; 1990.
26. European Organisation for the Safety of Air Navigation (EUROCONTROL). SAFREP TF Report to PC – November 2005 - Report on ATM Incident Reporting Culture: Impediments and Practices. Brussels: EUROCONTROL; 2005.
27. Ferguson J, Fakelmann R. The culture factor. *Frontiers of Health Services Management*. 2005;22(1):33–40.
28. Berwick DM, Feeley D, Loehrer S. Change from the inside out: health care leaders taking the helm. *JAMA*. 2015;313(17):1707–8.
29. Marx D. Patient Safety and the Just Culture. *Obstet. Gynecol. Clin. N. Am.* 2019;46:239–45.
30. Brand SL, Thompson Coon J, Fleming LE, Carroll L, Bethel A, Wyatt K. Whole-system approaches to improving the health and wellbeing of healthcare workers: A systematic review. *PLoS One*. 2017 Dec 4;12(12), e0188418.
31. Mira JJ, Lorenzo S, Carrillo I, et al. Lessons learned for reducing the negative impact of adverse events on patients, health professionals and healthcare organizations. *Int J Quality Health Care*. 2017;29:450–60.
32. Pollock A, Campbell P, Cheyne J, Cowie J, Davis B, McCallum J, McGill K, Elders A, Hagen S, McClurg D, Torrens C, Maxwell M. Interventions to support the resilience and mental health of frontline health and social care professionals during and after a disease outbreak, epidemic or pandemic: a mixed methods systematic review. *Cochrane Database Syst Rev*. 2020 Nov 5;11(11):CD013779.
33. Kunzler AM, Helmreich I, Chmitorz A, König J, Binder H, Wessa M, Lieb K. Psychological interventions to foster resilience in healthcare professionals. *Cochrane Database Syst Rev*. 2020 Jul 5;7(7):CD012527.
34. Lopez-Pineda A, Carrillo I, Mula A, Guerra-Paiva S, Strametz R, Tella S, Vanhaecht K, Panella M, Knezevic B, Ungureanu MI, ... Mira JJ. Strategies for the Psychological Support of the Healthcare Workforce during the COVID-19 Pandemic: The ERNST Study. *Int. J. Environ. Res. Public Health*. 2022;19:5529.
35. WHO. Implementation of the Global Patient Safety Action Plan 2021-2030. INTERIM REPORT. Based on the first survey of patient safety in WHO Member States. April 2023.
36. Paradiso L. Rebuilding trust in just culture. *Nurs Manage*. 2022;53(11):6–14.
37. Edrees H, Connors C, Paine L, Norvell M, Taylor H, Wu AW. Implementing the RISE second victim support programme at the Johns Hopkins Hospital: a case study. *BMJ Open*. 2016;6(9):e011708.
38. Schröder K, Bovil T, Jørgensen JS, Abrahamsen C. Evaluation of 'the Buddy Study', a peer support program for second victims in healthcare: a survey in two Danish hospital departments. *BMC Health Serv Res*. 2022;22(1):566.
39. Cobos-Vargas A, Pérez-Pérez P, Núñez-Núñez M, Casado-Fernández E, Bueno-Cavanillas A. Second Victim Support at the Core of Severe Adverse Event Investigation. *Int J Environ Res Public Health*. 2022;19(24):16850.
40. White RM, Delacroix R. Second victim phenomenon: Is 'just culture' a reality? An integrative review. *Appl Nurs Res*. 2020;56:151319.
41. Kim BB, Yu S. Effects of Just Culture and Empowerment on Patient Safety Activities of Hospital Nurses. *Healthcare (Basel)*. 2021;9(10):1324.
42. AHRQ. The differences between human error, at-risk behavior, and reckless behavior are key to a just culture, July 1, 2020, ISMP Medication Safety Alert! Acute Care Edition. 2020; 25(12). <https://psnet.ahrq.gov/issue/differences-between-human-error-risk-behavior-and-reckless-behavior-are-key-just-culture>.
43. Mira JJ, Romeo-Casabona CM, Astier-Peña MP, et al. Si ocurrió un evento adverso piense en decir "lo siento". *An. Sist. Sanit. Navar*. 2017;40:279–90.
44. Mrayyan MT. Predictors and outcomes of patient safety culture: a cross-sectional comparative study. *BMJ Open Qual*. 2022;11(3):e001889.
45. Hollnagel E, Wears RL, Braithwaite J. From Safety-I to Safety-II: A White Paper. The Resilient Health Care Net: Published simultaneously by the University of Southern Denmark, University of Florida, USA, and Macquarie University, Australia. 2015.