The Development of Patient Safety Culture

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ABSTRACT

Background: Assessing the organization's existing safety culture is the first stage of developing a safety culture. Patient safety culture assessments, required by international accreditation organizations, allow healthcare organizations to obtain a clear view of the patient safety aspects requiring urgent attention, identify the strengths and weaknesses of their safety culture, help care giving units identify their existing patient safety problems, and benchmark their scores with other hospitals.

Aim: The aim of the present study was review the literature about the development of patient safety culture from the nursing staff.

Method and Material: Method was used is to search in databases (PUBMED, SCOPUS) to identify articles related to the patient safety culture. The search took place in March 2011 for scientific papers until March 2011. The keywords used in combination, were: patient, safety, culture, nursing and staff.

Results: Patient safety is identified as a key element of concern in the health care environment. A broad range of safety culture properties organized into seven subcultures: leadership, teamwork, evidence-based care, communication, learning, just, patient-centered care.

Conclusions: Patient safety culture is a complex phenomenon. Patient safety culture assessments, required by international accreditation organizations, allow healthcare organizations to obtain a clear view of the patient safety aspects requiring urgent attention, identify the strengths and weaknesses of their safety culture, help care giving units identify their existing patient safety problems, and benchmark their scores with other hospitals.

Key words: Patient, safety, culture, nursing, staff

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INTRODUCTION

Patient safety is a global imperative. It has extensive implications for all WHO Member States, for all health-care workers and for all of us when we become patients.¹ A definition for patient safety has emerged from the health care quality movement that is equally abstract, with various approaches to the more concrete essential components. Patient safety was defined by the Institute of Medicine as “the prevention of harm to patients.” Emphasis is placed on the system of care delivery that (a) prevents errors; (b) learns from the errors that do occur and (c) is built on a culture of safety that involves health care professionals, organizations, and patients.²

Patient safety culture assessments required by international accreditation organizations. Developing a patient safety culture was one of the recommendations made by the Institute of Medicine to assist hospitals in improving patient safety.³ Assessing the organization’s existing safety culture is the first stage of developing a safety culture. Patient safety culture assessments allow healthcare organizations to obtain a clear view of the patient safety aspects requiring urgent attention, identify the strengths and weaknesses of their safety culture, help care giving units identify their existing patient safety problems, and benchmark their scores with other hospitals.

The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization’s health and safety management. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety and by confidence in the efficacy of preventive measures.⁴ According to literature, the major predictors of a positive patient safety culture in healthcare organizations specifically hospitals include communication founded on mutual trust, good information flow, shared perception of the importance of safety, organizational learning, commitment from management and leadership, and the presence of a non-punitive approach to incident and error reporting. Patient safety culture outcomes include the staff members’ perception of safety, the willingness of staff members to report events, the number of events reported, and an overall patient safety grade given
by staff members to their units.\textsuperscript{5} Nurses have a significant role in improving care because of their broad yet intimate perspective, nurses are an indispensable part of the endeavor to find innovative solutions to improve patient safety.\textsuperscript{6}

**Aim**
The aim of the present study was review the literature about the development of patient safety culture from the nursing staff.

**Material and methods**
Method was used is to search in databases (PUBMED, SCOPUS) to identify articles related to the patient safety culture. The search took place in March 2011 for scientific papers until March 2011. The keywords used in combination were: patient, safety, culture, nursing and staff. We found a total of 455 articles. In this literature review were included thirty that were deemed absolutely on the subject.

**Results**
Patient safety is identified as a key element of concern in the health care environment.\textsuperscript{7} A broad range of safety culture properties can be created and organized into seven subcultures\textsuperscript{8} and defined as:

1. **Leadership**: Leaders acknowledge the healthcare environment is a high-risk environment and seek to align vision/mission, staff competency, and fiscal and human resources from the boardroom to the front line. The lack of leadership has been attributed as a barrier to safety culture. Whereas strong leadership is often cited as critical to an organization’s culture of safety, there are no easy answers as to how leadership can develop or be developed to assure a culture of safety. Leaders require basic insight into safety problems and need rationales for focusing on patient safety. They need to be educated on the science of safety and the power of data.\textsuperscript{9,10}

2. **Teamwork**: A spirit of collegiality, collaboration, and cooperation exists among executives, staff, and independent practitioners. Relationships are open, safe, respectful, and flexible. Healthcare organizations are treating patients with increasingly complex disease processes and with increasingly complex treatments and technologies requiring stronger efforts toward applications of teamwork and collaboration among caregivers to achieve a system-wide culture of patient safety.\textsuperscript{11}

3. **Evidence-based care**: Patient care practices are based on evidence.
Standardization to reduce variation occurs at every opportunity. Processes are designed to achieve high reliability. Healthcare organizations that demonstrate evidence-based best practices, including standardized processes, protocols, checklists, and guidelines, are considered to exhibit a culture of safety.\textsuperscript{12, 13}

4. Communication: An environment exists where an individual staff member, no matter what his or her job description, has the right and the responsibility to speak up on behalf of a patient. Front line staff wants to know that communications with managers are heard and acknowledged. Providing feedback or closing the loop builds trust and openness important properties of a culture of safety.\textsuperscript{14}

5. Learning: The hospital learns from its mistakes and seeks new opportunities for performance improvement. Learning is valued among all staff, including the medical staff. A learning culture creates safety awareness among employees and medical staff and promotes an environment of learning through educational opportunities.\textsuperscript{13}

Education and training should include, at least, a basic understanding of (a) the science of safety, (b) what it means to be a high-reliability organization, (c) the value of a safety culture assessment, and (d) the performance improvement process, including rapid cycle testing of change.\textsuperscript{15}

6. Just: A culture that recognizes errors as system failures rather than individual failures and, at the same time, does not shrink from holding individuals accountable for their actions. Workload can be a factor contributing to errors.\textsuperscript{16, 17} Errors have been classified as (a) slips and lapses or execution errors, and (b) mistakes or knowledge errors.\textsuperscript{17} High workload in the form of time pressure may reduce the attention devoted by a nurse to safety-critical tasks, thus creating conditions for errors and unsafe patient care.

7. Patient-centered care: Patient care is centered around the patient and family. The patient is not only an active participant in his own care, but also acts as a liaison between the hospital and the community. Patient-centered care is a quality of personal, professional, and organizational relationships. Thus, efforts to promote patient-centered care should consider patient-centeredness of patients (and their families), clinicians, and health systems. Helping patients to be more active in consultations changes centuries of physician-dominated dialogues to those that engage patients as active participants. Training physicians to be more mindful,
informative, and empathic transforms their role from one characterized by authority to one that has the goals of partnership, solidarity, empathy, and collaboration.18

Discussion
In order for a patient safety program to be successful, strong leadership is needed. Nurse leaders reported significantly more positive safety culture perceptions compared with licensed staff nurses. Additionally, licensed nurses employed in government-run facilities had significantly less positive safety culture perceptions compared with those working in nonprofit organizations.19 Senior leaders are the only ones who are able to create the culture and commitment needed to solve underlying system causes of medical errors and harm to patients. The results of a study showed that that more support from hospital management for patient safety increased the frequency of events reported. It also increased the likelihood of having a better overall perception of safety among respondents and the likelihood of respondents to report a higher patient safety grade.5 Yet, the scarcity of nursing scholars and executives assuming leadership in the development and design of patient safety science was evident which may be why physicians, quality officers, administrators, and information experts became the pioneers for this new frontier in health care.7 Leadership involves staff in the development and implementation of the following principles: (a) retraining and counseling, (b) redoing policies and changing practices, (c) creating redundancy and double checks, (d) putting in fail-safe systems such as backup systems, and (e) purchasing more technological solutions.20 Patient safety culture is dependent upon the safe practices of nurses. Nurse executives must be the moral conscience for the patient and assure that wherever nursing care is practiced, it is practiced with a mindful approach. Nurses must have the time to think critically and not be interrupted or easily distracted. Every newly designed system will never be fail-safe if the nurse does not have time for that final safety net at the sharp end of the care delivery system. The authentic executive nurse leader in the 21st century must lead in spite of contradictions and complexity and build bridges to all stakeholders as we walk on them together.21

Many errors in health care go unreported for many reasons including fear, humiliation, the presence of a punitive
response to error, and the fact that reporting will not usually result in actual change.\textsuperscript{22} Encouraging health professionals, specifically nurses, to report events in a non-punitive environment is crucial for improving patient safety.\textsuperscript{5} The study findings of a study in Korea also indicate that strategies that promote reporting of errors play an important role in producing positive attitudes to reporting errors and improving behavior of reporting. Further advanced strategies for reporting errors that can lead to improved patient safety should be developed and applied in a broad range of hospitals.\textsuperscript{23}

Errors in operating rooms are not uncommon and can sometimes be catastrophic. Creating a patient safety culture in surgical units by improving communication and reporting more events is a high priority for operating room staff and hospitals.\textsuperscript{24} Work experience at the hospital also had some impact on the frequency and number of events reported. As people become more experienced, they become more aware of the safety practices undertaken in the institutions they work in. When the perception of safety decreases with the increase in the years of experience, it means that the staff members do not agree that the patient safety practices, systems, and procedures in the hospitals act as barriers to errors and problems.\textsuperscript{5} The results of a study also showed that patient safety culture scores decreased as seniority increased.\textsuperscript{25}

Communication affects health care transactions among health care personnel. Further, it is supported that the key role of communication or communication lapses in the commission of error, the role of nursing as a prime communication link in all health care settings becomes evident. The definition of “error chain” indicates the role of leadership and communication in the series of events that leads to patient harm. Root-cause analyses of errors provide categories of linked causes, including (1) failure to follow standard operating procedures, (2) poor leadership, (3) breakdowns in communication or teamwork, (4) overlooking or ignoring individual fallibility, and (5) losing track of objectives.\textsuperscript{26}

When residents are unable to communicate with staff because of an inability to speak, cognitive impairment or language barriers, risk is increased. Accurate and complete documentation is essential to prevent errors and ensure consistent and adequate care. Additionally, communication with family about the progression of residents’
diseases is important so that family members do not put residents in unsafe situations. However, communication between the blunt and sharp ends of the system must be bidirectional. If nurses feel comfortable reporting near misses in a nonpunitive environment, new communication channels are developed and new practice procedures are put in place by leadership.

Moreover, decisions made at one level of the system affect all other levels. For example, a decision to decrease staff made at the leadership level will necessarily affect health care system transactions and nurse–patient interactions by increasing caseloads and responsibilities, and thereby potentially increase medical error risk.

The majority of direct care staff has had little training, and that training may not be sufficient to consistently ensure a safe care environment. Priority areas for education include techniques around redirecting and re-focusing frustrated and aggressive residents, dementia care, identifying and recognizing risks, use of equipment and infection control. Barriers to adequate training include availability of adequate training programs for best practices and the ability to cover staff when they are off the floor.

Research on nursing and patient safety in general underscores the need to attack system problems at the system level, and the range and magnitude of effects associated with nurse staffing should generate an urgency to act. Some actions will involve those outside the hospital, such as payers, regulators, and accreditors however, action is also required inside the hospital. Those involved in quality improvement must give higher priority to improving general processes of care. They must find effective ways to monitor outcomes and learn from experience related to nursing, and they must free up resources and create opportunities to enable change in nursing systems.

These efforts will be accomplished best using a team approach, involving nurses, physicians, pharmacists, administrators, and human resources and medical records personnel, and even the new graduate nurse starting his or her first clinical position. Working as a team, members can: (i) ascertain which outcomes to measure; (ii) determine how such outcomes can best be measured (iii) develop data-gathering processes and analyze results; and (iv) feed information back to clinicians (so that they may learn how to improve care) and administrators (so that they may make more informed
decisions). Team-oriented processes will emphasize systems level thinking, bring forth new ideas and hypotheses, foster collaboration, build awareness and respect for what nurses and others on the patient care team do, and, most importantly, ensure that at the end of the day real efforts are made to improve the quality of patient care, promote a safer and more rewarding patient care environment, and minimize the risk of patients experiencing a preventable adverse outcome. Researchers have made important discoveries about the relationship between nursing and patient outcomes. Indeed, these discoveries have pushed the field a very long way in a relatively short period of time, have generated much attention inside and outside health care, and have highlighted the vital contribution of nurses to the quality of patient care.29

Advances have been made in technology and equipment. Many choices for equipment exist, which makes the process of selection difficult. Due to resource limitations, it is not always possible to purchase appropriate equipment. Risk is increased if staff members are not trained in the proper use of the equipment, proper protocols are not in place regarding the use of the equipment, equipment is not in good working order and the equipment is not appropriate for the resident.27 Nurses providing direct patient care can ensure that the technologies they use meet international quality and safety standards and technical specifications needed to perform in the clinical environment in which they are used.30

Conclusion
Patient safety culture is a complex phenomenon. Patient safety culture assessments, required by international accreditation organizations, allow healthcare organizations to obtain a clear view of the patient safety aspects requiring urgent attention, identify the strengths and weaknesses of their safety culture, help care giving units identify their existing patient safety problems, and benchmark their scores with other hospitals. The factors involved in the culture of patient safety are: leadership, teamwork, evidence-based care, communication, learning, just, patient-centered care. More research needs to be done on patient safety culture. The research from the field of human factors has shown that attention, perception, and cognition are all fallible. Fatigue, stress, and strong emotions such as anger and frustration, affect perceptions and thoughts. The next frontier in patient safety is now researching how human factors affect performance. As
such, mindfulness may contribute to preventing common errors of attention and perception, but it is not known whether mindfulness can be a learned skill.

**BIBLIOGRAPHY**

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