jrn

Journal of Research in Nursing
2015, Vol. 20(8) 734–740

DOI: 10.1177/1744987115621142
jrn.sagepub.com
SAGE

Perspectives: Nurses' expanding role in developing safety culture: Quality and Safety Education for Nurses – competencies in action

Gwen Sherwood
Associate Dean for Strategic and Global Initiatives, University of North Carolina at Chapel Hill School of Nursing, USA

Safety is a growing global phenomenon reaching crisis proportions. In spite of regulatory mandates, pressure from consumer groups, and organisational initiatives, a 10-year follow-up report card in the USA indicates little improvement is being made to alleviate preventable patient harm (Wachter, 2010). Increasing evidence indicates organisational leadership at the front lines of care is essential to achieve change; leadership commitment to creating a safety culture reinforces a safety mindset amongst all staff and helps develop behaviours necessary to achieve improvements. Safety is closely linked to attitudes and behaviour, and prevailing mindsets across the care team are integral to culture at both the unit and the organisational level. Still, attitudes and behaviours are difficult to change; new competency models can expand capacity for nurses to develop emotionally intelligent leaders who help lead organisational change in developing and supporting cultures of safety (Armstrong and Sherwood, 2012; Horton-Deutsch and Sherwood, 2008). This perspective examines leadership strategies for creating a culture of patient safety within a learning organisational structure and describes the six core quality and safety competencies from the Quality and Safety Education for Nurses project (Cronenwett et al., 2007) to prepare all staff with the knowledge, skills and attitudes that shape unit safety culture.

Safety and organisational culture

Reason (2000), a UK pioneer in understanding health care errors, was the first to identify organisational leadership as a frontline imperative for creating safety culture. Improving safety is a multi-layered issue; the most important layer is a supportive organisation that embraces key traits of interdisciplinary communication and collaboration, effective staffing,

Corresponding author:
Gwen Sherwood, Associate Dean for Strategic and Global Initiatives, University of North Carolina at Chapel Hill School of Nursing, Carrington Hall CB# 7460, Chapel Hill, NC 27599, USA.
Email: gwen.sherwood@unc.edu

employee input into decision-making, competent supervisory leadership, adequate staff education and appropriate access to information. As frontline care givers, nurses are uniquely positioned with leadership opportunities to help develop a supportive unit environment for improving safety (Hall et al., 2008); however, they need the appropriate skill set to develop the organisation traits to change unit culture (Aiken et al., 2012).

Translating safety practices to create a patient safety culture

Improving patient safety outcomes is more than a set of activities. Organisational commitment and leadership are the foundation for mitigating patient harm. To improve safety outcomes, we must first understand the principles of a safety culture. Patient safety culture is difficult to define and operationalise due to its multi-faceted nature (Sammer et al., 2010). The British Health and Safety Commission on the Safety of Nuclear Installations (1993) defines safety culture as the result of individual and group values, attitudes, competencies and patterns of behaviour. It is the collective commitment, or mindset, to safety of the individuals in the organisation that determines the achievement of patient safety goals. It is a subset of the overall organisational culture defined by the shared view of safety by group members and emerges from the synergy of people, tasks and system dynamics (Feng et al., 2008).

Safety culture is determined by the degree to which individuals in the organisation commit to safety, their determination to pursue safety in the midst of obstacles, and their willingness to report near misses and adverse events (Feng et al., 2008). Patient safety culture reflects the ability of both individuals and the organisation to deal with risks and hazards in avoiding errors and achieving their goals. Operationally, organisations with a positive safety culture are founded on mutual trust, shared perceptions of the importance of safety, and confidence in the efficacy of preventive measures (Health and Safety Commission Advisory Committee on the Safety of Nuclear Installations, 1993). A safety culture includes data collection and reporting of incidents, replaces individual blame with a focus on system design, systematically reviews actions that led to the incident, develops new pathways to prevent future occurrences, and shares information with patients or families (Barnsteiner, 2012).

Feng et al. (2008) described four dimensions of the patient safety climate as system, personal, task-associated, and interaction factors:

(1) System integrity reflects how purposefully the organisation sets safety policies and allocates resources to support a safety culture that mitigates errors and near misses so that each system member accepts responsibility and accountability for safety. Most adverse events occur from the interaction of system weaknesses rather than an individual action; something happens to trigger a cascade of events exposing weaknesses in the system, resulting in a near miss or adverse event.
(2) The personal dimension reflects the commitment of each individual in the unit to patient safety and development of the required competencies (Feng et al., 2008). New competencies are needed by staff so they have the tools and resources to improve outcomes and alleviate patient harm. Safety competencies include measureable objective statements of core safety competences as defined by specific knowledge, attitude and skills for working in and leading systems committed to patient safety (Cronenwett et al., 2007). These will be more fully described below.

(3) Task oriented behaviours reveal the extent to which the individual recognises the safety risk associated with their work: the higher the perceived complexity of a given task, the higher the perceived safety risk. Safety risks are increased when nurses are unable to complete their work according to evidence based standards and deviate from established procedures to use a work-around, because of limited resources or broken processes. Thus, the leadership role of the nurse manager becomes a key aspect of task oriented dimensions of safety to assure nurses they have what they need to provide safe care.
(4) Interaction involves partnerships based on shared values and productive communication among nurses, patients and the entire system to build teamwork. Communication and partnership with patients and families, provider to provider, and provider towards the organisation are open, flexible and trustworthy.

Developing the competencies to improve safety outcomes

Staff first must have development opportunities to master the knowledge, skills and attitude changes necessary for improving safety. Six competencies were first identified by the US based Institute of Medicine (Institute of Medicine, 2003) and then more specifically defined through the Quality and Safety Education for Nurses project (QSEN) (Cronenwett et al., 2007; www.QSEN.org). The competencies have been widely adopted for nursing professional practice models in addition to being integrated into nursing academic curricula at all levels. Table 1 summarises the six competencies required by all health care workers.

Table 1. Quality and Safety Education for Nurses quality and safety competencies (Cronenwett et al., 2007) based on the 2003 Institute of Medicine report.

Competency	Definitions
Patient Centred Care	Recognises the patient or designee as the source of control and partner in providing compassionate, coordinated care based on respect for patients' preferences, values and needs
Teamwork and Collaboration	Functions effectively within nursing and interprofessional teams, fostering open communication, mutual respect and shared decision making to achieve quality and safety
Evidence Based Practice	Integrates best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care
Quality Improvement	Uses data to monitor the outcomes of care processes and improvement methods to design and test changes to continuously improve the quality and safety of health care systems
Safety	Minimises risk of harm to patients and providers through both system effectiveness and individual performance
Informatics	Uses information and technology to communicate, manage knowledge, mitigate error and support decision making

Complete tables with 162 knowledge, skills and attitude statements are in Cronenwett et al. (2007) and available at www.QSEN.org.

These are the most comprehensive quality and safety competencies now spreading globally (Sherwood, 2011; Sherwood and Barnsteiner, 2012) and are embedded in the sub-dimensions of a patient safety culture (Sammer et al., 2010).

Applying the competencies to develop a safety culture

The competencies can be effectively applied within the seven key sub-dimensions of a patient safety culture: leadership, teamwork, communication, evidence based practice, learning, just, and patient centred care described by Sammer et al. (2010). In cross walking the seven dimensions with the six competencies, leadership is the overarching dimension and just culture is aligned with safety competency by describing how safety competency is lived every day.

Leadership. Frontline leaders help shape a safety culture by aligning decisions with vision and mission, fiscal and human capital, and personnel competencies (Sammer et al., 2010); it is the engagement of each nurse and staff member that improves safety outcomes. The commitment, ability and leadership of immediate supervisors are fundamental to create a culture of safety so that safety is a precondition, not a competing or optional goal. The focus is on system improvements that reduce variability; the real change comes as leaders empower front line nurses to use their professional autonomy by speaking up, seeking collaborative relationships and participating in decision making. Higher degrees of staff autonomy are linked to fewer adverse events and higher participation in safety (Sammer et al., 2010). In a safety culture, nurses are supported in 'stopping the line', that is, calling for time out when they see a safety issue or uncertain, risky actions (Barnsteiner, 2012). Productivity expectations must balance with safety concerns, illustrated in staffing assignments that consider match of staff expertise with patient needs.

Teamwork. Teamwork exemplifies collaboration, cooperation and collegiality across the organisation so that relationships are open, safe, respectful, transparent and flexible (Sammer et al., 2010). Teamwork is the capacity for different disciplines to work together with flexibility to achieve their common purpose of planning, coordinating and evaluating patient care with mutual respect (Disch, 2012). Group relationships are complex; yet working effectively with others is crucial to create a safety culture. Team members recognise and respect the roles and responsibilities of other team members; honour open, safe and adaptable relationships; defer to expertise wherever it derives; and provide psychological safety (watch each other's back) (AHRQ, 2009).

Communication. Effective communication allows multiple forms of information sharing among team members involved in care and encourages any team member to speak up on behalf of patients (Sammer et al., 2010). It is one of the most important and influential leadership skills in a safety culture (Disch, 2012) and cross cuts all six QSEN competencies (Sherwood, 2011). Communication must be assertive, clear, honest, trustworthy and transparent. Structured communication strategies such as SBAR (Situation, Background, Assessment and Recommendation), read backs, check lists and CUS (I am concerned, I am uncomfortable, and I feel this is a safety issue) illustrate effective communication strategies across all team members (AHRQ, 2009).

Evidence based practice. Evidence based standards derived from the latest available evidence determine best practices and guide care decisions (Cronenwett et al., 2007). Standardisation of care interventions reduces variance to help achieve high reliability (Sammer et al., 2010) by helping eliminate breakdowns in work processes. Competency in informatics provides the tools to retrieve information to determine evidence used. Using checklists minimises reliance on memory to assure patient hand overs include essential information and improve care coordination (Sherwood, 2012).

Learning organisation. Learning organisations examine errors and system breakdowns as an improvement strategy and promote educational development among all staff (Triolo, 2012). A learning organisation engages in structured critical reflection as a change model that identifies what to do differently in the future, incorporating both experience and knowledge for individuals and the organisation (Sammer et al., 2010). Organisationally, learning organisations continually examine outcomes from specific cases and situations to understand and modify future actions to better recognise safety and quality issues (Armstrong and Sherwood, 2012).

Just. Just refers to just culture in which organisations recognise errors as system failures rather than focusing on individual blame (Sammer et al., 2010). Individuals remain fairly and justly accountable for their actions, but focus on recognising and eliminating errors and near misses. Analyses of errors identify safeguards to prevent future occurrences (Barnsteiner, 2012). Patients and families become partners in safety and are provided transparent information. For example, the Australian Commission on Safety and Quality in Health Care established an open disclosure framework in 1995 to facilitate communication with patients and their families when an adverse event occurs (Wilson et al., 1995). The framework demonstrates the importance of organisational support for clinicians in open, blame free disclosure (Australian Commission on Safety and Quality in Health Care, 2013) so that workers who report system failures are not punished as whistle-blowers. Strong leadership supporting a safety culture encourages honest staff reports and mitigates negative reactions to reporting safety issues.

Patient centred care. Patient centred care involves patients and families as safety allies and active participants in the care team (Cronenwett et al., 2007). Patients are empowered to participate actively in discussions about their care and are provided access to their health information (Sammer et al., 2010). Care is based on patient preferences that may challenge traditional system policies but encourage participation in care planning. For example, changing visiting hours to allow family access to their loved ones at all times, basing patient education on patient background and culture, and calling patients by their preferred name. Stories about patients help put a 'face' on medical errors to demonstrate consequences on patients and families (Barnsteiner, 2012).

Summary: Emotionally intelligent leaders achieving change

Patient safety is a global crisis. Nurses have a leadership opportunity to lead changes to improve systems and alleviate preventable patient harm. New change model strategies can

replace old patterns to develop group engagement for a safety culture. The lack of progress in improving systems of care demands new approaches and leadership commitment to create a culture of patient safety and reinforce a patient safety mindset to guide attitudes and behaviours of unit staff. Emotionally intelligent leaders committed to modifying the unit work environment to improve patient safety outcomes can take advantage of leadership opportunities at the front lines of care. Emotional intelligence is a key trait of the transformative leadership needed to develop a safety culture (Horton-Deutsch and Sherwood, 2008). Reflection on experience identifies gaps in knowledge and potential safety issues and is a key skill for emotionally intelligent leaders (Armstrong and Sherwood, 2012). Reflective leaders continually examine their experience within what they know to develop a professional practice model by identifying patterns that influence decisions. Each of us must examine our own competencies for improving safety. What learning needs emerge so that we can join in alleviating the global crisis in patient safety? How can we frame education systems, research priorities, and practice models to prepare every nurse to be a safety leader?

References

Agency for Healthcare Research and Quality (AHRQ) (2009) TeamSTEPPS. Available at: www.ahrq.gov (accessed 20 November 2015).

Aiken LH, Clarke SP and Sloane DM (2012) Hospital staffing, organization, and quality of care; cross-national findings. *International Journal for Quality in Health Care* 14(1): 5–13.

Armstrong G and Sherwood G (2012) Reflection and mindful practice: A means to quality and safety. In: Sherwood G and Horton-Deutsch S (eds) *Reflective Practice: Transforming Education and Improving Outcomes*. Indianapolis: Sigma Theta Tau Press, pp. 21–40.

Australian Commission on Safety and Quality in Health Care (2013) *Annual Report 2012/2013*. Sydney: ACSQHC.

Barnsteiner J (2012) Safety. In: Sherwood G and Barnsteiner J (eds) *Quality and Safety in Nursing: A Competency Approach to Improving Outcomes*. Hoboken, NJ: Wiley-Blackwell, pp. 149–169.

Cronenwett L, Sherwood G, Barnsteiner J, et al. (2007) Quality and safety education for nurses. *Nursing Outlook* 55(3): 122–131.

Disch J (2012) Teamwork and collaboration. In: Sherwood G and Barnsteiner J (eds) *Quality and Safety in Nursing: A Competency Approach to Improving Outcomes*. Hoboken, NJ: Wiley-Blackwell, pp. 91–112.

Feng X, Bobay K and Weiss M (2008) Patient safety culture in nursing: A dimensional concept analysis. *Journal of Advanced Nursing* 63(3): 310–319.

Hall LM, Doran D and Pink L (2008) Outcomes of interventions to improve hospital nursing work environments. *Journal of Nursing Administration* 38(1): 40–46.

Health and Safety Commission Advisory Committee on the Safety of Nuclear Installations (1993) *Organizing for Safety: Third Report of the ACSNI Study Group on Human Factors*. Sudbury, UK: HSE Books.

Horton-Deutsch S and Sherwood G (2008) Reflection: An Educational Strategy to Develop Emotionally Competent Nurse Leaders. *Journal of Nursing Management* 16(8): 946–954.

Institute of Medicine (2003) *Health Professions Education: A Bridge to Quality*. Washington, DC: National Academies Press.

Reason J (2000) Human error: Models and management. *BMJ* 320(7237): 768–770.

Sammer CE, Lykens K, Singh KP, et al. (2010) What is patient safety culture? A review of the literature. [Meta-analysis review.]. *J Nurs Scholarsh* 42(2): 156–165.

Sherwood G (2011) Integrating quality and safety science in nursing education and practice. *Journal of Research in Nursing* 16(3): 226–240.

Sherwood G and Barnsteiner J (eds) (2012) *Quality and Safety in Nursing: A Competency Approach to Improving Outcomes*. Ames, Iowa: Wiley-Blackwell.

Triolo P (2012) Creating Cultures of Excellence: Transforming Organizations. In: Sherwood G and Barnsteiner J (eds) *Quality and Safety in Nursing: A Competency Approach to Improving Outcomes*. Hoboken, NJ: Wiley-Blackwell, pp. 305–322.

Wachter RM (2010) Patient safety at ten: Unmistakable progress, troubling gaps. *Health Affairs* 29(1): 165–173.

Wilson RM, Runciman W, Gibberd R, et al. (1995) The quality in Australian health care study. *Medical Journal of Australia* 163(9): 458–471.

Gwen Sherwood, PhD RN FAAN ANEF, is Professor and Associate Dean for Strategic and Global Initiatives at the University of North Carolina at Chapel Hill School of Nursing.

She helped lead the award winning Robert Wood Johnson funded Quality and Safety Education for Nurses (QSEN) project to define quality and safety competencies for nurses to work in and lead healthcare improvement. She is co-Editor of an AJN book of the year *Quality and Safety Education: A Competency Approach for Nurses* and three books related to reflective practice.