Interprofessional model on speaking up behaviour in healthcare professionals: a qualitative study

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ABSTRACT

Objectives Despite training and the recognition that speaking up can mitigate harm to patients and save lives, healthcare professionals do not consistently speak up when they have patient safety concerns. The purpose of this study was to identify barriers to and facilitators of speaking up about patient safety concerns to inform the development of interventions that will increase this behaviour.

Design From October 2017 to February 2018, the study team conducted focus groups and interviews with nurses, advanced practice providers and physicians at three healthcare facilities. Participants were prompted to share their personal experiences with and perspectives on speaking up about patient safety concerns and to discuss strategies for communicating those concerns.

Setting Tertiary academic healthcare centre.

Participants 62 healthcare professionals participated in the study. Purposeful sampling was used to include participants of different health professions and experience levels.

Main outcome measures We planned to answer questions about why more healthcare professionals do not consistently speak up when they have legitimate patient safety concerns and to identify ways to enhance current interventions on speaking up behaviours,

Results Twelve focus group discussions and two interviews were conducted with 62 participants. We identified two recurring themes: (1) The predominantly hierarchical culture of medicine is a barrier to speaking up and (2) Institutional, interpersonal and individual factors can modulate the impact of medicine's hierarchical culture on speaking up behaviours and inform the strategies employed.

Conclusions The data highlighted the importance of moving beyond targeting front-line healthcare professionals for training in the skills of speaking up and engaging institutional leaders and systems to actively promote and reward speaking up behaviours.

INTRODUCTION

Speaking up to express concerns about patient safety should be encouraged and supported to prevent leading human factor causes of medical errors, including poor communication and/or failure to speak up to prevent patient harm.[1] There is evidence that communication skills can be taught[2] and that training focused on teamwork and team communication for example, Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS and Crew Resource Management can improve communication among health team members and decrease the frequency of preventable medical errors.[3–6] An advocacy-inquiry framework[7] recommends both stating one's point of view and genuinely questioning one's interactant about theirs, as a means of fostering two-way communication to enhance mutual understanding.[8] Investigations into the effectiveness of TeamSTEPPS speaking up protocols and the advocacy-inquiry framework have shown mixed results in producing enduring changes in front-line speaking up behaviours.[8]

Healthcare professionals' motivations and behaviours for speaking up or remaining silent about patient safety issues are complex.[9] At the individual level, assertiveness and persistence have been shown to facilitate speaking up.[9] In contrast, an individual's concerns for self, including perceived risk of public humiliation, retaliation, or marginalisation can inhibit speaking up.[7 10] Interpersonal factors such as prioritising relationships with superiors or colleagues can also stifle the expression of legitimate patient safety concerns.[11 12] Cultural factors also influence decision making about speaking up. These include personal beliefs about supervisor interactions and healthcare team norms, often a product of leader attitudes and behaviours, and institutional safety culture.[13]

High psychological safety, a key component of safety culture, empowers team members to take risks such as raising concerns without fear of retribution.[14] In a psychologically safe environment, individuals feel safe to pose questions, offer alternatives or disagree with colleagues, especially those in authority.[15 16] This study was designed to: (1) answer questions about why, despite training and the knowledge that speaking up saves lives, healthcare professionals do not consistently speak up with legitimate patient safety concerns and (2) elicit information which may be useful in enhancing current interventions to increase speaking up behaviours.

METHODS

Study design

We chose a qualitative descriptive approach to exploring healthcare professionals' opinions about and experiences with speaking up. We held focus group discussions and interviews with healthcare team members from multiple professions, ranks and levels of training to explore perceived barriers and facilitators influencing speaking up, and commonly used strategies for speaking up. We grounded the study design, including structured interview questions, in existing frameworks: (1) psychological safety,[15] promoting organisational learning versus apathy or anxiety[8 17] and (12) the advocacy-inquiry model, which describes graded actions health professionals take for promoting patient safety.[8 17]

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Ethics approval was obtained. Participants provided informed consent for study participation.

Participants and setting

Subjects were recruited from two academic medical centres and one community hospital affiliated with a large academic health system. Participant specialties included internal medicine, paediatrics, surgery and anaesthesiology. These service lines were selected based on previous participation in an institutional initiative which supported training and unit-based coaching on teamwork, team communication and cross-team care coordination to improve patient safety and outcomes. This enabled us to explore why despite training, many front-line professionals do not speak up about safety concerns. We employed purposeful, maximum variation sampling across professions and demographics to ensure broad insight into a range of individual perspectives and experiences with speaking up. One investigator, partnering with the change management team at each site, distributed study recruitment materials describing the purpose and scope of focus groups to site physicians, advanced practice providers and nurses.

Data collection

Study investigators (SK and LR) constructed a semistructured interview guide to prompt discussion about the challenges of speaking up, strategies participants had personally used or observed for speaking up, the perceived effectiveness of strategies and how to create a safe environment for speaking up. From October 2017 to February 2018, we conducted 12 focus group sessions, each lasting approximately 60 min and consisting of 4–6 participants. Focus groups were homogeneous to participant profession, specialty and/or level of training or experience, except in one instance where surgical attendings and fellows participated together. Separate focus groups were conducted for resident physicians, nursing residents, operating room nurses, neonatal intensive care nurses and certified registered nurse (RN) anaesthetists. Experienced focus group facilitators used a semistructured interview guide for consistency. One-on-one interviews were conducted with individuals who were unable to participate in focus group discussions. Participants were asked to identify whether they were in leadership positions; leadership roles were defined as clinical or administrative roles regardless of specialty, such as unit chiefs, nursing managers, etc. All interviews and focus group discussions were audio-recorded, transcribed verbatim and uploaded to Dedoose V.8.3.21 (Socio-Cultural Research Consultants), a web application for managing, analysing and presenting qualitative data.

Data analysis

We employed qualitative content analysis to summarise and interpret healthcare professionals' narratives about experiences with and perceptions of speaking up about patient safety in the clinical environment. In keeping with this analytic approach, we derived codes inductively and avoided use of preconceived categories or theoretical perspectives to remain attuned to participants' statements. Two researchers, LR, a cultural anthropologist with a faculty development role and RU, a neonatologist with experience in teamwork training and qualitative research, read the transcripts independently to obtain a sense of the whole corpus. The researchers met early in the coding process to discuss initial impressions and develop a preliminary framework consisting of codes, definitions and illustrative excerpts with a plan to apply these to the transcripts. This coding framework was refined in an iterative fashion. The coding scheme was modified after differences in code application were identified and adjudicated and later, organised and grouped into thematic categories. To ensure confirmability, the coding team engaged study team members who did not participate in coding to review the themes, resulting in the final coding scheme. Associations between themes were identified to create a model of observed speaking up behaviours across a diverse, interprofessional group of study participants.

RESULTS

A total of 62 healthcare professionals including physicians (attendings, residents and fellows), RN and certified RN anaesthetists from the specialties of internal medicine, paediatrics, surgery and anaesthesiology participated in the study. There were 60 focus group participants and 2 interviewees. Most participants were female (N=44, 71%). Participants had a wide range of experience in healthcare, ranging from 1 to 20+ years in their role.

We identified two recurring themes: (1) The predominantly hierarchical culture of medicine is a barrier to speaking up; (2) Institutional, interpersonal and individual culture, particularly leadership approach, modulate the impact of medicine's culture on speaking up behaviours. Within institutions, leaders had a significant impact on whether healthcare professionals spoke up. Within relationships, variations in speaking up behaviour were often attributed to the relational history of the individuals and relative status to one another. Individual variations in behaviour were often explained with reference to cultures of origin, professional identity, perceived medical knowledge or experience level. When soliciting strategies participants had used (or seen others use) to speak up about patient safety concerns, they described using the patient's safety as the rationale to speak up, asking a question or soliciting input from a senior colleague. The use of speaking up strategies was highly individualised and context dependent.

Hierarchy and speaking up

Participants across specialties, professions and experience levels characterised the overall clinical practice environment as hierarchical and governed by norms that inhibited speaking up to superiors about patient safety concerns.

> There's a lot of lore and legend within the resident ranks…I don't think I was ever told not to call an attending, but you don't call an attending when you are an intern. (Attending)
> You're trying to convince them 'This is what we need to do. If that happens, it's bad for the patient, because they're here with a bad injury.' Then you're talking to your chief …so your chief calls their chief, and then finally if that doesn't work, …your attending calls their attending and by the time this happens half a day's gone by. [laughs] Because … the way the hierarchy's structured everything needs to be run up and down the chain of command. (Resident)
> I think usually what will make speaking up threatening or challenging is if your 'speaking up' or 'speaking out' is contradicting somebody who's in a higher position of authority than you are. (Resident)

Newer healthcare professionals, who described lacking knowledge, experience and power, felt particularly uncomfortable about voicing patient safety concerns. They often lacked confidence to challenge the behaviours of those with more seniority, experience and authority.

> I can tell you in one instance that I very strongly felt that maybe one of my attendings was mismanaging a ventilator for a patient, but in the level of my inexperience, and in addition to the fact that there's

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a power discrepancy, I definitely didn't feel like I could speak up. (Resident)
I'm a new nurse, I have my set of knowledge. I'm not really comfortable with that yet. So then when a doctor says something, sometimes it's like, 'oh that must be the correct way.' But really you have to rely on your knowledge and speak up. So, it's kind of hard with the different dynamics of hierarchy. (RN)
Since we're new, some of us more than others, you feel less confident about speaking up because of a knowledge gap, maybe in addition to feeling intimidated. (Residents)

Trainees worried that speaking up to supervisors could negatively impact their evaluations and professional advancement.

I know I have weighed, what's the consequence if I don't push this and say something more vs if I do it in such—even if I just continue. No matter how I do it, this person now dislikes me, or gives me a bad evaluation, or says I have problems with authority or things like that. (Resident)

Culture and speaking up

Participants described the ways in which institutional, professional or personal cultures interacted to facilitate or inhibit speaking up. At the individual level, cultural norms created barriers to speaking up.

I'm an Asian so there's a lot of personal bias that goes into that, because for me my attending is still like the ultimate authority and if they say to do things one way…, I have a hard time speaking against that. (Resident)

They described the institutional culture in their healthcare system along a continuum of hierarchy and explained how increasingly hierarchical cultures inhibited speaking up.

I feel much more like I can speak up about anything in [Institution B] than at any of the other hospitals…it's harder to speak up here… or trickier. It's more nuanced here than it is at [Institution B] and I do think that's definitely the culture. (Resident)
I feel like the culture at [Institution B] we (nurses) can talk to the doctors. They are usually very receptive and there's good team dynamics and we can discuss things. (RN)
There's also …[a] kind of culture within the [Unit] where people are very much encouraged to speak up. (Charge RN)

The culture of surgery was singled out as notably hierarchical, with special norms of speaking up.

Because of the hierarchical nature of surgery, it's presumed to be punitive or presumed to be weak if you question or call for help. That puts people in this difficult place…they don't speak up and then something happens. (Attending)
The nurse has the power over the attending in the [operating] room, 'cause if she sees something that's not right, she has the power to question the attending. (RN)

In hierarchical environments, participants reported using a patient-focused speaking up strategy.

I'm here to… help with the best care of this patient.(Charge RN)

Others questioned proposed courses of action by referring to institutional policies.

I don't think that's in our policy and procedure.(Charge RN)

Participants in leadership roles commented on the challenges of encouraging speaking up in institutions whose cultures on the one hand encouraged expressions of concern about patient safety but whose reward system did not support the downstream effects of speaking up.

If you're leading a unit and you're being measured by throughput, then your focus is not going to be listening to me talking about safety…If the leaders are not measured for safety, then it's not going to happen. (Attending)

Participants described their observations of how leaders intentionally invited members of their clinical teams to speak up.

Our former chair used to always start all of these cases with almost a scripted, 'If anyone sees anything during the operation please speak up'…At any point in the operation if you're uncomfortable with what I'm doing please speak up. It doesn't matter how long I've been doing this. (Resident)
Some chiefs are great leaders and really encourage… 'Are you concerned about anything? What's your question? Please speak up.' (Resident)

A track record of responding positively to speaking up encouraged open communication and reinforced speaking up in the clinical work environment.

I had a case…where one of the scrub techs said 'you left tinfoil in the eye'…after we had completely closed and we were getting ready to wake, and Dr. [X] said 'are you sure?' And the tech said 'I think we did'…and Dr. [X] said 'well, let's open up the eye.' And they opened the eye and they found the tinfoil. That's because of Dr. [X]'s personality and how Dr. [X] runs the room. Everyone feels very comfortable to talk. (CRNA)

Participants in leadership roles demonstrated intentional strategies for eliciting team input, role modelling positive responses to expressions of concern and explicitly demonstrating a willingness to listen and provide explanations.

It's your demeanor on how you respond to people. I offer my services a lot to especially new hires to say, 'Please don't hesitate to contact me if you have any questions.'(Charge RN)
When someone asks a question that's related to patient safety, as long as it's motivated by the concern that they had about that, acknowledge that "thanks for asking about that". Just try and establish that you're glad that they're thinking about safety and that they're willing to talk to you about it. (Attending)

Leaders recognised the negative consequences of team members' reluctance to speak up.

I think the worst situation [is) somebody does not want to challenge me on something, an order that I've given, then they will instead of talking to me about it or challenging me on it, then they will find a way not to follow that order. (Attending)

When invited to speak up, team members who perceive risk in expressing their concerns may consult with peers or senior colleagues.

When I felt uncomfortable, but I didn't know if I was right or wrong, seeking input from other people, talking to the respiratory therapist, just to make sure I'm not the only one that doesn't agree with this plan. (Charge RN)

Team members also reported framing their input in non-threatening ways, such as in questions.

I'm new at this and want to make sure that I'm learning things the best way. Please explain to me your reasoning. (RN)
What is your rationale for this procedure…because we haven't ever done it before here that I know of. (Charge RN)

DISCUSSION

Our findings highlighted one of the key dimensions of psychological safety: leader inclusivity that promoted speaking up about patient safety.[15 18] The rigid power hierarchy in healthcare

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largely determined by titles and positions created barriers for trainees and new staff to engage in speaking up, especially when they doubted their competence and level of knowledge base. What motivated healthcare professionals to step up and express their patient care concerns was the leaders' explicit expression of invitation to speak up. And this observable act by leaders signalled to the healthcare professionals a psychologically safe culture.[13 15 16 18] In such a culture, harm to patients due to medical errors or adverse events becomes a learning event for future prevention, rather than an occasion for individual punishment.[15 16] The implication for speaking up training our study raises is congruent with the conclusion drawn by Raemer *et al*[8]: '…rubrics, code words, encouragement, rationale, analogies, and slogans may be insufficient on their own to cause clinicians to speak up more readily…' what is needed is training about 'how to invite speaking up, how to speak up, how to deal with being spoken up to, and how to speak up even when uncertainty is present.' In this study, healthcare professionals across a wide range of experience, specialties, and positions described a willingness to express their patient safety concerns when their team leaders established psychological safety for ensuring their speaking up.

Beyond leader inclusivity, our study points to certain contexts that may make speaking up more difficult than in others, such as when patient or family members are present, when senior team members are present, and during rapidly evolving events such as codes. These contexts increase the complexity of decision making and raise the barriers to speaking up.[19] Our participants highlighted specific strategies they used including referring to a hospital policy, framing their input as a request for more information, or using patient safety as the rationale for speaking up. We recommend that for leaders in high-risk situations to use safety practices, such as procedural safety checklists or code debriefing, as a mechanism to support team members in raising safety concerns in a safe space.[20] Simulation training can also prepare teams to practice speaking up skills within their structure and roles with facilitated debriefing that allows participants to discuss motivations to speak up or remain silent when they are presented with speaking up concerns.[5 8 11 21–23]

Lastly, we emphasise the critical role of institutional structures that support and reinforce both individuals' speaking up skills and the speaking up culture. According to Jones *et al*,[14] when health team members choose to remain silent rather than voice concerns, this can be a protective or defensive strategy (perhaps due to previous negative experiences) rather than passive inactivity. Institutions and leaders can institute informal and formal mechanisms to promote relationship building and engagement. This poses opportunities for institutions to implement leadership skills development in creating a psychologically safe team culture in addition to training individual healthcare professionals in speaking up.[24 25] To augment formalise training, institutions may also identify opportunities for promoting speaking up as part of the routine workflow. For example, physician code leaders can be trained to ask for team input during key code events and debrief afterwards to generate collective learning from speaking up events. Furthermore, the institution can consider rewarding team leaders for establishing a culture that encourages speaking up and team members for demonstrating speaking up behaviours, rather than regarding an increase in event reporting as a negative reflection on a unit and/or its leadership.

Our study had limitations: (1) it was conducted at a large tertiary referral academic healthcare system, which may limit applicability to other settings within or outside the USA that are smaller in size or with different organisational dynamics; (2) we asked participants to recall instances of speaking up and describe the strategies they used, an approach that is subject to recall bias which may not reflect actual strategies used. That said, the study findings represent the perspectives of healthcare professionals representing many specialties and levels of experience. Additionally, the role of leader inclusivity in supporting speaking up behaviours is relevant to diverse institutional healthcare settings.

CONCLUSION

Speaking up for patient safety within clinical environments occurs within a power hierarchy, making leaders' inclusive behaviours essential for creating a psychologically safe culture. Future training should target both established and new leaders to cultivate verbal skills and habits to motivate health professionals on the team to step up, speak up and learn from their speaking up episodes.

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