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Editorial

Simulation and Patient Safety: Continuing to Provide Evidence

The role of simulation on improving patient safety is a frequently discussed topic. As simulation has repeatedly demonstrated the ability to improve knowledge and clinical skill competency through education, there is a call for more research to determine how simulation ultimately improves patient safety. At a recent presentation that I gave, one of the comments that I received was that they were disappointed that I did not present more on how simulation improved patient safety. I would love to be able to present something like this, but I need the research to support any claims that simulation improves patient safety. This is one of the main reasons that we will be dedicating the May 2020 issue of Clinical Simulation in Nursing to focus on simulation and patient safety.

Although simulation has gained significant traction in education programs for the health professions, it is not as routinely used in the clinical practice setting. There is a myriad of reasons why this is, with logistics, budgets, and time, cited most frequently as the more prevalent reason. These are all valid reasons; however, we need to look beyond these and understand how significantly simulation can change the way we practice and improve patient safety.

Frequently cited in the literature are statistics regarding patient safety issues. Medical errors are the third leading cause of death in the United States (Makary & Daniel, 2016). In Canada, medical errors also result in a significant cost of life as well as financial resources. The Canadian Institute for Health Information estimates that medical errors are associated with as many as 23,750 deaths per year, one million added days in hospital, and $685-$750 million in extra health care spending (CIHI, 2010; CIHI, 2016). Patient safety is a concern for all health disciplines. To address patient safety concerns, a wide variety of strategies have been implemented, including smart pump alerts (Shah, Irizarry, & O'Neill, 2018), triggers in electronic medical records (Patterson, Anders, & Moffat-Bruce, 2017), and surgical checklists to mention a few (Haynes, Weiser & Berry, 2011). Although these and other similar strategies have been widely used, they have demonstrated inconsistent improvements in patient safety (deJager, McKenna, Bartlett, Gunnarsson, & Ho, 2016). In fact, many of these strategies have actually reduced safety rather than improve it (Ip, 2015; Wachter, 2015). In contrast, simulation-based learning has demonstrated effectiveness in improving safety competencies in all health-related disciplines (Boet et al., 2014; Smith & Benedict, 2015).

In 2000, the Institute of Medicine in the United States released a report titled "To Err is Human," which consistently mentioned simulation as a key strategy to improve patient safety (Kohn, Corrigan, & Donaldson, 2000). In 2019, the documentary titled "To Err Is Human: A Patient Safety Documentary" was released and has been viewed widely across North America, with calls for changes in the way we work in health care systems. Despite such recommendations, there has not been widespread systematic, consistent adoption of simulation into the patient safety efforts of health systems. To move these efforts forward, simulation programs need to work collaboratively with all health disciplines and with administration to embed simulation practices into ongoing education strategies.

Going back the original question, if we know that our current patient safety strategies are not making significant differences in patient safety, and if we have the evidence that simulation has the potential to effectively improve patient safety, why is there continued reluctance to include simulation-based professional development activities for interprofessional teams? Does the cost of providing interprofessional simulation experiences exceed that of medical errors, extended hospital stays, and patient death? I believe this is a time when we need to advocate for increased use of simulation in the hospital setting and to collaborate with researchers who can evaluate the effects of simulation use on patient safety outcomes. Until we have strong body of evidence that goes beyond a handful of simulation events, we will continue to have these discussions to the detriment of patient safety.

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Nicole Harder, RN, PhD, CHSE, CCSNE
Editor-in-Chief
Clinical Simulation in Nursing
Assistant Professor, College of Nursing
Mindermar Professor in Human Simulation
Rady Faculty of Health Sciences
University of Manitoba
Winnipeg, Manitoba
Canada
E-mail address: Nicole.Harder@umanitoba.ca

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