

GLOBAL PATIENT SAFETY

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Patient Safety is the legacy of our profession and of ASA. There are countless examples of the positive impact of a culture of patient safety, especially in relationship to anesthesia and surgical outcomes. This legacy and its impact have yet to reach many patients worldwide. In many low- and middle-income countries (LMICs), preparations are under way to develop or expand surgical capacity. Yet in these same countries, there has been little focus on developing a culture of patient safety. There have also been few commitments from governments and health care systems to invest in promulgating a culture of safety, a system of provider accountability, or basic safety monitoring and inexpensive life-saving medications. Therefore, global patient safety must be the next global agenda, and ASA and its many patient safety experts are poised to lead this effort.

The events of 2015 have translated into the era of “Global Surgery,” which is unfolding now and will continue through 2030. The World Health Organization (WHO), the Lancet Commission and the G4 Alliance⁴ are already working to responsibly scale up access to 44 basic surgical procedures in all LMICs,¹ and while anesthesia is recognized as essential, our role and voice remain underserved. An opportunity is at hand to nurture and facilitate the role of global patient safety in the future of global surgery and the critical role that anesthesia must play in the process.

Perioperative mortality rates (POMRs), not surprisingly, will serve as an important metric as surgery scales up in LMICs. Fortunately, POMRs offer a reflection of anesthesia quality and patient safety, especially at 24 hours.⁵ What is not yet stated in the work of the WHO or G4 is the relationship of accountability around outcomes that will be essential to quality improvement initiatives in every setting.

Delivering cost-effective anesthesia is important in every clinical setting, but never more so than in LMICs. The costs and outcomes related to the presence or absence of basic anesthesia necessities are reviewed in “Disease Control Priorities in Developing Countries”¹ and the necessary expenditures for anesthesia as surgery scales up are also at the heart of a discussion on global patient safety.

Many processes, equipment and technologies have been developed and utilized in an effort to improve patient safety. But providing patient safety, when viewed through a historical lens, is not dependent on technology. 21st century anesthesiologists tend to view patient safety through the prism of technology. However, technologies applied to anesthesia are only tools that may be applied appropriately, but also inappropriately, if selection and training are not carefully utilized. Technology, per se, does not necessarily make an operation or anesthetic better or safer. The only constant of technology is that it changes the job. Anesthesia’s safety legacy is a journey through the past six decades, which has revolved around the triad of vigilance, commitment and professional accountability. The improvement in outcomes pre-dated EKGs in the O.R., pulse oximetry and ETCO monitoring. A culture of patient safety has improved outcomes.⁶ And while it is true that continued incremental benefits occur with the addition of appropriate technology, this is only accurate when the technology is used by vigilant professionals who are committed to and responsible for their patients.⁷

In the west, the improvement in perioperative outcomes exponentially progressed when there were limited choices of drugs (ether, pentothal, morphine) available for administration,



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and that paucity resulted in a fast learning curve for trainees. Second, the medications were generally predictable in their actions, with reasonable safety margins. Third, the techniques for administering an anesthetic were limited and straightforward; thus a subarachnoid block, for example, quickly became a statistically safe anesthetic. Therefore, as surgery scales up, strategies to develop patient safety and ensure best outcomes should consider standard approaches to anesthesia, especially in the hands of non-physician providers who commonly practice in LMICs without physician supervision.

Practices that contribute to patient safety are now commonplace in O.R.s and hospitals throughout high-income countries, but it is important to remember that our western culture developed and embraced the tenets of patient safety within the construct of our sense of responsibility and accountability, over time, and with feedback from followed outcomes. This pervasive culture of patient safety in the west is not universal. Cultures are unique and are influenced by many social, historic and emotional factors that are difficult to analyze or understand from a distance.⁶ Even when practicing the western tenets of medical science, the cultures of patient safety are very different, for instance, in China, Rwanda and Sri Lanka. This reality impacts the ability to standardize patient safety and it is why simply supplying safety monitors and suggesting a checklist will not be enough to prevent anesthesia-related mortality in the era of Global Surgery 2016-30.

Countries must ultimately decide how to instill patient safety into a practice of anesthesia and surgery. While they are likely to look to western countries and successful societies for guidance and support, they will ultimately find patient safety approaches and solutions that are embraced by providers influenced by their own local and regional culture. This is why the knowledge and expertise from ASA and other like-minded organizations must be sensitively exported to LMICs as they scale up to providing 44 surgical interventions (with related anesthesia activities) over the next 15 years.

The oldest and arguably most important component of patient safety – vigilance – may in fact be the rate-limiting step for global patient safety.⁸ It is certainly the first step toward safer surgery and anesthesia in most low-income countries. Not only is it possible in every setting when committed to, but also it is inexpensive and essential, with or without safety monitoring in place. Focusing on teaching, cultivating and demanding vigilance in every operative setting is a realistic goal in LMICs. Supporting this expectation through ASA, and the Anesthesia Patient Safety Foundation, is possible and virtually cost-neutral in an era of distance learning, apps and the Internet.

ASA is deeply committed to patient safety, including global patient safety. The ASA Committee on Global Humanitarian Outreach and the ASA Charitable Foundation support



Emery A. Rovenstine, M.D., performing an anesthesia induction.

Photo donated to the Wood Library-Museum by Alex Nacht, M.D., May 20, 1994.

and promote pulse oximetry and the WHO Surgical Safety Checklist in every operative setting. But we have yet to take on some critically important aspects of patient safety that are essential to LMICs, including teaching vigilance, the presence of oxygen and rescue medicines in every operative setting, benchmarking outcomes, and CME on patient safety and quality for all providers. In the era of Global Surgery 2016-30, it is time to look beyond our borders and our hemisphere to ensure patient safety for all.

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