Why Medical Residents Do (and Don't) Speak Up About Organizational Barriers and Opportunities to Improve the Quality of Care

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Abstract

Purpose
Medical residents are valuable sources of information about the quality of frontline service delivery, but if they do not speak up, their ideas, opinions, and suggestions for improving their work practices cannot be considered. However, speaking up can be difficult for residents. Therefore, the authors have explored both what helps residents speak up about organizational barriers and opportunities to improve the quality of their work and what hinders them from doing so.

Method
The authors conducted an exploratory qualitative interview study with 27 Dutch medical residents in the Netherlands in 2016. They used the critical incident technique for data collection and the constant comparison method of the Qualitative Analysis Guide of Leuven for data analysis.

Results
Three types of incidents in which residents considered speaking up are described. The authors identified 2 main considerations that influenced residents' decisions about speaking up: Is it safe to speak up, and is speaking up likely to be effective? Residents' decisions were influenced by personal, team, and organizational aspects of their situations, such as supervisors' open attitudes, hierarchy, duration of clinical rotations, organization size, and experiences (either vicarious or their own).

Conclusions
Findings from this study indicate that residents tend to be silent when they encounter organizational barriers or opportunities to improve the quality of their work. Perceived effectiveness and safety are important forces that drive and constrain speaking up. The authors provide important starting points to empower medical residents to speak up about their suggestions for change.

Medical residents are valuable sources of information about the quality of frontline service delivery.[1–3] They encounter organizational barriers, possess knowledge on how policies are implemented, and experience both efficiencies and inefficiencies in existing routines. During their training programs, residents work in many departments; they see how higher-level decisions affect patients' health care experiences and observe both good and bad practices. For their valuable experiences to be put to use in improving the quality of care, residents must speak up and share their ideas, opinions, or suggestions with people who can make positive changes, such as managers and supervisors.[4] For example, residents can make suggestions about introducing novel work routines, eliminating inefficiencies that cause long waiting times in outpatient clinics, or reducing redundancies in administrative tasks. To assist residents in being heard, we have explored what helps residents speak up about organizational barriers and opportunities to improve the quality of their work and what hinders them from doing so.

Current postgraduate medical education programs increasingly recognize that if residents are to be adequately prepared to work in complex health care systems, they must possess knowledge and abilities related to health care finance, quality improvement, teamwork, leadership, and other aspects of the science of health care delivery.[5,6] Moreover, postgraduate medical education underlines the importance of residents proactively taking responsibility for the quality of care by speaking up about and/or engaging in health care change management in medical leadership roles or as health advocates.[7–9] In the social sciences, speaking up about organizational issues is referred to as *voice*, which is defined as "a promotive behavior that emphasizes expression of constructive challenge intended to improve rather than merely criticize. Voice is making innovative suggestions for change and recommending modifications to standard procedures even when others disagree."[10] Voice can be operationalized in many ways.[10,11] Previous research on residents speaking up has mainly focused on "problem-oriented" voice, which refers to reactively speaking up about ethical or professional threats to patient safety, such as covering up error, disrespectful behavior, or inadequate hand hygiene.[12–15] In this report, we focus on "suggestion-focused" voice, which refers to proactively making suggestions for organizational change.[16,17] Our study contributes to developing a clear understanding of this phenomenon in current medical practice by providing empirical knowledge about demonstrating organizational behavior in professional settings. These findings can be used both to facilitate

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practical initiatives that encourage medical residents to speak up and to add value to the medical education and professionalism literature.

Literature on speaking up shows that employees have a natural tendency toward silence.[18–21] An individual makes a conscious assessment of whether or not to speak up; this assessment can be seen as an equilibrium between driving forces (i.e., What helps residents speak up?) and restraining forces (i.e., What hinders residents from speaking up?).[20,22] The action of speaking up or not is the product of an interaction between triggers or motivations to speak up, thoughts and beliefs about the anticipated effects of speaking up (Will it be appreciated if I speak up? Will I get support from my peers?), and contextual elements (e.g., local culture and resources). Speaking up about organizational barriers can be especially difficult for residents because they work in an environment that traditionally values passivity and compliance with authoritarian rules. This contradiction was recently pointed out in an editorial in *Academic Medicine*.[23] Residents are part of a so-called "professional group," a group of experts sharing specific standards, morals, and practices.[24,25] For members of these professions, the social norms that are deemed important within this group have a strong influence on the behavior of individual members. Because professionals are traditionally wary of business- and management-like issues, it can be challenging to engage medical professionals in organizational work, such as making suggestions about change.[26,27] Therefore, the objective of this study was to explore how residents decide whether or not to speak up about organizational barriers and opportunities to improve the quality of their work.

Method

Study design

We conducted an exploratory qualitative interview study with 27 residents using the critical incident technique (CIT) for data collection.[28,29] We used the Qualitative Analysis Guide of Leuven (QUAGOL) for data analysis.[30] The combination of these methods allowed us (1) to gather information on specific moments (critical incidents) in which residents were triggered and motivated to speak up and (2) to obtain in-depth insight into their cognitions and beliefs that either helped or hindered them in speaking up. This study was approved by the Netherlands Association of Medical Education ethical review board (file number 691).

Sample

We used purposeful sampling to recruit residents. We aimed to include residents enrolled in a specialty training program and doing clinical work at the time of the interview. To increase maximum variation sampling, we approached residents from various specialties (surgical and internal medicine and diagnostic and therapeutic specialties) from a range of postgraduate years. Moreover, we aimed to study a representative sample of male and female residents. We invited residents from training programs within the training region of a teaching hospital in the center of the Netherlands to participate in our research. Residents who responded positively received an information letter and an informed consent form describing the research procedures and ethical considerations. We contacted residents who returned the form and scheduled an interview.

Data collection

One researcher (J.J.V.) collected data between July and October 2016 through individual face-to-face interviews. The interview guide was based on CIT and aimed to explore what helps or hinders a resident in a particular experience or activity, in this case instances in which residents considered speaking up about organizational barriers or opportunities to improve the quality of their work. (For the interview guide, see Supplemental Digital Appendix 1 at http://links.lww.com/ACADMED/A755.) These critical incidents were the units of analysis. We studied residents' beliefs, thoughts, and actions that were provoked by the incidents. Our first question was, "At the departments where you have worked up till now, how did people generally deal with organizational issues that affect the quality of their work?" This question was purposely formulated in a broad sense and not specifically targeted toward participants' own actions as a way to ease the respondents into the topic and the interviews. Next, we asked whether the residents ever decided to speak up about—or proactively tried to change—organizational barriers and opportunities during their residency program (the critical incident). To trace a resident's decision-making process on whether or not to speak up, the interviewer specifically zoomed in on the small steps from the resident's first experience of an issue to his or her final decision to speak up or remain silent.

Data analysis

We recorded, transcribed verbatim, and anonymized the data. We used QUAGOL for data analysis. This tool was specifically developed to guide the analysis of qualitative data, combining a constant comparison approach and a process of coding and conceptualization.[30] The QUAGOL guideline fits with CIT research.[28] We conducted the analysis of the interviews in 2 stages. In stage 1, we met as a team to thoroughly prepare the coding process. Guided by the research objective, one author (J.J.V.) and a research assistant (H. van Roekel) each separately summarized the same 4 interviews, creating a narrative interview report for each interview. The 2 researchers discussed the differences and similarities in these reports and then repeated this process until 15 reports had been summarized. They selected 2 interviews that were particularly rich in content to discuss with the whole research team. This discussion both confirmed preliminary insights that had been found up to that point and helped the team discover new angles for the analysis. The 2 researchers who summarized the interviews also developed conceptual interview schemes (CISs) for the individual interviews. From these separate CISs, they formulated an overarching CIS for all the interviews, removing duplicates and combining similar concepts. This overarching CIS was the basis for the preliminary codes we developed in NVivo version 11 (QSR International, London, United Kingdom). In stage 2, we linked each significant passage in the interviews to one of the codes.

While coding, we checked the quality of our concepts by examining their fit, adjusting the list in a back-and-forth fashion. We also addressed quality by choosing 3 interviews that were rich in content for one author (J.J.V.) and a research assistant (E. van Leeuwen) to each code separately. They then discussed similarities and differences in their coding of these interviews. Their work

confirmed the fit of the preliminary codes, and they proceeded to code the remaining 12 interviews for which they had written narrative interview reports. Then, one author (J.J.V.) coded the remainder of the 27 interviews. Next, she performed a cross-case analysis to integrate the separate concepts and formulate an answer to the research question. Finally, J.J.V. translated from Dutch into English remarks from the interviews that illustrate the themes for use in this paper.

Results

The 27 residents represented 7 residency training programs in the Netherlands: dermatology and venerology (n = 2), general practice (n = 2), internal medicine (n = 6), obstetrics and gynecology (n = 5), ophthalmology (n = 6), psychiatry (n = 4), and radiology (n = 2). Nineteen (70%) participants were female, which is comparable to the percentage of female residents in the Netherlands. The mean age was 31 (SD = 4, with a range from 26 to 48), and the mean postgraduate year was 2.8 (SD = 1, with a range from 1 to 6). The residents had gained work experience in a total of 21 hospitals and 39 departments.

Critical incidents and motivations for speaking up

During the interviews, the residents described 3 types of incidents in which they considered speaking up and making suggestions for change. Moreover, residents described several motivations to speak up that were linked to these incidents. The first—and predominant—type of incident that caused residents to speak up was an inefficient work process that led to a sense of frustration. Examples are complex electronic patient files, inefficient information transfers between different information and communication technology systems, malfunctioning copy machines, and prescription software that generates an abundance of warnings and errors.

> We have a structural problem with the medical supplies and tools we have to look for during our shifts. When we have to do a consultation on another ward, then we can never find the supplies to adequately check the patient. Then we have to search through the entire hospital to gather our things.

Residents told us that each inefficient work process only took up a small amount of time, but, taken together, these inefficiencies caused them to waste a lot of energy and precious time in the clinic. Residents were motivated to speak up from a sense of dissatisfaction and from a desire to improve their own work circumstances.

The second type of incident was an inadequacy in work procedures that negatively affected patients' health care experiences. Examples include chronic delays in the outpatient clinic, long waiting times in the emergency department, and a lack of continuity of care due to regular changes in attending physicians.

> I think it is just a burden for patients when they have to wait for half an hour when this is not strictly necessary. . . . Our patients are always half an hour late because the supporting assistants are overbooked, and they just can't get it done in time.

Residents directly experienced the frustrations, powerlessness, and sometimes even anger of their patients about these inadequacies. They were motivated to speak up because they felt uneasy, due both to the conflict they experienced with the patient and to their perception of the poor quality of care delivered.

The third type of incident that motivated residents to speak up occurred when they came up with new ideas and suggestions that could enhance existing work flows. This type of motivation mostly occurred at the start of an internship when residents were still able to bring a fresh look to work processes. Some residents, generally those in the second half of their specialty training program, wanted to contribute to the health care system by sharing their experiences from other departments.

> I notice that I increasingly feel that I can make a contribution with my previous work experiences. I have worked in several hospitals, and I bring all the positive things I have learned with me to this health care organization. And I notice that I increasingly like to influence organizational processes.

These residents had developed vision and were eager to share this with their team. The motivation for exercising this voice opportunity was to improve both the organization and themselves: They wanted to become competent in (change) management because they thought they would need this skill in the future.

We found that the first type of incident was most common in the interviews. The data showed an emphasis on voice opportunities that covered practical, microlevel issues in operational processes and hardly touched issues at the departmental or organizational level. A few residents noted that they never attended department meetings in which staff discussed issues that were relevant at tactical and strategic levels in their department or organization. Therefore, they were not aware of these issues. In the course of the interviews, we asked residents whether they had ever attended such meetings. Most replied that this meeting was "off-limits"; some experienced a "sense of mystery" surrounding these meetings. One noted that it felt like department meetings were the place where "it really happened." One resident said that occasionally residents could participate in staff meetings but had to leave when financial issues were discussed. Another resident mentioned sometimes attending departmental "resident-proof" staff meetings during which only a selection of the topics the staff generally discussed were put on the table.

To speak up or not to speak up?

Although we explicitly asked for examples of situations in which the residents decided to speak up, residents mostly talked about instances in which they decided to remain silent. Residents frequently described situations in which they decided to passively wait it out and refrain from speaking up. The interviews showed 2 main categories of considerations that were important for residents when considering whether to speak up: Is it effective to speak up, and is it safe to speak up? (See Table 1.) These 2 main judgments, referred to in this study as the *efficacy calculus* and the *safety calculus*, were part of a cost–benefit trade-off residents engaged in as they considered speaking up. Within these categories, elements that helped or hindered residents operated at various levels: some, like thoughts, beliefs, and implicit theories, operated at the personal level; others, like contextual influences such as the organizational structure or local culture, operated at the organizational level.

What hinders residents from speaking up?

Efficacy calculus. As illustrated by the quotations in Table 2, residents described

Table 1

Inhibitors and Drivers Influencing Whether Medical Residents (N = 27) Speak Up About Organizational Barriers and Opportunities to Improve the Quality of Care, 2016[a]

Category	Efficacy calculus: "Is it effective to speak up?"	Safety calculus: "Is it safe to speak up?"
Inhibitors	• Short clinical rotations • Lack of personal resources (time and/or energy) • Seeing no other options • Negative experience (personal or vicarious), socialization ("things never change around here") • Lack of overview (not knowing who to contact or where to begin)	• Cognition that speaking up is the same as complaining (wanting to maintain a hard-working-resident image) • Perceived negative influence on job opportunities (troublemaker label) • Perceived negative influence on colleagues • Negative experience (personal or vicarious) with speaking up
Drivers	• Small teams, compact organization • Strong network (know who to contact) • Joint meetings with medical and nonmedical staff • Being invited to share a suggestion or join an existing project • Positive experiences (i.e., realizing things actually can change)	• Supervisor with an open, proactive attitude • Nonhierarchical organization • Work experience (learning that there are alternative solutions, gaining confidence in one's own ideas) • A strong case (objective evidence) • Support from colleagues

[a]Participants were from training programs within the training region of the University Medical Center Utrecht, Utrecht, the Netherlands.

several contextual features that made them feel it was futile to speak up and that they should "choose their battles," "do their time," and "endure" the status quo. Several residents pointed out that the short length of each rotation, usually a couple of months, made it seem unfeasible to bring about change. Some residents noted that they already had trouble maintaining a healthy work–life balance. In their view, speaking up, and especially engaging in quality improvement action, would increase their workload by an unknown amount for an undetermined amount of time. Additionally, their perceptions of efficacy decreased in the face of colleagues who told them "things never change around here." They felt they should not waste their energy trying to change anything. A few residents could not come up with any solutions for the problems they encountered and, therefore, decided that speaking up would not be beneficial.

Safety calculus. During the interviews, many residents pointed out that speaking up could be risky and, therefore, they learned to keep quiet. They were afraid that speaking up about issues—especially those related to workload—would harm the image they wanted to project of a strong, hard-working resident who does not "complain." They did not want to be considered weaker than their predecessors who had endured the same work circumstances. Some residents were scared to be labeled as troublemakers and thought speaking up could negatively affect their job opportunities. With respect to remaining silent about workload issues, some residents feared if they spoke up some of their colleagues might be burdened with trying to fix the problem.

What helps residents speak up?

Efficacy calculus. Residents described that working in small organizations and teams helped them to share their ideas or suggestions (see Table 3). They felt that it was easier to come forward with ideas when they had an overview of the organization and knew most of their colleagues, including those in management. Residents felt especially inclined to share their suggestions when there was a joint meeting that all their colleagues (medical and nonmedical) attended. A need for "short lines of communication" was often expressed. Several residents described teaching hospitals as large, unwieldy, bureaucratic organizations where they had to work through a lot of organizational layers before they could actually change or at least start to change something. Being actively invited to share their suggestions for change helped these residents to speak up. This invitation made them feel they were heard and taken seriously and a valuable part of the team. An important facilitator for speaking up was having had a positive experience with speaking up and attempts to change the status quo. Having an experience of change actually happening empowered them to speak up more often.

Safety calculus. Several of the residents mentioned that the open attitude of their supervisor was very important to their decision to speak up. A nonhierarchical atmosphere in which their supervisors made them feel like they could address any topic was beneficial. Residents with supervisors who were open to change, who made them feel safe, or who helped them think through organizational issues were more inclined to speak up. Seeing that colleagues who spoke up were not humiliated or disciplined led some residents to come forward with ideas themselves. A few of the senior residents who already had several years of work experience felt more inclined to speak up because they felt confident that their ideas were credible, instead of just "an opinion." Residents also mentioned that creating "a network of allies" boosted their confidence. Residents used strategic terminology to describe how this network helped them. They used phrases like "strengthening your position," "creating support," and "going to your supervisors en masse." They described strategies for giving more substance to their "complaint" or for gathering evidence to support their claim. Additionally, some considered external inspection of the residency training program to be a window of opportunity for addressing issues.

Discussion

This qualitative study shows that speaking up about organizational barriers and opportunities for improving the quality of their work does not come naturally to medical residents. Our findings indicate that residents in this study experienced a

Table 2

Quotations[a] From Medical Residents (N = 27) Illustrating Inhibitors to Speaking Up About Organizational Barriers and Opportunities to Improve the Quality of Care, 2016[b]

Speaking-up inhibitors	Representative quotations
Efficacy calculus	
Short clinical rotations	• Each time, you start [an internship] with a positive and enthusiastic mindset, and after 2 months you know, alright, this is realistic and this isn't, so I will accept it and I will endure it. • The internships take 4 months, so after a while you start thinking: I can endure this for another month and then this internship will be over.
Lack of personal resources (time and/or energy)	• I think I slowly became less proactive because I have the feeling it takes too much energy while it's not productive anyway. So I started to let things go. • You have to invest time and energy, next to all the other things you are already doing. And I often notice that these projects are never ending. . . . You know for a fact that it will take a lot of time and energy, while the outcome is uncertain.
Seeing no other options	• I think you implicitly think, everybody does it, or we just have to do it like this. There does not seem to be a solution. So quickly you think, when you start thinking about the alternatives, you find that there are no alternatives. So, we just keep going.
Negative (vicarious or personal) experience, socialization ("things never change around here")	• I always had the feeling it doesn't matter whether I make a fuss about it or not; you just have to play along and adjust to the circumstances. Don't be too annoyed and make the best of it.
Lack of overview (not knowing who to contact or where to begin)	• I feel like—especially because the department is so large—as a resident, you don't have any influence on how things are organized. Things have been the way they are for years now, and I don't have the illusion that I can come in here and change things. • But you lack overview, you can't see the bigger picture. That makes it difficult to coordinate, because every person involved participates at a different layer.
Safety calculus	
Cognition that speaking up is the same as complaining (wanting to maintain an image of a hard-working resident)	• I know a lot of residents who also experienced a lot of difficulty with it [speaking up], but because they were scared to be labeled as someone who is not motivated, lazy, or weak, someone who can't handle it, they just sat out their time and because the internship only takes a year, they started thinking, "Just a few months and then I'm done; then it is over. Then I'll still be viewed as the hard-working, never-complaining resident." That is the reason why it was never put on the agenda and that waiting-it-out attitude shows me that you experience a barrier [to speaking up].
Perceived negative influence on job opportunities (troublemaker label)	• I think that is an important issue for residents; I will keep calm and quiet because then they will not find me annoying and that will improve my chances to find a job later on.
Perceived negative influence on colleagues	• It is culture. I think that "specialty x" has a very open and relaxed climate. A very nice medical educator, etc. But you kind of go along in a group and you feel, you think: If I don't do it [the work], then somebody else has to. Solidarity. You don't want somebody else to have to fix it for you because bottom line, that is what it comes down to: If I don't do it, it won't be the supervisor who will take over; no, it will be one of the other residents.
Negative experience (personal or vicarious) with speaking up	• The current group of residents has—under my supervision as a member of the resident board—brought it [a problem with workload] up. And something did change, eventually. . . . But now the whole group of residents is perceived as weak: "You can't handle it." And that is also how they [the supervisors] talk about them [the residents]. And that is something I regret, because that does not stimulate us to bring forward other issues in the future.

[a]Translated from the original Dutch.
[b]Participants were from training programs within the training region of the University Medical Center Utrecht, Utrecht, the Netherlands.

barrier with respect to speaking up and needed strong arguments to get through that barrier. Before speaking up, they first considered whether it was safe and/or whether their contribution would be effective. This finding is closely related to findings on trade-offs described in research on speaking up about safety concerns.[13,14,31] We did not anticipate this close parallel between our findings and the results of these previous studies because we expected that speaking up about organizational barriers might feel less dangerous than speaking up about professionalism- and safety-related issues. Apparently, speaking up is a difficult task for residents, regardless of the subject.

The perceived safety and effectiveness of voice behavior are frequently mentioned in studies about employee voice in organizations.[10,11,18–20,32,33] Such studies often focus on beliefs about self and the environment that are dominant in established behavioral theories.[34–36] A possible explanation for the importance of perceived safety and effectiveness for medical residents is the nature of the medical profession: a highly socialized and hierarchical environment in which residents have to deal with a heavy workload. Residents are very dependent on their supervisors because they are trained in an apprenticeship model; this relationship makes the supervisor's opinions and approval especially important. Moreover, it is clear—given the high levels of burnout reported in the literature[37–39]—that residents find it difficult to strike the right balance between their work and private lives. For these reasons, a culturally dangerous and potentially

Table 3

Quotations[a] From Medical Residents (N = 27) Illustrating Drivers for Speaking Up About Organizational Barriers and Opportunities to Improve the Quality of Care, 2016[b]

Speaking-up drivers	Representative quotations
Efficacy calculus	
Small teams, compact organization	• In general hospitals,[c] you participate in most meetings and you have more of an overview. This makes it way easier to bring your ideas forward in the right place. • You know each other's faces, I think. And you all have passion for a small common cause, so everyone feels responsible for what happens. And you know each other so it is easier to address each other, I think. In bigger organizations, you are just a small fish in a big pond. • In a general hospital, the residency team is much smaller. Then it is easier to convey [information] and have a meeting. There is only one handover in the morning, and after the handover, people will stick around and have coffee. That is a moment where you can talk to each other.
Strong network (know who to contact)	• I knew all the supervisors and all the nurses, which makes you, I think, more proactive from the start.
Being invited to share a suggestion or join an existing project	• I thought it was really nice that we got the opportunity last Wednesday to discuss these issues. Because I had been frustrated about [them] for a long time now, but I never said anything about it. I thought it was really nice that they [the supervisors] offered us the opportunity to do so. • I notice around me that a lot of the residents feel dedication, but some residents are more able to act on [their dedication] than others. And I think that when you are actively invited, you also feel more responsible for change. Especially if you notice that people listen to you and things actually change.
Positive experiences	• [After a positive experience with changing time slots in the outpatient clinic] For the first time in my working life I had the idea, "Oh, but some things really CAN change." . . . And if I could describe my job satisfaction, then it went up from a 6 to a 10.
Safety calculus	
Supervisor with an open, proactive attitude	• Well, it is more the way he is. He is really approachable, and he really thinks through issues [with residents]. That [way of interacting] might relate to the fact that you really feel listened to . . . and that you are safe. He will never just say "that's stupid."
Nonhierarchical organization	• It's a small-scale organization; the barrier [to speaking up] is lower. I was at the same level as my supervisor. I was the only resident, and if I wasn't there, my supervisor would do my job.
Work experience (learning that there are alternative solutions, gaining confidence in one's own ideas)	• Because of the work experience I gained in another hospital, I can state with more confidence: This is not going well, and this could be improved because I know from another department that it could be done better. I am building up confidence in these matters . . . because I know I am not talking nonsense.
A strong case (objective evidence)	• We gathered more information about the rules and regulations and called some other hospitals, talked to colleagues over there, asked how things are done over there. . . . And then we figured it out ourselves and made a proposal that we checked with our supervisors and our medical educator first and said, "Well this is a better proposal according to the law."
Support from colleagues	• When something was up, you would first discuss it during lunch with your colleagues and then you would take these issues to your supervisor en masse so you could make a strong case that it would have to change. • First I discuss it with other residents: "Do you also think . . . ?" This way it wouldn't be a one-man crusade.

[a]Translated from the original Dutch.
[b]Participants were from training programs within the training region of the University Medical Center Utrecht, Utrecht, the Netherlands.
[c]In the Netherlands, there are large teaching hospitals and smaller peripheral hospitals. "General hospital" is a reference to one of the latter.

time-demanding conduct like speaking up does not come naturally. Our findings build on existing knowledge of speaking up and voice and provide empirical evidence of which contextual factors influence medical residents' judgments about the safety and efficacy of speaking up.

Our results show that residents focused more on microlevel issues that improved their own work circumstances than on issues at the patient, department, or organization level. This choice has several potential explanations. First, the Concerns-Based Adoption Model, originally developed for teachers, globally depicts learning as a development process with 3 consecutive stages: (1) concerns about self, (2) concerns about tasks/situations, and (3) concerns about impacts on others.[40,41] From this perspective, it is understandable that residents—early-stage learners—tend to focus on themselves and their own problems rather than on their environment. Second, an explanation for this emphasis on one's own work processes can be found in the professionalism literature. Traditionally, professionals such as physicians focus on individual case treatment ("professional logic") instead of on the organization of work ("managerial logic").[24,42,43] Although current developments in professionalism literature describe managerial logic as becoming more and more embedded in professional logic,[44] this study shows that residents still tend to focus on work and other processes close to themselves and their patients.

Limitations

Our study has several limitations. First, we interviewed 27 residents from the same training district, which could limit the generalizability of our results. The

residents had gained work experience across the Netherlands (21 hospitals and 39 departments), which lowered the possibility of our results reflecting the impact of a single hospital. Second, the first author was trained as a physician; therefore, she had a visceral understanding of the participants' experiences and was able to quickly build rapport with them. However, her training could also have constrained her observations. For this reason, the first author analyzed the interviews with independent research assistants from the Department of Organizational Sciences at Utrecht University, who contributed an outsider's perspective to the analyses. Moreover, the results were interpreted by a cross-disciplinary research team that combined expertise from public management, organizational sciences, quality and safety, medical humanities, and medicine.

Implications

For society to make use of the frontline experiences of residents to advance the quality of health care, it is important to view speaking up as a complex task. Its complexity comes from the different types of cognitions and beliefs that are deeply rooted in medical culture, which in turn are influenced by contextual elements, such as organizational structure, opportunities, and local values.[20] To stimulate residents to share their suggestions, training programs and health care organizations should not only focus on providing residents with knowledge and skills but also take a holistic approach, paying attention to the system in which residents have to speak up. This approach will ensure that residents feel that it is safe and effective to speak up. When this holistic approach is not used, behavior as *taught* and behavior as *expected* are worlds apart, and health care organizations run the risk of stifling an important resource for quality improvement: their residents. In Box 1, we provide 5 recommendations for health care organizations that are based on findings from our study.

Helping residents to speak up could eventually increase their well-being because the literature describes that positive voice experiences create a sense of control among employees, which is linked to employees' improved sense of well-being.[33,36,45–47] Speaking up could bring a twofold benefit: medical residents would feel better, and the organizations in which they work would function better. Future research could examine whether and how speaking up and well-being are related. Moreover, our findings indicate that the opinions and actions of supervisors had a considerable influence on residents' decisions on whether to speak up. Because the importance of supervisor support—or, at least, approval—for speaking up was revealed as a central theme in our interviews, exploring supervisors' views on residents speaking up could provide useful insight. Finally, in this study we have presented triggers—that is, critical incidents—and cognitions related to the decision to speak up or be silent as separate entities. We recognize that certain triggers could in fact be linked to certain thought processes. For instance, a resident could feel more inhibited in speaking up about workload by safety concerns than by concerns about effectiveness. Connecting organizational incidents to typical thought processes could be an interesting topic for future research.

Box 1

Recommendations for Empowering Medical Residents to Speak Up About Organizational Barriers and Opportunities to Improve the Quality of Care

Actively invite residents to provide input or engage in organizational change

This invitation can be given either in formal feedback structures, such as evaluations and educational initiatives on quality improvement, or in informal hallway conversations. Inviting input both reduces fear of speaking up (it is shown to be desired behavior) and enhances residents' self-efficacy beliefs.

Develop an open attitude toward residents' suggestions

Supervisors' demonstration of an open attitude can catalyze voice behavior in residents. A supervisor's open attitude creates a safe voice climate in which residents can come forward with ideas. When residents perceive that engaging in issues is important and valued, they will be keener to participate. Be aware of the implicit cognitions (e.g., beliefs, perceptions, thoughts) residents hold concerning speaking up (e.g., "I do not want to complain").

Invite residents to staff meetings in which managerial issues are discussed

Including residents in staff meetings gives them an overview of important organizational issues and actively invites them to think through issues with management. This inclusion can increase residents' sense of responsibility with respect to team issues and help them feel more like a part of the team. Additionally, including them can lower the barrier to speaking up, enabling them to engage in change issues both because they will be better informed and because they will feel comfortable participating, having been formally invited to do so. As a result, they will be able to estimate, for example, how long an improvement project will take and who they could contact to make the change successful.

Do not automatically expect that the resident who speaks up should be the one that fixes the problem

By not automatically assigning an improvement project to a resident who speaks up, the barrier against sharing suggestions for change is lowered. As a result, residents who are struggling with their workload may be more inclined to share their suggestions for change.

Create short lines of communication

Appointing someone to help residents take their first steps toward speaking up could increase residents' self-efficacy beliefs and make it more feasible for them to direct their ideas to where they can make a difference. This approach is especially true for large hospitals in which many residents feel lost.

Conclusions

This study shows that residents tend to be silent when they encounter organizational barriers to health care quality. Perceived effectiveness and safety are important forces that can either drive residents to speak up or constrain them from doing so. The aspects that influence this decision that are put forward in this study could be important starting points for residency programs and health care organizations to empower residents to speak up and share their valuable frontline experiences.

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