

cultural diversity in medicine



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Finding Links between Healthcare Safety, Communication, and Cultural Norms and Assumptions

Key points

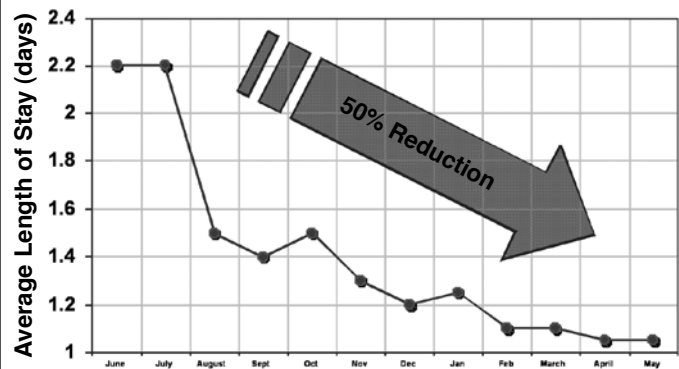
1. Various published reports state that up to 80% of medical errors can be traced back to communication issues.
2. National healthcare accreditation agencies are advocating and providing tools for team development/communication training to reduce medical errors.
3. Communication is affected by cultural assumptions and expectations.

Introduction

During the past six years, various research reports have indicated that up to 80% of medical errors can be traced back to miscommunication among healthcare providers.¹⁻³ Effect on patient safety has prompted national health improvement agencies to advocate for medical team development interventions to improve communications between physicians and with all other healthcare professionals.²⁻⁹ Time pressures, clinical complexities and various types of cultural factors (organizational, professional and ethnic) contribute to an environment prone to miscommunication. This concept paper will connect findings from the healthcare literature regarding safety and quality issues to cultural issues that affect communications and team relationships, as identified from management and organizational development literature.

First, let us look at examples of how improved communications can result in measurable progress in the healthcare process and patient outcomes. A 50% reduction in average length of stay was reported at a Johns Hopkins intensive care unit (ICU) after implementing team training and a new “Daily Goals Form” to enhance communication and performance expectations within interdisciplinary medical teams.¹⁰ Increased morale, cost savings and improved patient care were realized due to this intervention.

Figure 1.¹⁰ Johns Hopkins – Length of ICU stay after team training



Improved safety outcomes have been reported after conducting team training to implement surgical team preoperative briefings.¹¹ The number of preoperative briefings performed increased from 64% at one month to 100% by four months. Briefings resulted in a significant increase in the number of patients who received prophylactic antibiotics within 60 minutes of incision and the number of patients who received deep-venous thrombosis prophylaxis before induction. Additionally, the briefings identified 3.3% (7 of 213) of patients at high risk for proceeding with surgery, resulting in cancellation of surgery and possible avoidance of high-risk errors.

Another study by the Institute of Healthcare Improvement showed the results of an OB/GYN team simulation.¹² The following indicate actions that might have led to medical errors if they had actually been carried out. (Table 1)

Table 1.12 OB/GYN Simulation Results

| Cause of Near Misses | Number of Near Misses |
|---|-----------------------|
| • Hierarchy structure* | 15 |
| • Equipment/chart/room failures | 20 |
| • Process failure between departments | 25 |
| • Lack of shared mental model* | 11 |
| • Lack of role definition* | 16 |
| • Unfounded assumptions* | 10 |
| • Noncompliance with policy/procedure | 12 |
| • Training issues with policy/procedure | 12 |
| • Personnel cannot handle all tasks | 12 |
| • Loss of situational awareness* | 10 |
| • Communication failure* | 13 |
| • Mistakes | 16 |
| • Lack of common language* | 15 |
| • Handoff failure | 5 |

* Attributable to miscommunication and incorrect assumptions (47%)

Since assumptions are highly impacted by cultural norms and values, an examination of how the various cultures that coexist within a team affect performance is critical.¹³ However, this is not a well-researched dimension of medical teams. A literature review in 2002, and again in 2006, revealed only a few studies addressing organizational culture's impact on healthcare outcomes and even fewer examining ethnic cultures.^{14,15}

The following explanations of how various types of cultures affect safety and clinical outcomes make the case for future work in this area.

Organizational Culture

Whenever a group of people work together, a culture emerges based on accumulated learned assumptions about why and how things are to be done.¹⁶ Therefore, all organizations have a culture. Most of the time, this culture is tacit knowledge. Members may or may not be aware of cultural dynamics even while they participate in it. If an organization wants to strategically develop a certain culture, this tacit knowledge needs to become explicit so that positive elements will continue to be shared and negative or unproductive influences will be decreased.

There has been a call for the development of a "culture of safety" to reduce medical errors and costs within our healthcare systems.¹⁷ We need to use what organizational development specialists know about how cultures evolve to enable us to implement shared norms, values and assumptions that have been identified as those which increase safety, and decrease errors and costs.

Groups of physicians were examined to identify which organizational cultural attributes affected clinical outcomes.¹⁸ (Table 2) Significant effects were found when high levels of trust, sense of group identity, and use of data were correlated with rates of diabetes eye exam, Chlamydia screening and control of diabetic hemoglobin A1c. Both collegiality and autonomy were

Table 2.18 Regression Analysis Comparing Cultural and Structural Dimensions with Quality Outcomes (N = 50 physician practice groups)

| Rates: | Diabetic Eye Exam | HbA1c Control | Cholesterol Management | Chlamydia Screening | Adolescent Well Visit |
|------------------------------|-------------------|---------------|------------------------|---------------------|-----------------------|
| Cultural Dimensions | | | | | |
| Collegiality | - | - | | | |
| Organization trust/identity | + | + | + | - | |
| Innovativeness | | - | | | - |
| Quality emphasis | | | | | |
| Information emphasis | + | + | | | |
| Cohesiveness | | | | + | |
| Business emphasis | | | | | |
| Autonomy | | - | - | | |
| Structural Dimensions | | | | | |
| Group size | | | | | + |
| Workload | | | - | | |
| Nurse Practitioner | | | + | | |

negative factors. These results suggest that positive social relationships are necessary to enhance trust but not sufficient to produce effective working procedures. It is possible that too much empathy for fellow practitioners can reduce willingness to acknowledge poor performance when it occurs. Therefore, it is not how much we like each other, but how effectively we can work together that will enhance patient care.

Professional Cultures

Typically, doctors, nurses, social workers and other groups of health professionals are educated and socialized in isolation. Individual responsibility and decision-making are relied upon, and hierarchy among these different professional groups is fostered.¹⁹ This dynamic results in different professional behavioral norms, communication styles and expectations (cultures). Whether this is good or bad may be debatable, but in the reality of a fast-paced, high-risk environment, communication between professions is often hindered because of this professional, cultural isolation. Considerable discrepancies in perceptions of teamwork have been demonstrated by physicians rating the teamwork of others as good, while their nurses perceive the teamwork as mediocre.²⁰ Increasing *effective* communication will require a re-examination of this dynamic. As a result, some medical schools have instituted problem-based learning opportunities to educate medical students and nurses together to foster shared understandings and respect.²¹ Hospitals have begun to implement interdisciplinary simulation training based on that used within the aviation profession to reduce safety errors. Aviation is another profession where highly trained professionals face fast-paced, high-risk decisions that affect people's lives. While medical error rates are increasing nationally, aviation error rates have decreased.²²

Ethnic Cultures

As the number of physicians from different countries and cultural backgrounds expands, the interplay of ethnic cultures is becoming an increasingly important dynamic. Many American residency programs currently have a large percentage of residents who are foreign-born and educated, and many hospitals have nurses from other countries.²³ Many of these healthcare professionals stay, practice medicine in our communities and provide valuable services in locations that are currently medically underserved. In addition, the cultural diversity within our American-born physicians is increasing as well. In light of these changing demographics and the implementation of

required ACGME interpersonal and communication competencies, discussions are beginning within the medical community as to whether people from different cultures have different perceptions and expectations for what constitutes good interpersonal skills, good physician-patient relations, and professional and ethical judgments.^{24,25} A few empirical studies have attempted to systematically study the effects of differing cultural perspectives and communication styles on team performance in healthcare. For example, significant differences in clinical practices due to the different ethical beliefs of internists in China and the United States have been found.²⁶ Differences have been found in how residents from diverse cultural backgrounds define and evaluate professionalism, teamwork, caring, leadership, and autonomy. These different perspectives resulted in a significant source of variation within the residency's required performance evaluation outcomes.²⁷ Also found are correlations between cross-cultural communication difficulties and primary care delivery in the out-patient setting.²⁸ In addition, there is an abundant literature from management and human resource development demonstrating how culture affects work teams within other professions.²⁸⁻³²

Concrete examples of how culture impacts operating room dynamics during surgery within international medical teams have been documented with the warning that "culture can be a problem, but only if its influence goes unacknowledged."³⁰ Those in healthcare fields are encouraged to actively explore these issues. As physician and patient populations become more culturally diverse, it is important to understand how different cultural perceptions affect team dynamics, performance evaluations and healthcare outcomes. By taking various types of cultural differences into account, residency directors will be better able to diagnose whether the resident's individual clinical decisions are based on cultural difference rather than the inability to make good clinical judgments in general. In addition, residency teams are especially prone to communication failures because the team is always changing. There is much less time for informally shared assumptions to develop. Therefore, formal training and mentoring may be required to promote shared assumptions.

Given the importance of communication and collaboration in patient safety, healthcare organizations should measure teamwork using scientifically valid methods. The Safety Attitudes Questionnaire is one such instrument among several that can be used to measure teamwork and communication, identify disconnects between or within disciplines, and

evaluate interventions aimed at improving patient safety.³³ If specific issues are identified, then targeted team development programs should be considered as a possible improvement intervention. If existing communication results in errors, an organizational development specialist can conduct a systematic and objective examination of the communication factors.

The good news is that healthcare professionals have far more attributes and values in common and differ in far fewer, despite cultural differences. A targeted process of focusing on these common values, while finding common ground from different assumptions and expectations, can help a medical team develop shared assumptions, knowledge and expectations. A trained facilitator can help practitioners from different professional, organizational and ethnic cultures identify those shared values, demonstrating the team's common goals and aspirations. When individuals recognize these common values and goals, it is often easier to understand operational differences for what they are and agree on mutually developed team norms.

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CME Questions 6a-d

Please select the correct answer for the following:

- 6a. The percentage of medical errors that can be traced to poor communication errors is:
 - a. 20%
 - b. 100%
 - c. 80%
 - d. 50%
- 6b. Ethnic culture is an important dynamic in communication
 - a. True
 - b. False
- 6c. Healthcare professionals are typically educated and socialized in isolation
 - a. True
 - b. False
- 6d. Trust among colleagues is not important
 - a. True
 - b. False