PSNet
PATIENT SAFETY NETWORK

Annual Perspective: Psychological Safety of Healthcare Staff

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Introduction

The term psychological safety is defined as an individual's "sense of being able to show and employ oneself without fear of negative consequences to self-image, status or career"[1] and at the group level as "a shared belief that the team is safe for interpersonal risk taking."[2] The term embodies individual confidence in the belief that speaking up will not result in embarrassment, rejection, criticism, or punishment from others. Psychological safety can enhance employee voice and organizational commitment and have a positive impact on the clinical environment for healthcare providers and their patients and overall patient safety. For example, a healthcare worker who feels enabled to voice concerns about controversial topics or safety issues may stimulate group learning that, in turn, lowers the chance of future medical errors, thereby increasing patient safety. Creating psychological safety[3] is one component of the Comprehensive Unit-based Safety Program (CUSP) that promotes patient safety through learning and improving teamwork.

Psychological safety was noted as a frequent topic during the annual editorial review of featured articles on the Agency for Healthcare Research and Quality (AHRQ) Patient Safety Network (PSNet) collection. To further explore the topic, we engaged Mary Beth Kingston, PhD, RN, FAAN, a subject matter expert in nursing practice, standards, and workforce. Dr. Kingston was inducted as a fellow in the American Academy of Nursing in 2020. Recent findings and key themes for psychological safety and the relationship between psychological safety and patient safety are highlighted below.

Psychological Safety in High-Reliability Organizations and Healthcare Settings

Optimizing patient safety requires a culture of continuous learning where there is also a high level of psychological safety. High-reliability organizations (HROs) adopt many learning approaches following safety incidents that are very efficacious and result in nearly error-free performance. The way these learning approaches are implemented is important for their efficacy. HROs utilize learning tools, such as

debriefing and simulation, and foster a high level of open communication, staff engagement, and psychological safety for successful implementation of these tools. Staff workload, staff shortages, and lack of time and resources are all considered major barriers for successful deployment of learning tools. HROs in the fields of aviation and nuclear power, as examples, operate with almost no errors in unfavorable environments by prioritizing safety and learning over other goals. HROs represent models for promoting zero-harm patient safety in all healthcare settings.

Perspective authors identified several psychological safety articles across different healthcare settings that were featured in the past year in the PSNet collection. Results from a study conducted in a radiation oncology department demonstrated that higher levels of psychological safety were associated with greater odds of reporting near-miss safety events that were perceived as more serious and "nearly happened" versus those that only "could have happened." In other words, healthcare workers who felt psychologically safe were more likely to report a potentially harmful near-miss event than were healthcare workers who did not feel psychologically safe. Another study of hospital intensive care unit (ICU) team members reported that psychological safety was positively associated with inclusive team leader behavior (e.g., encouraging input from team members, providing rationale for key decisions, admitting when uncertainty exists) and negatively associated with job strain.[4] Data collected from a disability healthcare organization were analyzed, and the findings offer evidence that organizational identification and management commitment to safety were important for promoting safety motivation. In turn, safety motivation had a positive effect on safety voice, which is the act of speaking up about safety, but only when psychological safety was low (i.e., safety motivation has a positive effect when psychological safety is lacking). Results from a sample of hospital clinician interviews indicate that organizational learning from medical errors is more robust in higher performing hospitals where clinicians feel more psychologically safe relative to clinicians in lower performing hospitals. A study of a regional hospital system using a deidentified dataset derived from the Hospital Survey on Patient Safety Culture™ (SOPS®)[5] provided evidence that nurse managers are strongly influential for establishing environments that foster unit patient safety culture and nonpunitive responses to error. These recently published studies demonstrate some of the characteristics of psychological safety and some of the positive associations between psychological safety and patient safety in various healthcare settings.

Facilitators of and Barriers to Psychological Safety

Psychological safety is defined at the group level but is affected by the characteristics of the individuals composing the group. Facilitators and barriers to psychological safety are present at the organizational, team, and individual levels. A qualitative research study of four primary care teams reported several psychological safety facilitators and barriers at the team and individual levels. Eight facilitators and examples of each facilitator were identified:

- Leader inclusiveness: introducing individuals to the team (team level)
- Open culture: nonjudgmental atmosphere (team level)
- Support in silos: identifying with a group of similar individuals (team level)
- Boundary spanner: an individual linking subgroups (team level)
- Interpersonal relationships: familiar long-tenure team members (team level)

- Small teams: individuals are more comfortable and confident in smaller groups (team level)
- Vocal personality: ability to voice opinions confidently (individual level)
- Chairing meetings: appointed meeting chairs are motivated to speak up (individual level)

Four barriers and examples of each barrier were identified:

- Hierarchy: higher ranking physicians were valued more (organizational level)
- Lack of knowledge: lack of awareness of cases being discussed (team level)
- Authoritarian leadership: leaders devaluing ideas from team members (team level)
- Personality: dominant personalities overpowering conversations, or overly shy team members (individual level)

An independent study involving a systematic review of psychological safety studies in healthcare settings around the world identified a relatively larger set of facilitators and barriers, but there were several commonalities with the qualitative study cited above. Some common facilitators were leader inclusiveness and interpersonal relationships/familiarity. Some common barriers were hierarchy and lack of knowledge. Interestingly, a barrier identified in the systematic analysis study that the authors described as “less commonly acknowledged within the existing literature” was a high (i.e., unmanageable) workload that is possibly related to burnout or lack of staffing. There is some evidence of an inverse correlation between psychological safety and nurse burnout,[6] and a study of hospital ICU team members reported that job strain was negatively associated with psychological safety. Interventions designed to enhance facilitators and suppress barriers are likely to succeed in establishing a psychologically safe environment

Interventions to Promote Psychological Safety

Psychological safety is a multi-level construct, so it seems likely that a commensurate multi-level interventional approach is required for successfully establishing psychological safety. Although facilitators and barriers to psychological safety have been identified, there is still incomplete guidance on the precise interventions needed to establish psychologically safe environments across different healthcare settings. Two independently reported studies conducted by the same research group employed individual interviews with hospital healthcare team members as a primary means of designing interventions. The research group operated under the premise that a critical component of developing effective interventions to promote psychological safety is to design the intervention based on the experience of the individual healthcare team members, which is captured most accurately through individual interviews.

In the first study, three key suggestions for interventions were proposed. The first was to provide time during team meetings for discussing personal issues or experiences, to foster trust and openness, rather than discussing only operational issues, as well as to provide time to prioritize learning and promote team familiarity. The second key suggestion was to encourage opportunities for more one-on-one interactions outside of team settings to provide a safe environment to discuss difficult subjects and to promote one-on-one familiarity. The third suggestion was to promote awareness that all team members play valuable roles and focus on eliciting input from team members at risk for low psychological safety (e.g., junior team members).

In the second study, more detailed intervention components and descriptions were established which all fall into three intervention focus areas: (1) building trusting relationships between team members, (2) dealing with complex and/or sensitive issues, and (3) ensuring all team members feel valued. Further, in the second study, the intervention components were mapped to the psychological safety categories developed independently by Edmondson.[7] It is of interest to see if the interventions developed in these studies are successfully implemented in the future or inform future interventions that successfully enhance psychological safety.

Hunt and colleagues published a commentary describing areas of action and interventions required to promote organization-wide psychological safety with a focus on mental health organizations. The overall objective is to instill psychological safety at the individual, team, and organizational level. The areas of action are described as having three core pillars for ultimate outcomes of psychologically safe practice that include patient safety, quality improvement, and well-being. In addition, there are cross-cutting themes for what is needed to achieve the ultimate outcomes: (1) leadership modeling and behaviors, (2) psychologically safe organizational practices, (3) speaking up, knowledge sharing, and decision-making and 4) collaboration, co-design, and co-production. Proposed interventions include:

- Disseminating organizational and leadership messaging using multiple approaches including, for example, letters and in-person events, to reach the whole workforce
- Founding an organizational charter that provides a framework for behavioral expectations and codes of conduct
- Forming an ethics committee that is open and accessible, can explore complex issues, and can experiment with new approaches to patient care
- Holding dialogue meetings designed to address questions that are frequently unanswered or unanswerable to generate open discussion on difficult topics
- Conducting Schwartz rounds, which are interdisciplinary meetings held to discuss emotional and social aspects of care focused on shared experiences and compassion
- Developing staff engagement (e.g., holding town hall meetings) and action research groups to share best practices
- Forming patient participatory councils that bring all levels of healthcare staff together with patients to maximize patient involvement and choice

- Holding skills workshops to develop skills and embed those skills into practice
- Offering simulation and role-playing exercises to explore complex scenarios in safe environments
- Circulating video presentations and case studies to provide teams with time to self-reflect and consider everyday events that are complex

While these interventions and surrounding structure for establishing psychological safety were developed with mental health organizations in mind, much of the conceptual framework and many of the interventions translate to other healthcare settings.

Measuring Psychological Safety

A study that examined a large number of previously published psychological safety papers reported a large degree of heterogeneity in assessments of presence or level of psychological safety. Team-level surveys are the most common form of assessment for measuring psychological safety, but modified surveys at the individual and organization levels are reported in the literature as well. Adaptation of existing measures for assessing psychological safety has been described, and one study reported development of an observational measure[8] to complement the more typical survey-based assessment methods. Establishing and validating an assessment tool will be required to systematically test and confirm the interventions that successfully promote psychological safety.

Potential Negative Consequences in Psychologically Safe Environments

It is generally accepted that a high level of psychological safety is desirable in healthcare settings due to associated positive effects (e.g., improved patient safety). Therefore, it is somewhat counterintuitive to think that negative consequences could be associated with high psychological safety. However, researchers who conducted a qualitative study with 30 ICU team members reported several potential negative consequences of a high psychological safety environment. Three key themes were identified: (1) impact on bandwidth, (2) context, and (3) motivation to speak up. For the first theme, impact on bandwidth, the clinical decision maker may become overwhelmed or distracted by the volume of input from other team members resulting in poorer clinical decisions. For the second theme, context, a “flatter hierarchy” could allow multiple clinical opinions to be voiced, which increases the risk of confusion amongst the team members about the clinical plan. For the third theme, motivation to speak up, a team member may not be motivated by patient safety to voice a productive opinion, but rather may be motivated to criticize another team member and may feel safe voicing unproductive criticism without fear of personal repercussion. If such a phenomenon does occur, then the challenge will be to ward off the negative consequences without adversely impacting the psychologically safe environment and decreasing the positive influences of that environment.

Future Research Directions for Psychological Safety in Healthcare

A psychologically safe environment for healthcare teams is desirable for optimal team performance, team member well-being, and favorable patient safety outcomes. There is a bidirectional relationship between psychological safety and safety culture, with each promoting the other.[9] Currently there are at least three primary areas in the field of psychological safety that warrant further attention:

- First, additional knowledge is required about the precise interventions that most effectively foster psychological safety and whether distinct interventions are required for different healthcare settings.
- Second, there is a need to establish standardized measures of psychological safety that can be applied across different organizations and healthcare settings to accurately and consistently assess the level of psychological safety and to systematically assess the effectiveness of interventions.
- Third, there is evidence that, in addition to the positive influence of high psychological safety, some negative consequences are possible. If there are negative consequences of high psychological safety, then a better understanding is required to maximize the positive influences and minimize the negative consequences.

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