Patient Safety: Reflections from a Medical Student

Isabella Medina D'Onghia[1*]

[1] *Estudiante de la Escuela de Medicina, División de Ciencias de la Salud. Universidad Anáhuac Querétaro.* [*] **Correspondencia:** isabella.medina09@anahuac.mx

As a medical student, I have come to understand that patient safety is not simply a theoretical concept discussed in lectures or policy documents. It is a daily responsibility that shapes every clinical decision, every interaction with a patient, and every action taken within a health care team. Patient safety emerged as a structured movement in response to the recognition that medical error is common, often preventable, and deeply rooted in both human and system failures [1]. This realization has transformed the way medicine approaches quality of care.

1. Understanding the Importance of Patient Safety

Patient safety refers to the prevention of harm to patients during the delivery of health care [2]. It recognizes that while human error is inevitable, many adverse events are preventable when systems are designed to anticipate and mitigate mistakes. The patient safety movement gained momentum after the 1996 Annenberg Conference and the publication of the Institute of Medicine report *To Err Is Human*, which estimated that between 44,000 and 98,000 deaths occurred annually in the United States because of preventable medical errors [3].

What I find most powerful about this definition is that patient safety does not focus only on individual blame. Instead, it emphasizes recognizing system deficiencies, communication failures, workflow inefficiencies, unclear protocols, and hierarchical barriers that create conditions in which errors are more likely to occur.

In obstetrics specifically, where two patients (mother and child) are involved and favorable outcomes are expected, adverse events can be particularly devastating and legally significant [1]. This makes safety not only a clinical priority but also an ethical obligation. It also reminds me that providing safe care requires constant awareness, collaboration, and a willingness to improve every aspect of the health care system.

2. Moving from Knowledge to Action

From my perspective as a medical student rotating in clinical settings, improving patient safety begins with everyday behaviors. Although students are still learning, we have an important role in observing good practices, asking questions when something seems unclear, and developing habits that promote safe patient care from the very beginning of our careers.

First, we must strengthen communication. Poor communication accounts for a large proportion of sentinel events in perinatal care [1]. Structured communication tools such as SBAR (Situation, Background, Assessment, Recommendation), the two-challenge rule, and CUS (Concerned, Uncomfortable, Safety issue) help reduce hierarchical barriers and empower team members to speak up [1].

Second, we must standardize care through protocols, bundles, and checklists. Checklists, originally adopted from aviation, have dramatically reduced complications in critical care and surgery [1]. In obstetrics, standardized oxytocin protocols, obstetric hemorrhage bundles, and maternal early warning trigger systems have been associated with reductions in severe maternal morbidity [1]. These tools reduce variability and help ensure that evidence-based practices are applied consistently. As a future physician, I believe it is essential to view protocols not as restrictive but as safeguards designed to protect both patients and health care professionals.

Third, simulation and team training must be integrated into routine practice. Simulation allows teams to rehearse rare but catastrophic events such as eclampsia before they occur in real life. Evidence suggests that simulation programs improve team performance, strengthen communication, and reduce obstetric morbidity [1]. As students, we benefit enormously from simulation because it builds confidence, reinforces teamwork, and allows us to make mistakes in a safe environment. These experiences also prepare us to respond more effectively under pressure when similar situations arise in clinical practice.

Fourth, we must foster a culture of safety and a just culture. A culture of safety shifts the focus from punishment to system improvement while maintaining accountability [1, 4]. The concept of "just culture" distinguishes between human error, at-risk behavior, and reckless behavior [1]. This distinction is important to me because it reinforces that we are all human, but also responsible. Learning from near misses, participating in

Figura 1: Clinical training activities related to patient safety. Source: Author's personal archive.

root cause analyses, and engaging in honest disclosure are part of professional growth.

Fifth, we must measure outcomes and track progress. Tools such as the Obstetric Adverse Outcome Index (AOI) allow institutions to monitor significant adverse events and identify trends [1]. Without measurement, improvement is impossible. Quality indicators, including structural, process, and outcome measures, provide objective ways to evaluate whether safety interventions are working [4]. As a student, I am learning that data-driven medicine is essential not only in research, but also in everyday quality improvement.

Patient safety efforts can transform health care institutions into high-reliability organizations, where communication is transparent, teamwork is prioritized, and the unexpected is anticipated rather than simply managed [1]. As I progress in my medical training, I hope to contribute to that transformation, not only by acquiring clinical knowledge, but also by embodying a safety-centered mindset in every patient encounter. I believe that small, consistent actions performed by every member of the health care team can collectively produce meaningful improvements in patient outcomes and the quality of care delivered.

Ultimately, patient safety is an ethical commitment: to do no harm, to recognize our limitations, to learn from our errors, and to continuously improve the systems in which we work. As I continue my medical training, I have come to believe that excellence in medicine cannot exist without patient safety at its core.

Referencias

[1] Pettker CM, Grobman WA. Patient safety and quality improvement in obstetrics. In: Resnik R, Lockwood CJ, Moore TR, Greene MF, Copel JA, Silver RM, et al., editors. Creasy and Resnik's Maternal-Fetal Medicine: Principles and Practice. 9th ed. Philadelphia: Elsevier; 2025. p. 856-69.

[2] World Health Organization. Global Patient Safety Action Plan 2021-2030: Towards Eliminating Avoidable Harm in Health Care. Geneva: World Health Organization; 2021.

[3] Institute of Medicine (US) Committee on Quality of Health Care in America. To Err Is Human: Building a Safer Health System. Washington (DC): National Academies Press; 2000.

[4] Wachter RM, Shojania KG. Quality, safety, and value. In: Goldman L, Schafer AI, editors. Goldman-Cecil Medicine. 27th ed. Philadelphia: Elsevier; 2024. p. 43-8.