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A Multilevel Analysis of Professional Conflicts in Health Care Teams: Insight for Future Training

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Abstract

Purpose
Without a proper understanding of conflict between health care professionals, designing effective conflict management training programs for trainees that reflect the complexity of the clinical working environment is difficult. To better inform the development of conflict management training, this study sought to explore health care professionals' experiences of conflicts and their characteristics.

Method
Between 2014 and early 2016, 82 semistructured interviews were conducted with health care professionals directly involved in first-line patient care in four departments of the University Hospitals

of Geneva. These professionals included residents, fellows, certified nursing assistants, nurses, and nurse supervisors. All interviews were transcribed verbatim, and conventional content analysis was used to derive conflict characteristics.

Results
Six conflict sources were identified. Among these sources, disagreements on patient care tended to be the primary trigger of conflict, whereas sources related to communication contributed to conflict escalation without directly triggering conflict. A framework of workplace conflict that integrates its multidimensional and cyclical nature was subsequently developed. This framework suggests that conflict consequences

and responses are interrelated, and might generate further tensions that could affect health care professionals, teams, and organizations, as well as patient care. Findings also indicated that supervisors' responses to contentious situations often failed to meet health care professionals' expectations.

Conclusions
Understanding conflicts between health care professionals involves several interrelated dimensions, such as sources, consequences, and responses to conflict. There is a need to strengthen health care professionals' ability to identify and respond to conflict and to further develop conflict management programs for clinical supervisors.

I nterprofessional collaborative practice has been identified as the cornerstone for high-quality, safe, patient-centered care.[1] Trainees from all health care professions need to be prepared to work effectively in patient care teams. This task is complex as it spans multiple domains: the development of professional identity, the understanding of roles and responsibilities of team members, communication, and successful teamwork skills.[1] Educational curricula and interventions that target interprofessional collaborative practice are often based

on an idealized setting of cooperation in health care teams.[2] They do not fully address the complexity of working in a stressful environment where health care professionals with limited resources and time are constantly confronted with the interplay of conflicting perceptions about professional roles, responsibilities, and optimal patient care. These factors can easily lead to conflict.[3–7]

Conflict between health care professionals has been shown to have negative effects on health care teams and on quality and safety of patient care if left unaddressed, as it can draw providers' attention away from patient care and drain their personal resources.[8–11] Workplace conflict can also affect employee satisfaction and morale, leading to increased turnover.[7,12,13] Not all conflicts are equal in their potential to lead to positive or negative consequences. Conflicts arising from disagreements on how to perform tasks are usually considered to be less

harmful than conflicts resulting from poor relationships.[8,14] In some cases, they may even have positive effects on team cohesion as they can favor discussion and clarification of certain issues, provided that they take place in a supportive environment.[14] For providers to be able to successfully manage conflict, they should feel neither judged nor threatened.[6,15] Regarding conflict in a constructive way contributes to proactive resolution before conflict takes a toll on health care professionals.[16] This can be done by fostering a collaborative working environment and providing employees with conflict management training.[6] Descriptions of conflict management training are often based on existing conceptual models that come from outside health care (business, human resources).[17,18] To be effective in the health care setting, a training intervention requires developing a deep understanding of conflict within an organization. Even though there have

been numerous studies on workplace conflict and disruptive behaviors among health care professionals, most were based on descriptive surveys and had little theoretical grounding.[9,19,20] Qualitative work in this domain is scarce, and recent studies have been conducted on a small number of participants and specialties.[21–23]

In a large-scale qualitative study that was conducted in the Pacific Northwest region of the United States, interviews with health care professionals, hospital leaders, and patients revealed that conflicts resulted from and influenced factors at the individual, interpersonal, and organizational levels.[7] Existing conflict typologies distinguish between conflicts resulting from poor relationships, disagreements on how to perform tasks, and processes.[6,8] We sought to develop an understanding of how conflict is experienced by health care professionals working in diverse settings in an exploratory qualitative study with the aim of informing future conflict management training.

Method

Semistructured interviews, following the Standards for Reporting Qualitative Research, were conducted with health care professionals that are directly involved in first-line patient care at the University Hospitals of Geneva, Switzerland, a 1,700-bed teaching hospital.[24] Interviews were conducted between the fall of 2014 and the beginning of 2016 by four social scientists with backgrounds in medical sociology (N.Bo., S.C.), medical anthropology (P.H.), and education (V.M.J.). The four interviewers had extensive prior experience and training with qualitative hospital-based research in their respective fields. Two interviewers (P.H., S.C.) were hospital employees, and two interviewers (N.Bo., V.M.J.) were medical school research assistants. None of the interviewers had a direct relationship with participants.

The interview guide was adapted from Kim and colleagues'[7] study of professional conflict in health care. A French version of the guide was piloted with four clinicians from representative departments who did not participate in the study. On the basis of the pilot study results, the interview guide was revised to focus questioning on the sources, consequences, and responses to conflicts (Appendix 1). To control for individual differences in interviewing styles, interviewers listened to interviews and gave feedback throughout the data collection period. Meetings were conducted to summarize results and discuss emerging themes, permitting interviewers to be reflexive of their role in the research project.[24]

Participants included residents, fellows, certified nursing assistants, nurses, and nurse supervisors, all of whom were involved in first-line patient care. Attending physicians were excluded because in our context, they have less direct patient contact. To vary clinical settings, participants were randomly selected from four departments: internal medicine, family medicine, pediatrics, and two surgical units. Approximately equal numbers of physicians and nursing staff were selected in all four departments. Participants were directly contacted to solicit voluntary participation that was acknowledged with a gift certificate. Before the interview, participants were asked to think about disagreements or conflicts they had experienced or witnessed with coworkers.

With participants' consent, all interviews were audio-taped, transcribed verbatim, and deidentified by two of the interviewers (N.Bo., V.M.J.).

Data analysis

We first created a table that followed the structure of the interview guide. For each conflict story that was collected, we listed the main protagonists and their characteristics (gender, professional group and status, specialty) and summarized the sources and consequences of conflicts, as well as how the latter had been managed. This stage provided us with a descriptive overview of the stories that were collected.

We then analyzed our data using conventional content analysis.[25] All authors read 6 interviews to familiarize themselves with and discuss the data and to develop an initial list of codes. To test the relevance and applicability of these codes, a sample of 15 interviews were then coded in an iterative fashion, alternating coding phases with discussions to refine the codes and their use. Once the codes had been validated by all the authors, they were classified as belonging to three categories that were based on the literature: sources of conflict, consequences of conflict, and responses to conflict.[6,8,26] All data were then coded (N.Bo.) using ATLAS.ti software 7.5 (ATLAS.ti Scientific Software Development GmbH, Berlin, Germany). All authors reviewed the results and provided additional directions of analysis on a regular basis. Descriptive statistics are reported in frequency percentages, means, and medians.

For the present paper, representative quotes were selected from our interviews and translated from French into English. To ensure that translations were accurate, we first translated quotes into English (N.Bo.). Two members of the research team who are native English speakers and who were trained in the United States (N.Ba. as a pediatrician, P.H. as a medical anthropologist) then performed back translations to check the content of the translations, and adapted quotes to maintain conceptual equivalence.[27]

Ethical considerations

A complete ethical review was waived by the State of Geneva Institutional Review Board; the chief medical officer and the chairs of the different departments involved in the study independently approved the project. Participants received a written explanation of the research project, signed consent forms, and were able to ask questions. On request, participants could read the transcript of their interview, ask for information to be removed, or withdraw from the study at any time.

Results

Eighty-two semistructured interviews were conducted with residents, fellows, certified nurse assistants, nurses, and nurse supervisors. The characteristics of participants are displayed in Table 1. Similar to the general staff distribution of the University Hospitals of Geneva,[28] our participants included more women than men (61% vs. 39%, or 50/82 vs. 32/82), and the majority of our nursing participants had been trained in neighboring countries. Interviews lasted between 23 and 69 minutes, with an average of 38 minutes. During these interviews, we collected 130

Table 1
Participant Characteristics

| Characteristics	Fellows (n = 21)	Residents (n = 22)	Nurse supervisors (n = 6)	Nurses (n = 27)	Nursing assistants (n = 6)	Total (n = 82)
Mean age (range)	36 (32; 44)	34 (29; 45)	49 (39; 58)	46 (29; 61)	51 (43; 62)	41 (29; 62)
Male-to-female ratio	11:10	10:12	1:5	10:17	0:6	32:50
Department						
Internal medicine	4	6	2	6	2	20
Family medicine	4	6	2	8	—	20
Pediatrics	5	5	2	7	2	21
Surgical units	8	5	—	6	2	21
Median years of experience (range)	9 (4.5; 19)	5 (1; 18)	27 (16; 35)	18 (4; 35)	19 (15; 34)	11 (1; 35)
Median years of experience in current department (range)	3 (0.5; 10)	2 (0.12; 3)	1 (1; 6)	8 (0.5; 30)	11 (7; 12)	3 (0.12; 30)
Trained in Switzerland, n (%)	14 (67)	12 (55)	1 (17)	7 (26)	2 (33)	36 (44)

conflict stories, most of which had been experienced firsthand: Participants were one of the main actors in 65% (85/130) of the stories. The majority of conflicts that were shared were specific situations, but 16% (21/130) were more general, such as tensions and communication issues between physicians and nurses. We noted differences between the individual, interpersonal, and organizational levels of conflict stories. These differences are part of the framework of health care conflict that we developed on the basis of our findings (Figure 1).

Sources of conflict

We identified six sources of conflict: relationships, patient-related tasks, other tasks, team processes, structural processes, and social representations (Figure 1, Table 2). Conflicts caused by poor relationships were due to individual characteristics and interpersonal differences. Patient-related tasks refer to disagreements between professionals on how to care for patients, or which treatment to administer; we distinguished them from other task-related conflicts such as differing views on how to use equipment or cleaning procedures. Team
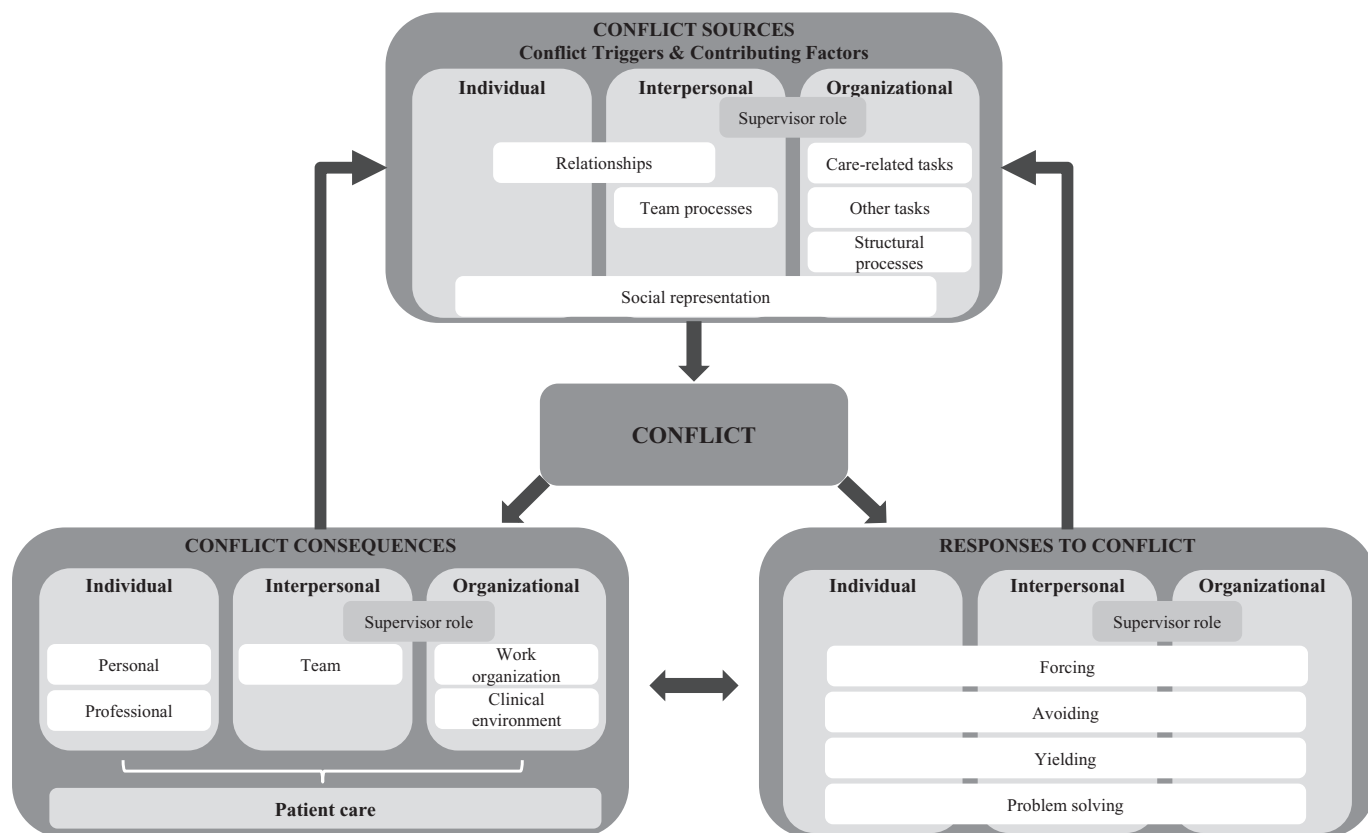
Figure 1 Framework of conflict: sources, consequences, and responses to conflict at the individual, interpersonal, and organizational levels.

Table 2
Characteristics of Health Care Conflict Organized by Sources, Consequences, and Responses to Conflict

Characteristics	Definition	Illustrative quotes
Sources		
Relationships	Conflicts caused by personal characteristics and interpersonal differences	You know the joke that's usually about surgeons, and that works really well? It's "What's the difference between the head of the unit and God?" (Answer: God doesn't think he's head of the unit.) It fits him like a glove; he wants to control everything but isn't involved in anything. (Nurse supervisor, family medicine)
Care-related tasks	Conflicts caused by differences on how to provide patient care, or which treatment to administer	I said to the nurse, "Listen, she needs a hemoglobin test at 8 PM, because she's lost a lot of blood and we can't leave her like that." And the nurse said, "But you're the one who makes the patients anemic with all your blood draws." (Resident, internal medicine)
Other tasks	Conflicts caused by tasks that are not directly related to patient care	I had cleaned everything, and I just forgot to take the empty bed out of the room, that's all. The next day, they criticized me and said it was a glaring error, that I hadn't done my job. (Certified nursing assistant, internal medicine)
Team processes	Conflicts caused by communication and coordination issues	We weren't informed about the surgery—in any case we're always the last to know. But the fact that the residents didn't know either, when they're the ones that are going to prescribe, well that's more problematic. And even one of the next day's surgeons wasn't informed. (Nurse, surgical unit)
Structural processes	Conflicts caused by resource allocation, professional roles and responsibilities, and disagreements over vacation time and shifts	It was a conflict with my supervisor, about scheduling. I had an absolutely horrible schedule at Christmas a few years ago. I worked both Christmas and New Year's, day and night. (Nurse, internal medicine)
Social representations	Conflicts caused by general viewpoints of a group vis-à-vis another group	There were times in the ER when things got really chaotic, and we hadn't eaten but we're doctors, we're not supposed to eat, according to the nurses. (Resident, pediatrics)
Consequences		
Personal	Emotional and health-related consequences of conflicts	Afterwards, I think I was ashamed, I didn't want to see anyone for two weeks (laughter). Whenever I saw the attending physician, I would hide. (Resident, family medicine)
Professional	Professional consequences of conflicts	In the end, he left the department. Especially since the attending physician had already threatened to fire him once or twice. (Fellow, surgical units)
Team	Consequences of conflicts on team interactions, communication, collaboration, and on trust within teams	After that mistake, and after two or three other little things that followed, she was completely isolated and the message that circulated was "be careful, she can't be trusted." Which created some problems in our team. (Fellow, pediatrics)
Work organization	Consequences of conflicts on work organization and resources allocation	The fellow refused to work with that resident, so we had to change everyone's schedules to make sure they wouldn't have to work together on weekends or during night shifts. (Resident, internal medicine)
Clinical environment	Development of an environment in which errors and mishaps are more likely to occur	It can create stress for the surgeon that needs to operate. Because, if the surgeon, the OR nurse or the anesthesiologist start getting on each other, the atmosphere isn't great for doing good work. (Nurse, surgical unit)
Patient care	Consequences of conflicts may affect safety and quality of patient care	I called the nurse and told her not to accept more patients, but she hung up on me and sent me another one. So eventually, I had to tell the patient: "Listen, I won't be able to see you tonight." (Resident, family medicine)
Responses to conflict		
Problem solving	Collaborating to find a solution that is satisfactory to all parties	I gathered up the courage to go talk to him about his behavior with the residents (Fellow 1), and in fact it went really well. I think he intimidates people, there are few that dare talk to him. I wasn't particularly brave, but I was afraid there might be a negative impact on patient care if residents avoid talking to him. (Fellow, surgical units)
Forcing	Seeking to impose one's opinion	As a new resident, it's true the nurses often have a lot more experience than us. So they'll say, "We don't usually do it like that; I suggest we do it like this," but this time she flat out refused to take the baby's blood pressure. (Resident, pediatrics)
Avoiding	Pretending that a conflict does not exist	My supervisor and the head of the department asked me to come in. We discussed the problem, and then they told me, "Okay, we'll let it go this time." (Nurse, surgical units)
Yielding	Surrendering to the other's point of view	I did what I had to do, but I had this internal struggle, I felt powerless, just like "keep your mouth shut." It's a really bad feeling to experience. (Nurse, internal medicine)

processes represent communication and coordination issues. Structural processes refer to conflicts that arose because of resource allocation, professional roles and responsibilities, and disagreements over vacation time and shifts. Finally, social representations refer to general viewpoints of a group to which one does not belong.

As shown in Figure 1, some of these categories did not belong to a specific level of conflict but, rather, spread over several levels. This was the case for conflicts that pertained to relationships, which could be caused by individual characteristics such as someone's inability to speak the local language fluently (individual):

> There's this obstacle here, the language barrier. Some people simply won't trust you because you don't speak like a native French speaker. (Fellow, pediatrics)

Relationship conflicts also arose when two individuals did not get along for personal reasons (interpersonal):

> It was also a matter of character, because we had a fellow who is very energetic, who is always on top of things and lives in the fast lane; the resident was always very calm and controlled, and might have taken more time to do things. (Resident, internal medicine)

For all conflict stories, our analysis revealed differences between perceived conflict triggers and other contributing factors that led to conflict escalation but did not generate conflicts. In each story, conflict triggers represent one element that participants identified as having

started contentious situations. In most cases, participants first referred to conflict triggers when prompted to describe what had caused the story they were discussing, before mentioning other factors that had contributed to conflict escalation. Conflict triggers were identified and agreed on by two researchers (N.Bo., N.Ba.). As shown in Figure 2, the main categories of conflict triggers included team and structural processes, as well as patient-related tasks. On the other hand, relationships and social representations were more often contributing factors than triggers of conflict. For instance, a fellow discussing a challenging situation where a group of residents had complained about their working conditions observed that even though he was in his mid-30s, he could see differences between himself and his younger counterparts:

> My generation used to work without saying anything, and without being heard or noticed. Even though we weren't always happy with our working conditions, we accepted them. I feel like the new generation is different. There were things that we accepted, such as the number of hours we had to work. Now, with the introduction of the new working hour regulations, I feel like the new generation of residents is a lot less willing to commit to, I mean, they don't want to make as much efforts as we did. (Fellow, surgical units)

Generational gaps in terms of life stages of different groups could generate tensions and contribute to conflict escalation.[29]

Conflict consequences

Conflict consequences were diverse across all three individual, interpersonal, and

organizational levels (Figure 1, Table 2). At the individual level, contentious situations could lead individuals to experience a variety of emotions such as anger, fear, frustration, shame, or doubt. In some instances, participants even talked about harassment or bullying:

> I started eating junk food; I couldn't sleep at night, etc. I felt harassed, even though I wouldn't have been able to use that word at the time. (Nurse, family medicine)

These initial feelings could lead to health-related issues, and increase absenteeism, sick leaves, and staff turnover. While over two-thirds (69%, or 89/130) of conflict stories had had a personal impact on individuals, some also affected them professionally, although more rarely (15% of situations, or 20/130). Conflicts could lead individuals to look for a different position or to change specialty.

> Our relationship was becoming extremely complicated. This has contributed to my decision to go back [from being a nurse manager] to working as a nurse. (Nurse, surgical units)

At the interpersonal level, approximately half of the conflict stories that were collected had affected teams by decreasing collaboration, communication, and trust.

> I've felt bitter ever since. I just don't believe in him anymore. I don't trust him anymore. […] I don't want to develop a relationship with him, nor even to be on good terms with him. (Nurse, internal medicine)

Contentious situations had consequences at the organizational level by affecting structures and work organization
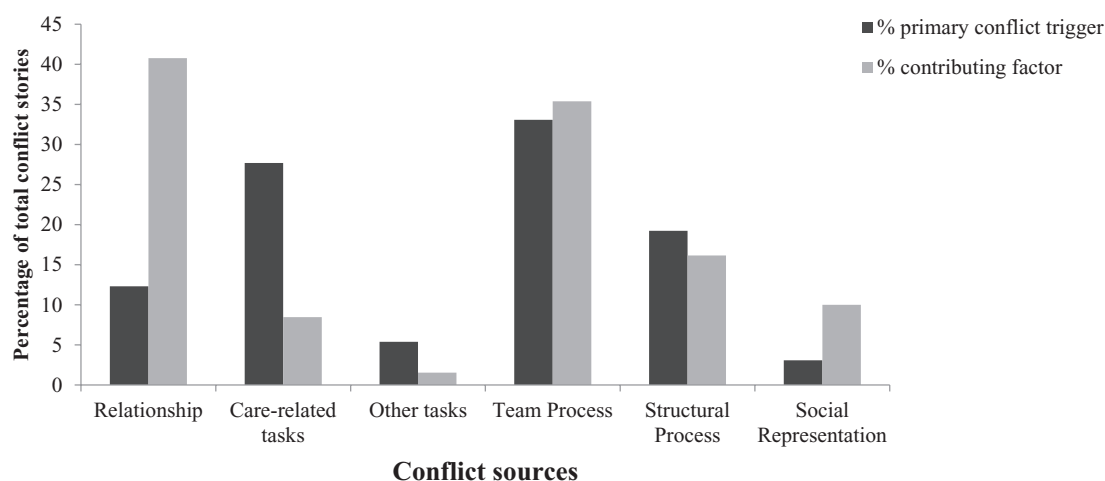
Figure 2 Perceived conflict triggers and contributing factors of 130 conflict stories. Perceived conflict triggers represent one element that participants identified as having initiated conflicts; contributing factors represent factors that contributed to conflict escalation, but did not directly generate conflicts.

(e.g., task assignment within a team). Participants sometimes believed that the conflicts they described had not had any particular consequences but had generated an environment where errors were more likely to occur. Alternatively, some conflicts led to poor relationships between health care professionals, which could then generate new conflicts, thus creating a never-ending conflict cycle:

> Which came first, the chicken or the egg? The question is, did the conflict arise because patient care was suboptimal or did this resident not manage the case properly because he was stressed [because of working with the attending physician]? (Fellow, surgical units)

Consequences of conflict could influence patient care: In 41% (53/130) of the reported conflict stories, patient care had been affected, mostly by being delayed or not focused on patients' needs.

> Instead of having his adrenaline administered at 3:20 PM, the child had it at 3:50. So, what will parents think of us then? We examine kids, we talk to parents, we tell them we're going to do something, and nurses come and tell them something different. (Resident, pediatrics)

Responses to conflict and conflict resolution

Responses to conflict encompassed problem solving (collaborating to find a solution that is satisfactory to all parties), forcing (seeking to impose one's opinion), avoiding (pretending that a conflict does not exist), and yielding (surrendering to the other's point of view).[6] These strategies were adopted individually or in reaction to others' responses to contentious situations. Participants often described themselves as having sought to solve conflict by initiating discussions, whereas other individuals involved were reported to have been reluctant to engage in conflict resolution:

> The nurse was violent and aggressive. I don't think she understood that when a physician says something is urgent, it actually is urgent. I tried to talk about it with her a bit later but it was impossible to communicate with her, so now, we just don't talk. (Resident, surgical units)

Avoiding also represented a common response to conflict, as people used it in about 40% (52/130) of the situations. Using avoiding could affect individuals' careers. This phenomenon was

particularly striking among residents, who often preferred to leave their position (by means of transfer to another residency program in their specialty or to another specialty completely) rather than speaking up.

> He was an attending physician, and I was a resident. Asking for help didn't even seem to be an option. He was a little crazy, and he wasn't going to change. I had a fixed-term contract, I was only there for a limited time and I knew it was going to end at some point. Maybe I should have done something for the residents that came after me, but hey … I was at the bottom of the ladder. (Fellow, surgical units)

As a result, conflicts that were avoided were often left unsolved and could lead to a never-ending conflict cycle.

The last response to conflict, yielding, was the least commonly encountered. It was used by individuals with less institutional power such as certified nursing assistants:

> Sometimes, doing what you love requires you to withdraw. […] I'm going to retire soon, so what would be the point of fighting now? I want to retire feeling that I've done my work well, and that's it. I will leave everything else here, behind me. (Nursing assistant, internal medicine)

Most conflict stories were dealt with within teams. At the time of data collection, 7% of conflict stories (9/130) were in the process of being solved, and about one-third of the stories had been left unaddressed (44/130). The rest of the conflict stories had reached resolution, but participants were not always satisfied with the outcomes. Supervisors were said to have known about contentious situations in approximately half of the cases. They did not always play a role in solving conflicts and sometimes failed to meet participants' expectations:

> My team had asked the nurse manager to come for a meeting. This meeting was a really bad experience, because to me, if someone gets involved in solving a conflict in a team, they should organize a meeting where everyone gets a chance to speak. What happened in this case was that she [the nurse manager] had me wait outside the room while she talked to my team. Half an hour later, they let me in, and I just felt like I was on trial, as if I was in the dock. (Nurse, pediatrics)

At the organizational level, reaching out for external support such as professional mediators seemed rare, as it was only

reported in four situations. Out of these, two represented situations of conflict between nurses and physicians that were long-lasting and required an external intervention for them to be able to work together, one situation occurred between a resident and his supervisor, and one within a group of nurses. Participants viewed external support positively regardless of whether or not it contributed to conflict resolution:

> I liked the fact that I was able to talk about everything that was wrong without being judged, and without anyone interrupting me.… But that's the only difference this mediation made. (Nurse, family medicine)

All four types of responses to conflict were reportedly used at the individual level by conflict protagonists, at the team level by groups of individuals, and at the organizational level, particularly through involvement of supervisors (Figure 1).

Discussion

Our research provides an extensive view of characteristics of professional conflict in health care at the individual, interpersonal, and organizational levels. Existing health care conflict frameworks support the complex interplay of sources, consequences, and responses to conflict.[4,7] The inductive nature of our study permitted a deeper understanding of the conflict experiences of our participants. Our framework (Figure 1) represents an extension of previous frameworks by delineating sources of conflict, identifying the overarching role of supervisors, and characterizing individuals' responses to conflicts. The resulting consequences are also multifaceted and have a direct impact on patient care. The levels of conflict (individual, interpersonal, and organizational) overlay each element of the framework. The framework demonstrates a cyclical phenomenon of conflict escalation that may occur if conflicts are not adequately addressed.

As illustrated by the distinction drawn between conflict triggers and other contributing factors, disagreements over specific issues often reveal deeper, latent conflicts. These conflicts may be rooted in poor relationships, in the health care structure, or in social representations, and may turn daily disagreements into conflict. Task-based conflicts are generally considered to be less detrimental to team

functioning, whereas relationship and process conflicts are viewed as being more harmful.[8,30] The effects of different types of conflict tend to vary depending on whether multiple types of conflict coexist.[8] Distinguishing between what triggered conflict and what contributed to conflict escalation may help to better understand how and why conflicts developed and whether they are likely to have negative consequences. Process conflicts that arise at the team level might not have the same consequences as process conflicts generated by structural issues, as the latter do not necessarily involve interpersonal disagreements.

Social representations of different groups emerged as a category of conflict sources. This category was associated with conflict stories that were latent, such as differences in perceived desire for work–life balance between generations. Research has suggested that tensions between different generational groups represented new challenges for supervisors. Younger generations' dissatisfaction with their current working conditions in spite of improvements in work–life balance has been interpreted as a decline in professionalism.[31,32] While social representations may influence everyday interactions between health care professionals, they usually do not trigger conflicts, as shown in Figure 2.

Limitations in our study may have impacted the interpretation of our data. While conducting interviews enabled rich data collection, participants may have focused more on emotional experiences, disregarding smaller, more frequent incidents. Future studies should triangulate data from interviews with field observations. Further, interviews were conducted with health care professionals from a single institution who represented a limited number of professional groups. Integrating other professional groups such as midwives or physiotherapists in future studies would open the door to new conflict stories and allow for the exploration of interprofessional collaboration. A specific focus on interprofessional interactions may yield results that could be used in interprofessional education programs. Changing lenses to focus on the relationship between conflict and quality of patient care may also uncover ways to improve the delivery of patient-centered care.[33]

Because of its multidimensional and cyclical nature, conflict in health care matches the definition of what Varpio and colleagues[34] have termed "wicked problems." Agency, which refers to the ways in which individuals act and give sense to their actions through discourses, shifts the focus from problems themselves to how individuals act on them.[35] Approaching such complex problems through the lens of theories of agency may lead to new understandings of conflict, particularly in the ways in which health care professionals learn how to respond to difficult situations. In the case of conflicts, analyzing how individuals position themselves may contribute to viewing conflicts as an opportunity to untangle complex situations that might lead to misunderstandings. There has been a shift from seeking to avoid and ignore conflict to viewing it as a process that is neither negative nor positive per se but, rather, depends on its impacts and how it is managed.[36,37] Constructive approaches to conflict may contribute to increasing trust and cohesion within teams.[5] They may in turn favor knowledge sharing, both formally during dedicated times and informally in staff rooms or corridors, thus supporting clinicians' decision making and patient care.[38] Whereas health care professionals tend to engage with discourses of their own profession, providing them with a range of discourses that go beyond professional silos may better equip clinicians to manage conflict.[34] All health care professionals would benefit from such a shift in discourses. However, being able to view conflict constructively would particularly help supervisors, who are commonly trained as clinicians and take on managerial responsibilities as they get promoted.[39,40] Providing health care professionals with regular conflict management training and support therefore seems paramount.

The results of our study can be used to inform training of health care professionals in conflict management by educating staff on the conflict cycle specifically related to health care and on the factors influencing consequences and responses employed to effectively deal with conflict in actual clinical settings. Using extensive descriptions of the conflict landscape to create authentic clinical cases for the creation of conflict management training programs may strengthen the link between interprofessional collaborative competencies and strategies of prevention of negative conflict consequences. An approach grounded in the realities of the complex health care environment may better engage health care employees than training based on an ideal theoretical concept of collaboration.

Conclusions

Through interviews with physicians, nurses, and certified nursing assistants from four departments in a teaching hospital, we have examined characteristics of professional conflict at the individual, the interpersonal, and the organizational levels. Our findings point to the complex and cyclical nature of conflict where unaddressed or poorly managed issues may escalate and lead to negative consequences on health care professionals, as well as on organizations and patient care. This, in turn, may trigger new conflicts. To strengthen clinicians' ability to identify conflict and to effectively respond to it, it seems necessary to take all conflict characteristics, as well as the different levels associated with conflict, into consideration. Such an endeavor may improve patient care.

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Appendix 1
Interview Guide

Opening

We are interested in experiences of disagreements and conflicts in health care teams, so as to develop strategies to better respond to contentious situations.

This interview is confidential. With your permission, the interview will be audio-taped, transcribed, and de-identified to protect any sensitive information that you might share during the interview. If you do not wish to answer a question, just let me know. As we are interested in your perception and experience of conflict, there is no wrong answer.

This interview will last approximately 40 minutes. Do you have any questions before we start?

Probing questions

Could you describe a contentious situation with coworkers that you have either experienced or witnessed? What happened? Who was involved?

In your opinion, what has caused this situation?

How did you feel about this situation?

How has the situation developed? Is it solved now? What factors contributed to or hampered conflict resolution?

What were the consequences of this situation?

Further probing questions

If a similar situation arose, would you do anything differently?

Do you have other situations you would like to talk about?

Closure

Thank you for taking the time to meet with me and share your story. Is there anything else you would like to add?