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ORIGINAL ARTICLE

Catalysts of worker-to-worker violence and incivility in hospitals

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Aims and objectives. To identify common catalysts of worker-to-worker violence and incivility in hospital settings.

Background. Worker-to-worker violence and incivility are prevalent forms of mistreatment in healthcare workplaces. These are forms of counterproductive work behaviour that can lead to negative outcomes for employees, patients and the organisation overall. Identifying the factors that lead to co-worker mistreatment is a critical first step in the development of interventions targeting these behav-

Design. Retrospective descriptive study.

Methods. Qualitative content analysis was conducted on the total sample (n = 141) of employee incident reports of worker-to-worker violence and incivility that were documented in 2011 at a large American hospital system.

Results. More than 50% of the incidents involved nurses, and the majority of incidents did not involve physical violence. Two primary themes emerged from the analysis: Work Behaviour and Work Organisation. Incidents in the Work Behaviour category were often sparked by unprofessional behaviour, disagreement over responsibilities for work tasks or methods of patient care, and dissatisfaction with a co-worker's performance. Incidents in the Work Organisation category involved conflicts or aggression arising from failure to following protocol, patient assignments, limited resources and high workload.

Conclusion. Incidents of worker-to-worker violence and incivility stemmed from dissatisfaction with employee behaviour or from organisational practices or work constraints. These incident descriptions reflect worker dissatisfaction and frustration, resulting from poor communication and collaboration between employees, all of which threaten work productivity.

What does this study contribute to the wider global clinical community?

- Worker-to-worker violence and incivility in hospital settings may be due to modifiable, work-relevant catalysts.
- · Content analysis of incidents of worker-to-worker violence and incivility recorded near the time of occurrence can assist hospital system stakeholders in identifying catalysts to these events.
- Identification of common catalysts of worker-to-worker violence and incivility in hospitals provides a first step towards the development of targeted interventions for these forms of mistreatment.

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Relevance to clinical practice. Violence and incivility between hospital employees can contribute to turnover of top performers, hinder effective teamwork and jeopardise the quality of patient care. Identification of common catalysts for worker-to-worker violence and incivility informs the development of mistreatment prevention programmes that can be used to educate hospital staff.

Key words: healthcare workers, hospitals, incivility, mistreatment, worker-toworker, workplace violence

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Introduction

Violence and incivility between employees are prevalent in hospital settings, where high stress situations may lead to mistreatment (Rowe & Sherlock 2005, Rosenstein & O'Daniel 2008, Arnetz et al. 2011b), ranging from incivility (Andersson & Pearson 1999) to physical assault (Jackson et al. 2002). These behaviours undermine a culture of safety (The Joint Commission 2008), reduce productivity (Sliter et al. 2012) and employee well-being (Arnetz & Arnetz 2001, Hesketh et al. 2003, Gerberich et al. 2004), and foster a hostile workplace environment (Ceravolo et al. 2012, Khadjehturian 2012). Interventions to reduce worker-to-worker violence and incivility require an understanding of its root causes; however, there is a lack of research based on actual, reported incidents in health care. This study was designed to identify common catalysts and circumstances of co-worker violence and incivility in a hospital setting.

Background

The term 'mistreatment' is used throughout the study to represent both worker-to-worker violence and incivility. Workplace violence has been categorised into types, according to the perpetrator's relationship with the organisation and its employees. Overt aggressive behaviour targeting a co-worker falls under Type III workplace violence (IPRC 2001), while more ambiguous acts of mistreatment that lack the overt intention of workplace violence are characterised as workplace incivility (Andersson & Pearson 1999). Co-worker mistreatment is prevalent across healthcare systems internationally (see Arnetz *et al.* 2011b).

Type III violence among healthcare workers

Type III (worker-to-worker) workplace violence encompasses a wide variety of events, including physical assault,

verbal aggression, harassment, intimidation, threats and bullying (Jackson et al. 2002). For example, novice nurses may be bullied by more senior nursing staff (Ditmer 2010); medical residents may be victimised by more senior physicians (Acik et al. 2008); and nurses may be targeted by physicians via disruptive or disrespectful behaviour (Rosenstein 2002, Hegney et al. 2006). Type III violence can also occur between employees of the same professional rank: 'horizontal violence' (Ditmer 2010) and 'lateral violence' (e.g. Dimarino 2011). This type of violence is most often nonphysical and includes verbal abuse (Rowe & Sherlock 2005), emotional abuse (Roche et al. 2010) and bullying (Hogh et al. 2011). One qualitative study found nurses were more distressed by violence from fellow nurses than from patients (Farrell 1997), which could have consequences for both the individual and organisation. While Type III violence may or may not include physical injury, it encompasses a psychological component that can be detrimental to worker well-being (Arnetz & Arnetz 2001, Hesketh et al. 2003, Gerberich et al. 2004). Workplace bullying (Kivimaki et al. 2000) and verbal abuse (Rowe & Sherlock 2005) have been associated with increased absenteeism, while disruptive behaviour has been shown to negatively impact both work satisfaction and retention among nurses (Rosenstein 2002).

Workplace incivility

Incivility has been defined as a low-intensity deviant behaviour with an ambiguous intent to cause harm (Andersson & Pearson 1999). Experience of incivility can lead to negative cognitive and behavioural outcomes for employees, including decreased job performance and increased absenteeism (Sliter *et al.* 2012). Uncivil acts that are allowed to continue can perpetuate into an 'incivility spiral' (Andersson & Pearson 1999) when the mistreatment escalates into more aggressive behaviours.

The importance of reporting worker-to-worker mistreatment

Worker-to-worker mistreatment, encompassing both violence and incivility, represents a threat to employees (e.g. Sabbath et al. 2014) and organisational interests (e.g. Haines et al. 2007). However, without descriptive data of the actual incidents occurring between hospital employees, hospital system stakeholders lack knowledge of the problem's causes and effective interventions cannot be developed (Rosenstein & O'Daniel 2008). Many healthcare organisations do not have systems in place to systematically collect and analyse worker-to-worker mistreatment incidents (Arnetz et al. 2011b). This study was conducted at a hospital system that houses a unique reporting system with established methods for reviewing and responding to employee reports of adverse events, including worker-to-worker mistreatment. Qualitative analysis of documented incident reports of worker-to-worker mistreatment may provide insights to researchers and hospital administrators into common catalysts and trends in these behaviours. The aim of this study was to examine a sample of documented worker-to-worker mistreatment incidents in a large hospital system to identify common catalysts.

Methods

Setting

This study was conducted at a large, metropolitan hospital system in the Midwestern United States. The hospital system includes seven hospitals and nearly 15,000 employees.

Data collection

The hospital system houses an electronic, central reporting system for all adverse work events, including workplace mistreatment. Employees can access this standardised system from any hospital computer, and all reports are received by Occupational Health Services (OHS). The report gathers data such as location of the event, time, witnesses and if there were any injuries resulting. Employees fill in details using drop-down menus and entered text. An open text box is provided for employees to describe the incident in free text. Hospital system policy requires that employees report incidents of workplace mistreatment, either into the electronic central reporting system or to their supervisor within 72 hours. Supervisors are required to report adverse events via the electronic system within

24 hours of their shift. A thorough description of this reporting system has been reported previously (Arnetz *et al.* 2011a,b).

The hospital system defines workplace violence as acts of physical assault, harassment/sexual harassment, intimidation, threats and verbal aggression (Arnetz *et al.* 2011b) that occur on their property or during the course of an employee's work-related activities on behalf of the hospital system. All incidents of workplace violence are categorised by OHS data analysts according to types (I–IV), where Type III denotes worker-to-worker violence (IPRC 2001). For this study, the total sample of 141 Type III incidents from 2011 was collected from OHS following de-identification by a hospital system data analyst.

Data analysis

Analyses were conducted on the free-text portions of the total sample of 141 incident reports. A data-driven inductive approach was employed (Boyatzis 1998). Qualitative content analysis was used to establish themes for the most prominent reasons that violence or incivility between employees was initiated. First, two researchers independently examined each report with an aim of identifying a possible catalyst for the violent event, recording them as codes. Each incident was coded with only one theme, for parsimony. Second, this process was repeated until incidents with similar codes became apparent, aggregating into larger themes. Once no new themes emerged, the data set was considered to be saturated (Corbin & Strauss 1990). Finally, the researchers shared their findings and the themes of catalysts were discussed until consensus was reached. A third researcher later read the incidents and validated the findings of the first two.

Qualitative rigour

Qualitative rigour was maintained following Guba and Lincoln's (1989) criteria for judging the quality of qualitative evaluation: credibility, transferability, dependability and confirmability. Credibility is analogous to internal validity and was achieved using actual incident reports, verbatim, that were submitted by employees. Transferability parallels external validity and was achieved using incidents from various locations in multiple hospitals within the hospital system. Dependability is similar to reliability and was achieved using data from a standardised reporting system and documenting the methods used to analyse the reports. Finally, confirmability parallels the criterion of objectivity, reducing researcher bias, and was achieved using the verbatim

reports, removing all personal identifiers and validating findings between independent researchers.

Ethical approval for this study was granted by the Human Investigation Committee of the university and the Clinical and Translational Research Office at the hospital system. Funding was provided by CDC/NIOSH.

Findings

After coding each incident, those with no identified catalyst were removed (n = 6), resulting in a final sample of 135 reported incidents. Of the employees who reported incidents, 81% were female; 52% were in nursing; and 41·3% worked part-time; the mean age was 40·76 years, and mean tenure at the hospital system was 9·31 years. Some employees filed more than one report; there were 110 (90·9%) one-time reporters, 8 (6·6%) two-time reporters and 3 (2·5%) three-time reporters. Only five incidents (3·7%) included physical violence, none of which resulted in physical injury requiring treatment. All seven hospitals reported worker-to-worker mistreatment in the year sampled.

Through qualitative content analysis, two primary themes emerged, each with four subthemes: Work Behaviour and Work Organisation. Definitions of primary themes and subthemes are provided in Table 1. Work Behaviour had to do with conflicts related to the actions of employees in the course of their work; these were typically job-related, but at times were simply unprofessional. Subthemes of Work Behaviour were Unprofessional Behaviour, Duties and Responsibilities, Methods of Patient Care and Poor Work Performance. Work Behaviour was the larger primary theme, with a total of 92 incidents identified (Table 2).

Work Organisation involved conflicts related to work tasks and procedures, environmental and organisational

constraints, or the interdependence between workers. Subthemes of Work Organisation were Following Protocol, Patient Assignments, Limited Resources and High Workload. A total of 43 incidents were coded within this primary theme (Table 2). Subthemes of each primary theme are defined and supported with quotes from actual incident reports below.

Work Behaviour

Unprofessional Behaviour describes actions that deviate from the norms of civility and respect in the workplace and was the largest subtheme identified. Incidents falling under this subtheme were initiated by a co-worker's unprofessional behaviour:

(During a surgical procedure), my attending spontaneously head butted me claiming that I was "in his space" and that I stood too close. I stood to his left, and was assisting with the procedure by retracting the skin over the incision site. (A visiting student) described the attack as being "vicious" and produced a loud noise. During that time, (Doctor) struck his forehead to the right side of my head while I was focused and looking down to the surgical field. (Surgery Resident)

Duties and Responsibilities emerged as the second-largest subtheme. This involved disagreement or miscommunication over whose responsibility it was to perform certain work tasks. In some instances, an employee believed their co-worker was failing to perform their assigned tasks, and in others, employees believed their co-worker had no business performing certain tasks:

Employee refuses to take direction regarding patient care. I asked to update/inform her regarding team plan of care, she refuses...Her

Table 1 Definitions of themes and subthemes

Primary theme	Subtheme	Definition
Work Behaviour		Actions of employees in the course of their work
	Unprofessional Behaviour	Actions which threaten norms of civility and respect in the workplace
	Duties and Responsibilities	Disagreement or miscommunication over whose responsibility it was to perform certain work tasks
	Methods of Patient Care	Disagreement about how a patient care should be provided
	Poor Work Performance	Low quality or incomplete work tasks
Work Organisation		The structure of work, environmental and organisational constraints, or the interdependence between workers
	Following Protocol	Not adhering to policies or practices of the hospital system or medical field
	Patient Assignments	Complaints about unfavourable patient assignments and disputes over who would be assigned to those patients
	Limited Resources	Competition for finite resources that resulted in conflict
	High Workload	Work stress due to the number of tasks to be performed by a single employee

Table 2 Number of primary themes and subthemes

Primary themes and subthemes	No. of incidents
Work Behaviour	92
Unprofessional Behaviour	32
Duties and Responsibilities	29
Methods of Patient Care	16
Poor Work Performance	15
Work Organisation	42
Following Protocol	16
Patient Assignments	13
Limited Resources	7
High Workload	7

demeanor is loud, rude and hostile to the point that patients notice and question the behavior...She upset an on-coming PCA [patient care associate] that asked a direct question regarding equipment. She refused to inform them of the equipment mal-function. (Patient Care Associate)

The following incident was reported by a third party:

(Pharmacy Technician) was in medication room completing "cart exchange." During her duties, she was approached by a nurse who grabbed her hands/wrists, stopped her from completing her duties, while she questioned her about her activity. Technician explained duties, and nurse finally let go. (Pharmacy Manager)

Methods of Patient Care emerged as a catalyst for conflict based on co-worker disagreement about how patient care should be provided. This included opposing orders from physicians, and arguments over medication or treatment options:

The physicians were (Doctor A) and (Doctor B) and they were arguing over the patient and could not agree on the patient's care. When (Doctor B) would suggest one thing, (Doctor A) would suggest something different. (Doctor B) wanted the patient to go to CT scan and (Doctor A) wanted the patient to go to ICU. After 20–30 minutes of this constant bickering, (Doctor B) storms out the room and stops just outside the patient's room and yells as loud as he could, "SHUT ... UP, I'M THE DOCTOR!" (Administrative Supervisor)

Poor Work Performance incidents were initiated based on dissatisfaction with a co-worker's quality of work. Employees were angered when a co-worker was not performing their tasks, was performing their tasks incorrectly or simply refused to help:

(Doctor) was on the phone shouting, "These nurses are incompetent! ... This is a consistent problem! The doctors are always getting blamed when the nurses are the problem!" I told him he was

so loud that the visitors told me, "that doctor is saying the nurses (here) are incompetent." (Clinical Coordinator)

Work Organisation

Under Work Organisation, four subthemes were also identified through the coding process: Following Protocol, Patient Assignments, Limited Resources and High Workload. Incidents identified under the Following Protocol subtheme had to do with not adhering to policies or practices of the hospital system or medical field. This was the largest subtheme of the Work Organisation primary theme:

Security Officer entered the unit and was in the process of restraining a patient when it was noted that he had his weapon still on. When asked to leave the unit he responded it's not loaded when asked to leave again he became angry and threw a watch across the nursing desk, pulled off his gloves and threw them hitting one of our nurses in the head. (Registered Nurse)

The Patient Assignments subtheme encompassed conflicts over the patient to which an employee was assigned for their shift. This included complaints about difficult cases and disputes over who would take a particular assignment:

Another nurse signed up for same assignment. I approached her to let her know that I planned on taking back the same patient for continuation of patient care. She refused, saying she refused to work in [another part of the unit]. I talked about the policy with clinical coordinator and another employee...As I was leaving the office the nurse saw me in the hallway. She gestured at me with her left hand in a diagonal downward gesture with a pointed index figure, saying in a loud, elevated voice, "if you ever come at me like that again you better watch your [expletive] back or else." (Registered Nurse)

Limited Resources emerged as a catalyst of worker-toworker conflict based on the need to compete for equipment and other items. Competition for resources created tension and sometimes conflict between co-workers who were trying to care for their patients. The following incident was reported by both parties involved. Only one quote was chosen to represent the incident:

(Respiratory Therapist) took my (charting computer); I had logged off and stepped away to use the restroom. My papers were on the (charting computer) turned over. I stated that I was using that computer and he rudely said that since I logged off, he could use it. I walked away. A bit later I was speaking to a coworker about the incident, and the (Respiratory Therapist) came flying out of a room yelling at me that he would write me up. (Registered Nurse)

High Workload was found to be a catalyst for workerto-worker conflict based on the stress of having too many job demands, such as number of tasks, paired with low resources, or limited time:

(RN) called me from patient's room for help and I explained I was in the middle of (giving) a bath. While she was telling me where she was I dropped my phone in the patient's bed. The RN immediately called me back and started screaming into the phone "How dare I hang up on her and to never do that again, get to (her room) as soon as possible." I found her patient sitting in the chair with the privacy curtain in her [the patient's] lap. She was crying. She asked the nurse for a toothbrush and the nurse said "I just can't take this place anymore" and then pulled the curtain out of the wall and left it lying in her lap. (Unknown Reporter)

Discussion

The purpose of this study was to better understand the reasons behind worker-to-worker mistreatment in a hospital setting. Previous studies of mistreatment typically gathered data using self-report, retrospective questionnaires or interviews (e.g. Farrell 1997, Hogh et al. 2011). While these studies offer some evidence of the prevalence of worker-toworker mistreatment among healthcare workers, they do not provide details on the causes and circumstances surrounding such events. Mistreatment between co-workers is a sensitive issue and victims may be hesitant to report such incidents (Hesketh et al. 2003), especially when there has been no physical injury (Arnetz et al. 2011b). Asking employees to recall multiple incidents of conflict over a large span of time (e.g. in the last 12 months, Hogh et al. 2011) may be less effective in limiting recall bias than recording incidents within days after their occurrence, such as in the current study. Some incidents may be misremembered or forgotten altogether, and underreporting leaves researchers and stakeholders with incomplete knowledge of the extent and nature of the problem (Arnetz et al. 2011b).

The current study aimed to fill this methodological gap by conducting content analysis of actual incident reports filed within 72 hours of occurrence. Two primary themes emerged: Work Behaviour and Work Organisation. Catalysts identified revealed that these co-worker behaviours can be sparked by a range of work-related activities or circumstances. There were also incidents that did not directly relate to work – those categorised under Unprofessional Behaviour. These were incidents largely initiated by rude and inconsiderate actions taken by co-workers that had no tangible source; it was simply employees behaving unprofessionally. Previous studies have found that seniority or assumed superiority is

linked to mistreatment, such as bullying from more senior nursing staff (Ditmer 2010) or aggression from physicians towards nurses (Hegney *et al.* 2006), which may be the underlying catalyst for these incidents.

The other Work Behaviour subthemes encompassed work-related activities that are integral parts of the job. These routine tasks and procedures reflect the nature of hospital work, which often necessitates cooperation and collaboration between workers. Duties and Responsibilities concerned basic tasks performed by workers to accomplish their work goals. Disputes over who was accountable for certain tasks led to mistreatment between co-workers, suggesting that role ambiguity was a potential source of mistreatment for interdependent employees. Role ambiguity includes unclear expectations about the job or performance, including responsibility for certain tasks (e.g. House & Rizzo 1972). It is a common work stressor that has previously been linked to workplace harassment among co-workers (Bowling & Beehr 2006). In their meta-analysis, Bowling and Beehr (2006) found that role ambiguity was positively related to co-worker harassment; the negative effects of role ambiguity on physical and mental health were also mediated by co-worker harassment.

Methods of Patient Care emerged as a distinct subtheme including arguments and mistreatment over the way another professional was providing care to a patient. Lack of communication and collaboration can lead to mistreatment in the process of care. Disagreements such as doctor's conflicting orders or the preferred treatments of multiple employees may lead to disputes over what is best for the patient. Previous research found that uncertainties about care or disagreements about how to proceed stemmed from physicians' disruptive behaviours towards nursing staff in the process of giving directions for patient care or ordering treatments (e.g. Rosenstein & O'Daniel 2008). Based on staff questionnaires, Rosenstein and O'Daniel (2008) found that poor communication was an underlying factor of disruptive behaviour in healthcare organisations, and the current study replicates this finding.

The Poor Work Performance subtheme reflects the highly interdependent nature of health care. Registered Nurses rely on other staff to assist in patient care. Previous qualitative research has found that nurses may consider 'not sharing the workload' an instance of mistreatment (Farrell 1997). Other workers may need to pick up their slack and add to their own workload, potentially leading to anger towards the individual who is underperforming and reactions in the form of mistreatment.

The Work Organisation theme differed from Work Behaviour in that it accounted mostly for circumstances and understanding of work procedures more so than the actual performance of job tasks. Subthemes falling under this theme reflected mostly situational catalysts. Following Protocol included incidents in which an employee failed to adhere to established procedures at their hospital or for their job position. Patient Assignments included incidents initiated over characteristics of a patient (i.e. difficulty of care) or conflicting tasks between co-workers in charge of the patient's case. High Workload incidents revolved around the stress of managing multiple tasks. Workload has been related to acts of violence and incivility between healthcare workers in previous studies (Hegney et al. 2006, Roche et al. 2010). Roche et al. (2010) likewise found that nurses' working environment, such as changes in the patient population, related positively to co-worker mistreatment.

Limited Resources is a common issue in many workplaces. In particular, hospitals use many types of equipments for patient care and monitoring, and lack of these valuable resources may lead to disputes over who may use the few tools available. Using quantitative data, Fox and Spector (1999) found that situational constraints at work (e.g. limited resources) were positively related to counterproductive responses such as aggressive interpersonal behaviours. Their model of work frustration—aggression posits that workers frustrated with work constraints experience an affective reaction to frustration, such as anger, that is then directed towards their co-workers.

None of the worker-to-worker mistreatment incidents resulted in physical injury requiring medical attention, and only five incidents had a physical component at all. Why should hospital stakeholders and clinical practitioners care about these types of incidents? Evidence from previous literature points to the negative effects co-worker mistreatment may have on employees (e.g. Sabbath et al. 2014) and the organisation (e.g. Haines et al. 2007). Sabbath et al. (2014) found a significant relationship between hospital workers who were 'yelled at' by a co-worker or physician and risk of work-related injuries. Haines et al. (2007) found that incivility among operating room staff correlated with lower safety climate and also less use of recommended practices in the operating room. Clearly, employees were disturbed enough by the incident to take the time to report it, and incident reports were often long and detailed. In the incident under High Workload, the reporter gave a detailed visual description of what she experienced that day, and even reported the words of the patient, claiming that her nurse stated, 'I just can't take this place anymore' before abandoning her work. This is a clear example not only of how coworkers are negatively affected by mistreatment, but also patients, who may endure some consequences of hospital workers lashing out against each other.

Another interesting finding of this study was the third-party reports. Some incidents (11%) were reported by employees who witnessed but were not directly involved in the violence or incivility. These incidents were upsetting enough to other workers that they took the time to file a report in the system, providing names and details of what occurred. For example, the incident under Methods of Patient Care was reported by an Administrative Supervisor regarding the aggressive actions of two physicians. This finding provides some insight into how worker-to-worker mistreatment has a broader impact on the unit and organisation, not only the individuals involved. Witnessing violence or incivility between co-workers, particularly if management does not intervene, can lead to climates of mistreatment (Yang et al. 2014) and fear of being targeted.

There were also multiple reports of some of the incidents, from various employees. For example, the incident under Limited Resources involved two co-workers in dispute over a piece of equipment. Each employee reported the incident, providing their perspective of the situation. This also points to the counterproductive nature of worker-to-worker mistreatment. More than one individual is disturbed by the interaction and takes the time to report the details. Both workers could have experienced stress following the incident that could hinder their job performance.

Implications

There are certain implications of this research. First, hospital system stakeholders should recognise the need not only for establishing policies regarding worker-to-worker violence and incivility, but the systematic enforcement of those policies. Rather than using effective communication and maintaining a professional demeanour, co-workers lashed out at each other over routine tasks and circumstances. If co-worker violence and incivility are allowed to continue without repercussions, then the behaviour will likely persist and even escalate. The incivility spiral (Andersson & Pearson 1999) typically unfolds when there is no direct intermanagement. Persistence vention from counterproductive work behaviours can also lead to mistreatment becoming the behavioural norm, developing broadly across the organisation (Yang et al. 2014). Work units may develop cultures of incivility (Ceravolo et al. 2012, Khadjehturian 2012) in which employees perceive their unit to accept uncivil acts as the status quo, leading to further perpetration. A zero-tolerance culture provides explicit behavioural guidelines for employees and clear consequences for violation of positive social norms (Dimarino 2011).

However, a zero-tolerance policy will not suffice unless hospitals make use of the incident reports filed. Hospital system stakeholders need actual documented incidents to understand and respond to worker-to-worker mistreatment, but collection of incident reports is not enough; reports must be systematically reviewed and acted upon. Awareness of the behaviours and circumstances leading to violence and incivility between co-workers enables stakeholders to develop effective policies and procedures for preventing and treating such behaviours (Rosenstein & O'Daniel 2008). Supervisors of individual units may also use the reports to educate staff about inappropriate co-worker interaction and behaviours that may undermine a supportive work climate. In a randomised controlled intervention, Arnetz and Arnetz (2000) found that regular feedback to staff about violence incident reports led to greater awareness for individual preventive behaviours. Units with high reports of co-worker mistreatment may benefit from interventions aimed at fostering teamwork and respect for co-workers (e.g. CREW, Osatuke et al. 2009). The hospital system in this study continuously collects incident reports filed by employees, which allowed researchers to conduct qualitative analyses of detailed incidents that were reported directly after the mistreatment occurred.

Third, although the incidents described here did not result in physical injury, they should be taken seriously by management. Worker-to-worker mistreatment is a form of counterproductive work behaviour that has many implications for the hospital employee, the organisation and patient care. Taking the time to file an incident report reflects a disruption in an employee's work tasks, disturbance over what occurred and a care for the workplace on the part of the reporter.

Strengths and limitations

A strength of the current study is the use of the total sample of actual, documented incidents of worker-to-worker mistreatment across multiple hospitals and over the span of a year. Employees are also required to report the incident to their supervisor or the electronic central database upon occurrence, in effort to limit recall bias. However, there may still be bias on the part of the reporter, as employees may provide their own version of an incident. There were instances in which multiple employees, involved in or witness to a dispute, have reported their own perspective of the incident. This information may reflect accurate perspectives of each party involved, leading to unique conse-

quences for each individual. Having both sides of the story provides a richer description of the situation, allowing stakeholders to identify more specific points of intervention.

However, one limitation of the reporting system concerns the intent of the reporter. As seen in the incident under Limited Resources, employees may use the system as a means to threaten co-workers with 'writing them up' or otherwise to simply complain about other employees via the incident reports. There were six incidents that described a similar threat of reporting a co-worker. As this hospital system has established routines for responding to incident reports, some individuals may abuse the system to draw negative attention to a co-worker.

Underreporting may also be a limitation. A recent study found that underreporting of workplace violence events via documentation was as high as 88% among hospital personnel, although 45% of employees reported incidents informally to their supervisors (Arnetz *et al.* in press). Missing data due to underreporting may hinder the development of intervention programmes for mistreatment.

The established routines for management's response to incident reports may present a barrier to reporting, especially when the employee's supervisor is the actual perpetrator of worker-to-worker violence or incivility. Unit supervisors are responsible for reporting co-worker mistreatment promptly, and also review all incidents reported for their work unit. If a supervisor is mistreating their subordinates, then employees may be less likely to report, knowing that their supervisor will be aware of the report (e.g. Findorff *et al.* 2005).

This study did not examine individual factors (i.e. personality) that may contribute to initiation of conflict with co-workers. The workplace is a social setting, and employees sometimes allow their personal issues to interfere with professionalism, as seen in the Unprofessional Behaviour subtheme in particular. However, it is important to focus on factors that are malleable and modifiable, such as specific behaviours and environmental factors. This allows unit management and hospital system stakeholders to develop strategies to address these behaviours or make changes to environmental constraints.

Conclusion

Qualitative content analysis of actual incident reports of worker-to-worker mistreatment revealed common catalysts among hospital employees. Through this analysis, specific work-related functions and procedures were identified as points of mistreatment among workers. These represent potential targets of intervention and prevention efforts for mistreatment; hospital system stakeholders may consider strategies such as education about why certain procedures are used, or promoting teamwork among work unit employees. Some incidents were initiated by bad behaviour rather than work-related factors. This points to the importance of enforcing zero-tolerance policies for workplace mistreatment. Maintaining a strict code of behaviour and consistently reviewing problem behaviours reinforce a more positive work climate for employee safety and well-being, as well as a more positive care environment for patients.

Relevance to clinical practice

Worker-to-worker mistreatment in hospitals has implications for employees, patient care and the healthcare organisation overall. Registered Nurses work interdependently with a variety of other healthcare professionals to conduct patient care; working in close proximity under high stress may lead to mistreatment. Factors leading to co-worker mistreatment in a hospital setting were found to be mostly work related and modifiable, providing points of prevention and intervention for management. Identification of common catalysts of worker-to-worker violence and incivility in hospitals is an important first step in developing targeted interventions to reduce mistreatment among hospital employees.

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Conflict of interest

The authors report no conflict of interest.

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