Are Clinical Instructors Preventing or Provoking Adverse Events Involving Nursing Students: A Contemporary Issue

Lorna Christensen

Keywords: Students, Nursing; Education, Nursing; Education, Clinical; Faculty, Nursing; Patient Safety; Health Care Errors

Are Clinical Instructors Preventing or Provoking Adverse Events Involving Nursing Students: A Contemporary Issue

Errors are inevitable. Unfortunately, when errors happen in health care, leading to adverse events, human lives are put at risk. There has been an abundance of international research into adverse events since the landmark report *To Err is Human* was published by the Institute of Medicine (IOM) in 2000, and much has changed in healthcare culture since the recognition that system failures—rather than individual negligence—contribute to most adverse events (Reason, 2000, p. 768). However, studies have focused largely on registered professionals—and even when healthcare students were included, the focus remained on the students themselves, often excluding their instructors.

So, what can clinical instructors do to prevent adverse events involving their students, and what might they be doing inadvertently to provoke these events? Certainly, no instructor would like to believe that they contributed to a student's mistake; yet, so many students and nurses have a story of a "terrible teacher"—one that made them feel unintelligent, incompetent, or downright scared. What is the ultimate role of the clinical instructor in patient safety? This article proposes a framework to begin to understand nursing student error prevention, with the aim to assist clinical instructors, nursing faculty, and nursing leaders in addressing an unrecognized aspect of adverse events.

BACKGROUND

There is an alarmingly high rate of adverse events in healthcare. In 1997, patient deaths due to adverse events in the USA occurred more often than from AIDS, car crashes, or breast cancer (IOM, 2000). Global literature reviews estimate adverse events as affecting anywhere

from 3% to 16% of hospitalized patients, with 30-70% being preventable (Raymond, 2016, p. 18).

Research into student errors is more limited, and overall, the true rate of student errors is not known. A study by Cebeci et al. (2015) in Turkey found that 38.3% of students reported committing an error during clinical courses, but noted that 98.1%--fortunately—caused no harm to the patient. Another study by Stevanin et al. (2015) in Italy found that 28.8% of students had participated in or witnessed an adverse event, but found a risk of patient harm in 84.8% of cases. They calculated this to equate to "around 0.5 events/1000 h of clinical learning (p.931). To further compound the issue, many nursing students fear reporting their errors. Cebeci et al. (2015) found that 61.4% of errors were reported by nursing students, while Noland (2014) found that 72.4% of nursing students in the USA reported their errors, and Koohestani and Baghcheghi (2009) found that 75.8% of medication errors by nursing students in Iran were reported. In other words, about 25-40% of errors are not reported. Overall, what research does agree upon is that nursing students are making mistakes, sometimes these mistakes are not reported, and sometimes those mistakes hurt their patients.

So why are so many nursing students involved in adverse events, and why do they choose to hide them? There are several unique factors affecting students, which contribute to their risk of making mistakes. Nursing students are inexperienced and under pressure of evaluation when entering the clinical environment, and are often anxious, stressed, and uncertain. Students are expected to be responsible and accountable for their actions—including mistakes—while simultaneously being graded and evaluated. Indeed, repercussions after making an error is one of the most commonly reported fears of students entering the clinical environment (Raymond,

2016). Clinical instructors have the power to both magnify and reduce these factors in clinical nursing students.

THE LEVELS OF PREVENTION

The levels disease prevention (World Health Organization, 2018) provide a simple format that can be modified to discuss this problem. If the three levels of disease prevention (primary, secondary, and tertiary) are adapted to understand nursing student error prevention, then the following framework emerges:

A) Primary prevention: creating a safe learning culture (one that prevents errors before they happen);
B) Secondary prevention: reducing the negative impact of errors on students (stopping the effects early on); and,
C) Tertiary prevention: participating in systemic efforts to reduce the established problem (reducing the overall impacts).

This framework is particularly helpful for clinical instructors, but it is also useful for nursing faculty and nursing leaders to understand the importance of needed policy and administrative changes.

Primary Prevention

Just as in traditional disease prevention, primary prevention is where institutions and individuals can have the most impact on errors with the least effort. Error prevention begins by creating a safe learning culture—a setting where the very likelihood of errors is reduced. According to Sabog et al. (2015), creating a culture where it is safe to report errors simultaneously reduces errors and increases the rates of reporting. A safe learning culture is one that treats students fairly, views errors justly, and has approachable and accepting leadership

(Penn, 2014; Nelson, 2015; Sabog et al., 2015). In contrast, an unsafe learning culture treats students harshly, has unapproachable leaders, penalizes students for making any mistakes, and equates these mistakes with course failure.

Uncontrolled student anxiety can impact problem solving, focus, diligence, and ultimately, performance (Raymond, 2016). Actions such as learning students' names, involving them in decisions, being sensitive to their feelings, expressing pleasure with the group, promoting trust, encouraging questions, and exhibiting a sense of humour can all contribute to reducing student anxiety. Negative behaviours, such as being inflexible, threatening, intimidating, impatient, or demanding, do the opposite—and reduce effective learning (Nelson, 2011). By openly acknowledging that students may commit errors, and being accepting of this, instructors can sow the seeds of accountability, honesty, transparency, and error disclosure—all of which are morally and ethically desirable in our future nurses.

Clinical instructors can impact their students' performance through their leadership style and attitudes. Adult learners respond favourably to instructors that are respectful, open, collaborative, authentic, supportive, and encouraging (Nelson, 2011). If students are seen as equals, rather than as subservient, they are more likely to ask questions, challenge erroneous decisions, and thus prevent harm to patients.

Embedding an allowance for errors within academic policies is likely to be contentious among faculty. However, punitive and intolerant environments do not reduce errors, and such attitudes and policies must be abandoned. Indeed, if errors are to be uncovered and learned from, students need to be able to trust that they will be treated fairly when they disclose them (Reason, 2000). Of course, this does not mean that reckless, negligent, or at-risk behaviours should not be remediated; some student errors are not the fault of the system. In discussing their views of

errors in the clinical setting, instructors, faculty, and administrators are likely to encounter the question of how to determine whether remediation is needed. In these circumstances, Reason's Culpability Model (Reason, 1997, as cited by Schmidt, 2012) or Penn's "Document of Concern" (Penn, 2014) may be helpful in forming institution policies regarding individual vs system responsibility. Regardless, the creation of just-blame policies will require instructors, nursing faculty, and administrators to come to a consensus on their views of errors, as well as engage in dialogue with clinical placement agencies to ensure that a just-blame culture is upheld in the clinical setting.

Secondary Prevention

Despite instructors' best efforts to create an environment where errors are unlikely, they will not always be preventable, and instructors will be faced with the challenge of supporting students in their aftermath. Errors often have a significant mental and emotional toll, regardless of severity or patient harm, and most students need support to process the emotional turmoil and trauma that follows. When primary prevention fails, secondary prevention strategies can help to reduce these impacts on students.

The most common and most effective strategy employed by those who have been involved in an adverse event is to simply talk about it: with colleagues, friends, instructors, or other trusted individuals (Seys et al., 2012; Zieber & Williams, 2015). Given their role within clinical courses, instructors are likely to be the ones that students debrief with, and should aim to respond to the disclosure of an error in the same way they created their culture of safety: in a non-judgmental, positive, confidential, and accepting way. Without this positive support, students lose clinical confidence (Zieber & Williams, 2015).

Debriefing can help students process the dramatic and distressing emotions associated with errors (Zieber & Williams, 2015). Debriefing should be performed one-on-one with the student in a private setting, preferably not long after the error occurs. After allowing the student to discuss their emotions and reactions surrounding the mistake, they could be guided to consider changes that they or the unit could make. The student could also be taught about the widespread frequency of errors, that making an error does not make them a failure, that even the best nurses make mistakes, and that there is hope of recovery after an error. It may also be helpful to the student to hear about the instructor's own individual experiences of errors (Noland, 2014).

Learning can be enhanced when learners engage, explore, and inquire with and through errors, and their end learning and recall is improved when errors are accompanied by feedback and discussion on the correct response. Humans are predisposed to remember negative, emotionally charged events, and lessons from them can be long lasting. Instructors can capitalize on these opportunities to gather information on a student’s decision making, reinforce important lessons, and promote positive changes in themselves and the system. By being accepting and supportive, and focusing on learning, instructors can reframe the error from a failure into an opportunity for growth and development.

Students that commit errors are likely blaming themselves, rather than others, and are unlikely to see a failure of the system as a reason that the error occurred, especially early in their nursing education. While this self-blame may assist in solidifying the lessons they learn from the error, it does little to promote critical examination, reflection, and system improvement. Students often need assistance from clinical instructors to develop this broader awareness. For example, most students early in their undergraduate years are unaware of incident reporting systems and their purpose. Filling out an incident report jointly can provide another opportunity for learning

about quality improvement and system failures. The same can also be said for jointly conducting a root cause analysis. Alternatively, such an analysis could be assigned as homework to be brought back to the instructor for further discussion.

Depending on hospital and institution policy, students should be encouraged—if not required—to disclose their errors to patients, whether the error was harmful or not (Seys et al., 2012). Because of their inexperience and uncertainty, it may be best for the student and instructor to disclose the error jointly, and in collaboration with the staff nurse (Zieber & Williams, 2015). This presents an opportunity to teach students how to discuss a sensitive matter with their patients, including what should and should not be said (for example, apologizing while maintaining boundaries and professionalism, and refraining from discussing causes of the error). Such disclosures should adhere to hospital policies, and may require careful planning, particularly if the error is severe.

Debriefing can also occur within the larger clinical group, who can provide multiple opinions on the event, as well as group support. However, such a strategy may not be appropriate for all clinical groups at all times, particularly if the group is not cohesive or comfortable with each other. If students prefer not to speak to others about the error, instructors could encourage self-debrief through journal writing using guiding questions. This journaling could be handed in to the instructor or included in their clinical evaluation if deemed appropriate.

Tertiary Prevention

Preventing errors from occurring is by far the preferred approach, and supporting students after errors occur will be necessary; however, system-wide changes for educational institutions are essential to make a long-lasting impact on the rates of student errors.

Noland, 2014, found that students often reported being unsure of how to respond to an error, including, "how to communicate about mistakes, how to behave when they made a mistake, and how they could resolve the emotional turmoil they felt" (p. S37). This is in part due to a failure of nursing programs to embed effective patient safety education within their programs (Noland, 2014). However, curricula require time and significant review to be altered. In the interim, clinical instructors can address this topic as part of clinical orientation or as a conference during the course. Such timing may be more relevant and meaningful to students than within a classroom setting, since they are actively engaged with patients in the clinical setting. Topics within the conference could include root causes and the systemic context of errors, common emotions after an error, important actions to take (such as incident reporting), how to properly disclose errors, and useful coping strategies. These conferences can be tailored to the level of the students. With more planning, patient safety and error education can be incorporated into clinical courses through simulation activities. A simulated environment removes the risk to patient safety and provides a safe environment for students to experience errors and their aftermath.

Incident reporting in hospitals is a relatively widespread and established practice, but a similar system of incident reporting should be incorporated into educational institutions, if not already being done. Administrators can use this data to identify curriculum gaps in their programs as well as effective teaching strategies. If a certain type of error is noted frequently, then efforts can be made to resolve knowledge, skill, or attitude gaps before students reach the clinical setting and put patients at risk. Without this important step, educational programs are potentially missing valuable teaching opportunities.

CONCLUSION

Overall, clinical instructors have considerable influence over their students' learning and experiences, including errors and mistakes. There is much that clinical instructors and nursing faculty can do to prevent errors. These actions could be as simple as conveying an attitude of acceptance, respect, and trust, or as complex as establishing an institutional reporting system. Clinical instructors have the capacity to create a safe learning culture, guide their students through the experience of making an error, and participate in processes that reduce them in the future. Regardless of what method instructors choose, it is imperative that action is taken. Nursing students—the future of our profession—deserve to learn in a supportive and positive environment, which will shape them into the competent, responsible, honest practitioners that the healthcare system needs.

References

Cebeci, F., Karazeybek, G. S., & Kahveci, R. (2015). Nursing students' medication errors and their opinions on the reasons of errors: A cross-sectional survey. *Journal of Pakistan Medical Association, 65*(5), 457-462.

Institute of Medicine (2000). *To err is human: Building a safer health system.* Washington, DC, United States of America: National Academies Press. Retrieved from http://www.nap.edu/catalog/9728.html

Koohestani, H. R., & Baghcheghi, N. (2009). Barriers to the reporting of medication administration errors among nursing students. *Australian Journal of Advanced Nursing, 27*(1), 66-74.

Nelson, N. (2011*). Beginning nursing students' perceptions of the effective characteristics and caring behaviours of their clinical instructor* (Doctoral dissertation). Retrieved from PQDT Open: http://pqdtopen.proquest.com/doc/861626965.html?FMT=ABS

Noland, C. M. (2014). Baccalaureate nursing students accounts of medical mistakes occurring in the clinical setting: Implications for curricula. *Journal of Nursing Education, 53*(3), S34-S37. https://doi.org/10.3928/01484834-20140211-04

Penn, C. E. (2014). Integrating just culture into nursing student error policy. *Journal of Nursing Education, 53*(9), S107-S109. https://doi.org/10.3928/01484834-20140806-02

Raymond, J. M. (2016). *Nursing students and patient safety: Errors, curriculum, and perspectives* (Doctoral dissertation). Retrieved from QSpace: http://hdl.handle.net/1974/14154

Reason, J. (2000). Human error: Models and management. *British Medical Journal, 320*, 768-770.

Sabog, R. F. V., Caranto, L. C., & David, J. J. T. (2015). Effective characteristics of a clinical instructor as perceived by BSU student nurses. *International Journal of Nursing Science, 5*(1), 5-19. https://doi.org/10.5923/j.nursing.20150501.02

Schmidt, B. (2012, May/June). Mitigate risk and drive organizational change with just culture. *Patient Safety & Quality Healthcare.* Retrieved from https://www.psqh.com/analysis/mitigate-risk-and-drive-organizational-change-with-just-culture/

Seys, D., Wu, A. W., Van Gerven, E., Vleugels, A., Euwema, M., Panella, M., Scott, S. D., Conway, J., Sermeus, W., & Vanhaecht, K. (2012). Health care professionals as second victims after adverse events: A systematic review. *Evaluation & the Health Professions, 36*(2), 135-162. https://doi.org/10.1177/0163278712458918

Stevanin, S., Bressan, V., Bulfone, G., Zanini, A., Dante, A., & Palese, A. (2015). Knowledge and competence with patient safety as perceived by nursing students: The findings of a cross-sectional study. *Nurse Education Today, 35*, 926-934. https://doi.org/10.1016/j.nedt.2015.04.002

World Health Organization (2018). *Health promotion and disease prevention through population-based interventions, including action to address social determinants and health inequity*. Retrieved from: http://www.emro.who.int/about-who/public-health-functions/health-promotion-disease-prevention.html

Zieber, M. P., & Williams, B. (2015). The experience of nursing students who make mistakes in clinical. *International Journal of Nursing Education Scholarship, 12*(1), 1-9. http://doi.org/10.1515/ijnes-2014-0070