### Rehabilitation NURSING

## Workplace Violence in Healthcare Settings: Risk **Factors and Protective Strategies**

Gordon Lee Gillespie, PhD RN PHCNS-BC • Donna M. Gates, EdD RN FAAN • Margaret Miller, EdD CNS RN • Patricia Kunz Howard, PhD RN CEN FAEN

This article describes the risk factors and protective strategies associated with workplace violence perpetrated by patients and visitors against healthcare workers. Perpetrator risk factors for patients and visitors in healthcare settings include mental health disorders, drug or alcohol use, inability to deal with situational crises, possession of weapons, and being a victim of violence. Worker risk factors are gender, age, years of experience, hours worked, marital status, and previous workplace violence training. Setting and environmental risk factors for experiencing workplace violence include time of day and presence of security cameras. Protective strategies for combating the negative consequences of workplace violence include carrying a telephone, practicing self-defense, instructing perpetrators to stop being violent, self- and social support, and limiting interactions with potential or known perpetrators of violence. Workplace violence is a serious and growing problem that affects all healthcare professionals. Strategies are needed to prevent workplace violence and manage the negative consequences experienced by healthcare workers following violent events.

Workplace violence is a problem plaguing all employers and employees who work in healthcare settings. Physical violence can result in physical injuries or, in extreme cases, death of a worker (Bergen, Chen, Warner, & Fingerhut, 2008; Hartley, Biddle, & Jenkins, 2005). Verbal violence is another form of workplace aggression and has been linked to negative consequences, including anxiety, depression, and stress (Spector, Coulter, Stockwell, & Matz, 2007). Violence affects workers from all disciplines in the healthcare field. DuHart (2001) reported that both physicians and nurses were victims of workplace violence—the rate of physical violence committed against physicians was 16.2 per 1,000 workers and against nurses it was 21.9 per 1,000 workers. Other healthcare workers, including patient care assistants, were assaulted at a rate of 8.5 per 1,000 workers (DuHart). The purpose of this article is to describe the risk factors and protective strategies associated with workplace violence perpetrated by patients and visitors against healthcare

### Risk Factors for Workplace Violence in Healthcare Settings

Healthcare workers are exposed to a variety of factors that increase their risk for physical and verbal workplace violence from patients and visitors. The National Institute for Occupational Safety and Health (NIOSH, 1996) reported several risk factors, including working with the public, handling money, transporting or delivering passengers or items, working with people who are more likely to be violent, working in the community setting or high crime areas, working during nighttime or early morning hours, guarding valuables, and working alone. Perpetrator, worker, and setting and environmental risk factors are described below.

#### Perpetrator Risk Factors

Mental health disorders (such as dementia, schizophrenia, anxiety, acute stress reaction, suicidal ideation, and alcohol and drug intoxication [American Medical Association, 2007]) have often been identified in people who have committed workplace violence (Catlette, 2005; Gates, Fitzwater, & Succop, 2003; Gates, Ross, & McQueen, 2006; Gillespie, 2008; James, Madeley, & Dove, 2006; Lee, Gerberich, Waller, Anderson, & McGovern, 1999). Patient dementia was identified as a factor in 87% of physical assaults on nursing home assistants (Gates et al., 2003). Mandiracioglu and Cam (2006) found that patient dementia was linked to 11% of violent events while other psychiatric diseases were linked to another 25%. Gates and colleagues' study (2003) may have reported an increased rate of violence committed by patients with dementia because a larger percentage of nursing home residents had dementia in their particular study sites.

Using the Staff Observation Aggression Scale-Revised, Almvik, Rasmussen, and Woods (2006) studied male and female patients with Alzheimer's

#### FREE CE OFFERING FOR ARN MEMBERS



Log on to www. rehabnurse.org and visit the Education page for more details

#### **KEY WORDS**

health care workplace violence

disease and the severity of physical violence they committed against their healthcare workers. Almvik and colleagues determined that the severity of physical violence perpetrated by male patients was significantly greater than violence perpetrated by female patients (p < .01). This may be because men are more likely to enact physical violence and women are more likely to enact verbal violence. In addition, men are physically capable of causing more bodily injury when hitting, striking, or pushing healthcare workers compared with women who commit physical violence.

Another leading perpetrator risk factor for verbal or physical violence is the influence of drugs or alcohol (Catlette, 2005; Crilly, Chaboyer, & Creedy, 2004; Chaplin, McGeorge, & Lelliott, 2006; Gates et al., 2006; Gerberich et al., 2004; Gillespie, 2008; James et al., 2006; Keely, 2002; Keough, Schlomer, & Bollenberg, 2003; Kowalenko, Walters, Khare, & Comptom, 2005; Lin & Liu, 2005). In one study, 35% of healthcare workers believed that the violent perpetrator was using drugs or alcohol before the violent event (DuHart, 2001). In a second study, participants believed that perpetrators were under the influence of drugs or alcohol in 50% of all verbally violent events and 96% of all physically violent events (Crilly et al.).

Patients' and visitors' inability to deal with a crisis situation is another perpetrator risk factor for workplace violence (Catlette, 2005; Gates et al., 2006; Gillespie, 2008). For example, the stress experienced during an emergency department (ED) visit may create a crisis during which patients or visitors are no longer able to deal with a situation as they normally would (Broering, Campbell, Favand, Galvin, & Holleran, 2007). This stress may increase verbal or physical violence. Crises can occur when there are disagreements with the medical plan, denials of a service or request, conflicts with healthcare workers, excessive waiting times for assessments and interventions, inability to focus beyond oneself, perceptions that a healthcare worker is rude or uncaring, grief over the death of a child, and inability to change a healthcare outcome (Badger & Mullan, 2004; Catlette; Committee on Pediatric Emergency Medicine, 1997; Ergün & Karadakovan, 2005; Gates et al., 2006; Gillespie; James et al., 2006; Keely, 2002; Lin & Liu, 2005; McAneney & Shaw, 1994).

Gerberich and colleagues (2004) reported that the gender and age of a perpetrator are factors associated with violence against healthcare workers. They found that the majority of verbally violent perpetrators were men (73%, n = 1,594) age 35–65 (54%, n = 1,186). Physical violence was most often enacted by men (59%, n = 386) and people 66 years or older (64%, n = 423). Children 17 years old and younger represented the smallest group of perpetrators of physical violence

(5.3%, n = 35) and verbal violence (5.7%, n = 122). James and colleagues (2006) reported similar findings for gender when studying safety event reports from a hospital in the United Kingdom. Males (66%, n = 97) and patients between 16 and 35 years (55%, n = 82) were most likely to be perpetrators of violence.

The sheer volume of weapons being brought into healthcare settings today may increase the potential for violence against healthcare workers. Peek-Asa, Cubbin, and Hubbell (2002) noted that in 2000, patients were more likely to carry guns and knives when being treated in a healthcare setting than in 1990. Sixteen years ago, McAneney and Shaw (1994) found that more than one-half of pediatric ED directors had already started confiscating weapons from pediatric patients. DuHart (2001) reported that 11% of perpetrators used a weapon during the commission of violent events against healthcare workers. Although some EDs instituted a weapon-screening system in triage, patients who arrived by ambulance were not routinely checked for the presence of weapons (McAneney & Shaw).

Being a victim of violence, particularly when the violence resulted from a firearm injury, is a perpetrator factor significantly linked to enacting violence against others (Bingenheimer, Brennan, & Earls, 2005; Cunningham et al., 2009). Bingenheimer and colleagues tracked 1,517 Chicago adolescents longitudinally and found that adolescents who had seen or been victims of violence were significantly more likely than adolescents with no exposure to violence to self-report impulsivity (p < .0001) and aggression toward others (p < .0001) and commit violent offenses (p < .0001). These behaviors increase the likelihood that the patient who is a victim of violence will be violent toward the healthcare workers providing his or her care.

#### Worker Risk Factors

Certain characteristics have been found to increase the risk of workers being targets of workplace violence in the healthcare setting, including the worker's gender, age, years of experience, hours worked, marital status, and previous workplace violence training.

Contradictory evidence about whether a worker's gender poses a risk for being verbally or physically assaulted by patients and visitors exists. Ayranci, Yenilmez, Balci, and Kaptanoglu (2006) ascertained that women experienced a higher percentage of verbal and physical violence compared with men, although the difference was not significant. However, most researchers reported that men experienced workplace violence significantly more often than women (Anderson & Parish, 2003; Camerino, Estryn-Behar,

Conway, van Der Heijdend, & Hasselhorn, 2008; Ferrinho et al., 2003; Hegney, Plank, & Parker, 2003; Hegney, Eley, Plank, Buikstra, & Parker, 2006; James et al., 2006; Miedema, Easley, Fortin, Hamilton, & Tatemichi, 2009; Thomas et al., 2006). In contrast, Tolhurst, Baker, and colleagues (2003) determined that there was no significant difference in the overall frequency of verbally and physically violent events between groups of male and female physicians; however, the percentage of men who experienced at least one violent event during the preceding 12 months was greater than the percentage of women. Privitera, Weisman, Cerulli, Tu, and Groman (2005) noted that the gender of clinical and nonclinical mental health workers did not significantly affect the number of verbally or physically violent events they endured. However, a greater percentage of female physicians had a fear of future violence compared with male physicians (Tolhurst, Talbot, et al., 2003).

Healthcare workers younger than 40 years old were most frequently the victims of violent events (Ayranci et al., 2006). Researchers also observed that older workers experience significantly less violence than younger workers (Camerino et al., 2008; Hegney et al., 2003, 2006; Lawoko, Soares, & Nolan, 2004; Thomas et al., 2006). In addition, Gates, Fitzwater, Telintelo, Succop, and Sommers (2002) researched how a nursing home assistant's age affected the incidence of violence. As the age of caregivers increased, the frequency of violence committed against them decreased. Gates and colleagues posited that this relationship may be a result of older nursing home assistants being more adaptable, patient, and empathetic and moving more slowly during interactions with the elderly. As with gender, not all research findings for age were consistent. In contrast, Ergün and Karadakovan (2005) provided evidence that nurses reporting physical violence were significantly older than nurses who denied an event of physical violence. Anderson and Parish (2003) did not detect a relationship between age and the occurrence of violence among Hispanic nurses, but this may be due to them studying lifetime incidence for workplace violence versus a limited 12-month period for workplace violence. The lifetime incidence of violence will generally be greater for older workers as compared with younger workers because the accumulative number of violent events will increase as each year passes. In contrast, when studying the number of violent events during a 12-month period, the number of violent events per person per year will likely be less for older workers.

Ergün and Karadakovan's (2005) research showed a significant and positive accumulative relationship between the number of violent events and years of nursing experience. Anderson and Parish (2003)

## **Key Practice Points**

- Being a victim of violence, particularly when the violence resulted from a firearm injury, is significantly linked to enacting violence against others.
- The odds of being physically assaulted at work are reduced when there is a security presence, video cameras present, and organizational policies that address assault prevention and repeat violent offenders.
- Social support reduces the negative physical and psychological symptoms and negative attitude toward work following violent events.
- 4. The foremost strategy for violence is an effective workplace violence program focused on preventing violence before it occurs, safely managing violent events, and coping with the psychological consequences that occur after violent events.

found no relationship between years of experience and the occurrence of violence; however, their study was limited to Hispanic nurses working in Texas. It is possible that there may be geographical or ethnic differences between Hispanic Texan nurses and nurses from other cultures, states, or countries. And although the accumulated number of violent events spanning a career may increase with each successive year, the incidence per each successive year may decrease. This would explain why nurses with less work experience report a greater number of violent events per year but more experienced nurses accrue a greater lifetime number of violent events. In contrast to Ergün and Karadakovan, Kowalenko and colleagues (2005) determined that less experienced physicians incurred violence more often than more experienced physicians. The difference in findings may be attributed to differences in data analysis; for example, Ergün and Karadakovan studied cumulative incidence of violence compared with Kowalenko and colleagues who studied violent incidences during a 12-month period.

Other healthcare worker characteristics associated with an increased risk of workplace violence include the number of hours worked per week and marital status. Part-time employees experienced reduced risk of physical assault compared with full-time employees (OR = 0.35, p < .001; Thomas et al., 2006), even though part-time employees experienced a significant (p < .01) increase in violent events from 2001 to 2004 (Hegney et al., 2006). Lin and Liu's study (2005) reported that unmarried workers were significantly (p < .01) more likely to experience workplace violence compared

with married workers, which may be the result of married workers being accustomed to working with others toward a mutual understanding or agreement.

Evidence about whether violence-prevention training reduces the risk of workplace violence is contradictory. One group of researchers found that participants who had not attended violence-prevention training were at greater risk for workplace violence than workers who did attend training (Ergün & Karadakovan, 2005). However, Nachreiner and colleagues (2005) reported that violence training increased the likelihood of being a victim of physical violence. Specific training components that contributed to an increase in the risk for experiencing violence included managing assaultive or violent patients (OR = 1.551; p = .03), reporting work-related physical assault (OR = 1.639, p > 0.05), practicing self-defense (OR = 1.393, p > .05), and recognizing risk factors for violence (OR = 1.314, p > .05). Lee and colleagues (1999) stated that the relative risks for physical violence against a nurse increased when the nurse had received assault-prevention training with a previous employer (RR = 2.57), had completed training with his or her current employer (RR = 4.64), and his or her employer accepted assault as being part of the job (RR = 8.14). Data from these studies defy logic. The researchers provided four possible explanations for the contradiction. First, workplace violence-prevention training may only be provided in settings in which violence is more common (Lee et al.). Second, the training may increase awareness of the need to report violent events (Lee et al.). Third, victims of violence may be more likely to recall previous training (Lee et al.). Fourth, workers who receive violence-prevention training may be more likely to intervene during violent events, whereas their untrained counterparts may be more likely to remain passive (Nachreiner et al.).

Identifying the healthcare worker most at risk for experiencing violent events based on his or her characteristics is difficult because research findings in the literature are inconsistent. Many researchers have concluded that men are more likely to be victims of workplace violence (Anderson & Parish, 2003; Camerino, Estryn-Behar, Conway, van Der Heijdend, & Hasselhorn, 2008; Ferrinho et al., 2003; Hegney, Plank, & Parker, 2003; Hegney, Eley, Plank, Buikstra, & Parker, 2006; James et al., 2006; Miedema, Easley, Fortin, Hamilton, & Tatemichi, 2009; Thomas et al., 2006); however, it is possible that women are more frequently the targets of violence, but men become victims of workplace violence because they intervene. Older, more experienced workers report a greater number of violent events throughout their work life, but younger, less experienced workers report a greater number of recent violent events. Availability of violence-prevention training has also been associated with increased risks for workplace violence. It is not known whether employers identified violent work environments after implementing violence training programs or whether the programs were implemented as a result of workplace violence events. Evidence has consistently shown, however, that all workers are at risk for some degree of workplace violence despite their gender, age, years of work experience, and availability of training opportunities.

#### Setting and Environmental Risk Factors

Environmental factors that have been shown to reduce the risk of physical assault against healthcare professionals include controlled access to patient areas, reduced wait times, security presence, and escorting workers to their vehicles (Catlette, 2005; Crilly et al., 2004; Gates et al., 2006; Gerberich et al., 2005; Gillespie, 2008; Lee et al., 1999; Nachreiner et al., 2005). Lee and colleagues and Ayranci and colleagues (2006) provided evidence that the likelihood of a nurse being physically assaulted at work was reduced when there was a security presence, video monitors, and organizational policies that addressed assault prevention and repeat violent offenders. In contrast, Gerberich and colleagues ascertained that nurses' risks for experiencing physical assault were actually increased when employers used video monitors, metal detectors, or panic buttons. Gerberich and colleagues did not provide an explanation for this finding, but it may be the result of an increased awareness of violence leading to increased reporting or an increase in employer efforts to make environmental changes for improved worker safety in response to violent events.

Other researchers have identified that violence is more likely to occur during certain times of the day. Ergün and Karadakovan (2005) found that 70% of violent events took place between 4 pm and 8 am, which was supported by other researchers (AbuAl-Rub, Khalifa, & Habbib, 2007; Crilly et al., 2004; Gates et al., 2006; Gillespie, 2008). Increased rates of violence during evening and nighttime hours may be attributed to the types and conditions of patients who seek treatment during later hours, such as intoxication and injuries due to violence (McAneney & Shaw, 1994). Almvik and colleagues (2006) further stated that violent events in long-term care were most likely to occur during daytime and evening hours with few events occurring during nighttime hours. This difference may be due to the setting; long-term care patients who are aggressive may be asleep during nighttime hours and, therefore, unable to enact violence against others.

## Protective Strategies for Workplace Violence

When violent events occur, some healthcare professionals are likely to experience negative consequences, which can be minimized by protective strategies. The literature identified personal protection as an effective protective strategy against violence. In a sample of 116 Iraqi hospital nurses who reported physical violence, 27% (n = 13) took no action and 49% (n = 24) attempted to defend themselves during the event (AbuAlRub et al., 2007). Self-defense may be an effective strategy to prevent injury until help arrives or escape from the patient room is possible. Gerberich and colleagues (2005) determined that hospital nurses who carried some form of personal protection or a personal cellular telephone had a greatly reduced odds ratio for being assault compared to those who did not (.30 to 1); however, when nurses used an employer's cellular telephone or personal alarm system, the odds ratio for assault did not decrease (1.03 to 1). This discrepancy may reflect employees' lack of knowledge about how to use the employer's equipment at the time of the event. Employees who carried some form of personal protection may have decreased their risk of a violent event because they were more aware of the potential for violence and relied on themselves for protection, and those who used employers' measures relied on the employer for protection. Tolhurst, Talbot, and colleagues (2003) found that 15% (n = 47) of rural physicians started carrying a cellular telephone with them to use in the event of workplace violence. Kowalenko and colleagues (2005) reported that 16% (n = 27) of Michigan physicians in their study carried a concealed weapon as a form of protection because they feared workplace violence or had previously experienced a violent event.

Healthcare workers also exhibited a no-tolerance policy as a strategy for reducing risk for violent events. Findorff, McGovern, Wall, and Gerberich (2005) randomly sampled 4,166 hospital employees and found that some instructed perpetrators to stop being verbally violent. These workers were more than three times as likely to report the violence compared to workers who did not tell the perpetrator to stop. Even though Findorff and colleagues did not report whether the perpetrator stopped the verbal assault when instructed to by workers, the simple act of setting a limit on unacceptable behavior may have helped protect the worker against long-term, violence-related stress.

After experiencing a violent event, some healthcare workers protected themselves against the negative effects with self-support (Gillespie, 2008). Catlette (2005) interviewed eight trauma nurses about their experiences with workplace violence. Nurses discussed using self-support techniques such as humor, talking about the experience, and taking advantage of leisure time, but did not report whether the participants believed that the interventions were effective (Catlette). During qualitative interviews of pediatric emergency workers, Gillespie discovered that drinking a cold beverage and taking a short break helped decrease stress following a violent event.

Researchers identified that support from other people after a violent event was another strategy for protecting against negative effects. Schat and Kelloway (2003) found that support (e.g., showing concern, listening to the victim's story) from coworkers and managers had a positive effect on study participants from a Canadian healthcare system who were primarily nurses, patient care assistants, laboratory and technical assistants, counselors, and social workers. The support reduced their negative physical and psychological symptoms and negative attitudes toward their work. Gillespie (2008) concluded that an informal debriefing should occur during the same shift as the violent event to prevent future intrusive thoughts from affecting the worker's sleep.

Although Schat and Kelloway (2003) identified social support as an effective strategy for protecting against the negative consequences of violent events, they also found that the support had no effect on a worker's fear of future workplace violence. The researchers concluded that to increase the social support of a worker, this fear must be addressed through interventions such as formal debriefings or professional counseling sessions.

Another protective strategy identified in the literature included changing current practices to promote personal safety. Magin, Adams, Ireland, Heaney, and Darab (2005) found that general practitioner physicians who worked in urban settings documented their destinations after hours, checked in with spouses at predetermined periods, and stopped making house calls to patients with whom they were unfamiliar or who lived in areas of low socioeconomic status. Female physicians in the study were more likely to take their spouses with them during home visits. Tolhurst, Talbot, and colleagues (2003) stated that 30% of general practitioners made similar changes to their after-hours practices based on the risk of workplace violence. Physicians' most significant change was instructing patients whom they didn't know or who had a history of perpetrating violence to seek health care with a different provider when they requested to be seen after hours. In fact, 5% of the physicians stopped making home visits altogether.

### Summary

Perpetrator, worker, and setting and environmental factors have been associated with risk for workplace violence. Perpetrator factors that increased the risk of violence were gender, age, the possession of weapons, mental disorders (including dementia), and the influence of drugs or alcohol. Worker factors that were associated with a decreased risk of violence were age, years of experience, hours worked, and marital status. However, evidence related to the effect of gender and workplace violence training on the risk of workers experiencing an assault was conflicting. Setting and environmental factors that were related to increased risk for workplace violence (though not definitively) included time of the day (daytime versus evening and nighttime hours) and changes to the environment such as the presence of security systems or cameras.

Employees in healthcare settings cannot prevent all violent events; however, they can use several strategies to protect themselves against the negative consequences of workplace violence. Strategies for workers include carrying concealed weapons or personal cellular telephones to defend against the consequences of physical violence, instructing perpetrators to stop their violent acts, engaging in self-care to cope with a violent event, receiving support from colleagues and employers, and limiting the availability of after-hours care or care for patients who have a history of violence.

#### Implications for Rehabilitation Nursing

Both rehabilitation nurses and organizations must implement strategies to reduce the risks associated with workplace violence. All verbally and physically abusive threatening and harmful acts should be considered violent, despite the intent or cognitive accountability of the perpetrator. Even when perpetrators are cognitively impaired patients, violent acts can be physically debilitating or psychologically harmful to healthcare professionals (Badger & Mullan, 2004; Brock, Gurekas, Gelinas, & Rollin, 2009; Rose & Cleary, 2007). The strategies depicted in this section are universal regardless of the patient's intent or cognitive accountability for committing a violent act.

The foremost protective strategy is implementing an effective workplace violence-deterrant program focused on prevention, safe management, and helping victims cope with the psychological consequences. Violence-prevention training should take place when workers are hired and should be supplemented with annual or semiannual updates. Educational components may include a description of factors related to violent events, such as patients or visitors experiencing a situational crisis or the influence of drugs or alcohol. Additional training components may include training

specific to rehabilitation settings, such as identifying patients with signs of substance abuse withdrawal and intervening early or establishing new physical limitations (e.g., inability to perform normal activities of daily living). Developing case studies based on real violent events reported by rehabilitation healthcare workers would increase the personal relevance of educational programs. Case studies allow rehabilitation workers to discuss why the patient or visitor escalated to verbal or physical violence and what actions could yield a more positive outcome.

Special strategies can be used for patients who are victims of violence (e.g., patients suffering injuries from gunshots, stabbings, and gang assaults) including limited visitor access and using a pseudonym for patients. These two strategies may be necessary to prevent exposure to the same stressor that caused the original violent event. Using a pseudonym to register patients in hospital or rehabilitation settings may help reduce the likelihood that they will be disturbed by people who are capable of provoking violent behavior in these patients. Limiting visitor access to two designated individuals (e.g., spouse, parents) reduces the chance that a room full of anxious and stressed visitors will resort to workplace violence.

It is important for healthcare workers to recognize that the reported risks for violence are not all inclusive and that every patient and visitor should be considered potentially violent. When initial signs of violence are identified, interventions should be implemented immediately, especially de-escalation techniques. These include actively listening to the patient or visitor, attempting to identify concerns and reasons for the escalation, honestly answering patient and visitor questions, allowing access to visitors who may have a calming effect on the patient, and providing comfort measures (e.g., warm blankets, beverages, snacks, and medications for pain, anxiety, and agitation control).

Organizational policies addressing workplace violence should include plans for how to address finding a weapon on a patient or visitor. For example, employees should calmly leave the patient's room, notify security personnel that a weapon has been discovered, and make no attempts to remove the weapon from the patient. Homecare workers should instruct their patients to remove all firearms from the premises before home visits or keep firearms in a lock box with the ammunition removed and stored separately. Care plans should indicate that a firearm is on the premises. Healthcare workers should be informed about and adhere to the organizational policies and provide input about how to keep the policies up to date. Experienced workers can mentor and guide less experienced colleagues in communication and care delivery strategies that may calm patients and visitors, diffuse tense situations, and discourage the use or presence of weapons.

Limited empirical evidence is available for protective strategies that are implemented after a workplace violent event has already occurred. It is important for all healthcare professionals to recognize the signs of stress, in patients as well as themselves. Those experiencing stress should request or be offered a break from the patient-care environment. A plan for dealing with workplace violence, the means to call for help (e.g., personal alarms, cellular telephones, radios), and knowledge about how to use protective technology (e.g., activating a personal alarm) are also important. It may not be feasible to limit hours of service (e.g., inpatient rehabilitation units or on-call homecare services) or refuse patients; however, organizations should implement plans, including flagging charts and specifically soliciting this information during shift-change reports and new referral intake processes, to identify patients who have a history of violence. Patients who have had a violent encounter with a particular healthcare professional should be reassigned to someone else when feasible. This may not be possible when the caregiver (e.g., registered nurse, physical therapist) is the only provider within a geographic area that includes the patient's residence. To provide additional protection, healthcare professionals should communicate their location at regular intervals with a unit coordinator or home care office, with a plan to be activated if they fail to do so. Home care workers may need a chaperone or to conduct home care visits in pairs to increase personal safety.

#### Conclusion

A review of the literature revealed a number of risks and protective strategies associated with violent events committed by patients and visitors against healthcare workers in the workplace. Workplace violence is a serious and growing problem in today's healthcare settings and affects all employees. Although protective strategies were identified to reduce negative consequences of violent events, it is important that researchers conduct rigorous studies to determine which factors—and in which combinations—provide the greatest protection. It is important that employers and employees recognize that the only strategy proven to prevent the negative consequences of workplace violence is an effective violence-prevention program. Healthcare professionals have a right to be safe while on duty and should be proactive in collaborating with their employers to create that safe work environment (Occupational Safety and Health Administration, 2004).

#### About the Authors

Gordon Lee Gillespie, PhD RN PHCNS-BC, is an assistant professor at University of Cincinnati, College of Nursing in Cincinnati, OH. Please address correspondence to him at gordon.gillespie@uc.edu.

Donna M. Gates, EdD RN FAAN, is a professor at University of Cincinnati, College of Nursing in Cincinnati, OH.

Margaret Miller, EdD CNS RN, is professor emeritus at University of Cincinnati, College of Nursing in Cincinnati, OH.

Patricia Kunz Howard, PhD RN CEN FAEN, is operations manager at UK Chandler Hospital Emergency & Trauma Services in Lexington, KY.

#### References

- AbuAlRub, R. F., Khalifa, M. F., & Habbib, M. B. (2007). Workplace violence among Iraqi hospital nurses. *Journal of Nursing Scholarship*, 39(3), 281–288.
- Almvik, R., Rasmussen, K., & Woods, P. (2006). Challenging behaviour in the elderly—Monitoring violent incidents. *International Journal of Geriatric Psychiatry*, 21, 368–374.
- American Medical Association. (2007). Current Procedural Terminology, CPT 2008: Professional Edition. Chicago, IL: Author.
- Anderson, C., & Parish, M. (2003). Report of workplace violence by Hispanic nurses. *Journal of Transcultural Nursing*, 14(3), 237–243.
- Ayranci, U., Yenilmez, C., Balci, Y., & Kaptanoglu, C. (2006). Identification of violence in Turkish health care settings. *Journal of Interpersonal Violence*, 21(2), 276–296.
- Badger, F., & Mullan, B. (2004). Aggressive and violent incidents: Perceptions of training and support among staff caring for older people and people with head injury. *Journal of Clinical Nursing*, 13, 526–533.
- Bergen, G., Chen, L. H., Warner, M., & Fingerhut, L. A. (2008). Injury in the United States: 2007 Chartbook. Hyattsville, MD: National Center for Health Statistics.
- Bingenheimer, J. B., Brennan, R. T., & Earls, F. J. (2005). Firearm violence exposure and serious violent behavior *Science*, 308, 1323–1326.
- Brock, G., Gurekas, V., Gelinas, A. F., & Rollin, K. (2009). Use of a "secure room" and a security guard in the management of the violent, aggressive or suicidal patient in a rural hospital: A 3-year audit. Canadian Journal of Rural Medicine, 14(1), 16–20.
- Broering, B., Campbell, M., Favand, L., Galvin, A., & Holleran, R. (Eds.). (2007). Psychosocial aspects of trauma care. In TNCC Trauma Nursing Core Course Provider Manual (6th ed., pp. 273–284). Des Plaines, IL: Emergency Nurses Association.
- Camerino, D., Estryn-Behar, M., Conway, P. M., van Der Heijdend, B. I., & Hasselhorn, H. M. (2008). Work-related factors and violence among nursing staff in the European NEXT study: A longitudinal cohort study. *International Journal of Nursing Studies*, 45, 35–50.
- Catlette, M. (2005). A descriptive study of the perceptions of workplace violence and safety strategies of nurses working in level I trauma centers. *Journal of Emergency Nursing*, 31(6), 519–525.
- Chaplin, R., McGeorge, M., & Lelliott, P. (2006). The national audit of violence: In-patient care for adults of working age. *Psychiatric Bulletin*, 30, 444–446.
- Committee on Pediatric Emergency Medicine, American Academy of Pediatrics. (1997). The use of physical restraint interventions for children and adolescents in the acute care setting. *Pediatrics*, 99, 797–798.
- Crilly, J., Chaboyer, W., & Creedy, D. (2004). Violence towards emergency department nurses by patients. *Accident and Emergency Nursing*, 12, 67–73.
- Cunningham, R., Knox, L., Fein, J., Harrison, S., Frisch, K., Walton, M., et al. (2009). Before and after the trauma bay: The prevention of violent injury among youth. *Annals of Emergency Medicine*, 53(4), 490–500.
- DuHart, D. T. (2001). Violence in the workplace, 1993–99 (NCJ Publication No. 190076). Washington, DC: Bureau of Justice Statistics.

- Ergün, F. S., & Karadakovan, A. (2005). Violence towards nursing staff in emergency departments in one Turkish city. International Nursing Review, 52, 154–160.
- Ferrinho, P., Biscaia, A., Fronteira, I., Craveiro, I., Antunes, A. R., Conceição, C., et al. (2003, November 7). Patterns of perceptions of workplace violence in the Portuguese health care sector. Human Resources for Health, 1, Article 1. Retrieved March 14, 2008, from www.human-resourceshealth.com/content/1/1/11.
- Findorff, M. J., McGovern, P. M., Wall, M. M., & Gerberich, S. G. (2005). Reporting violence to a health care employer: A cross-sectional study. A/AOHN Journal, 53(9), 399–406.
- Gates, D., Fitzwater, É., & Succop, P. (2003). Relationships of stressors, strain, and anger to caregiver assaults. *Issues in Mental Flealth Nursing*, 24, 775–793.
- Gates, D., Fitzwater, E., Telintelo, S., Succop, P., & Sommers, M. S. (2002). Preventing assaults by nursing home residents: Nursing assistants' knowledge and confidence–a pilot study. *Journal of the American Medical Directors Association*, 3(6), 366–370.
- Gates, D. M., Ross, C. S., & McQueen, L. (2006). Violence against emergency department workers. *Journal of Emergency Medicine*, 31(3), 331–337.
- Gerberich, S. G., Church, T. R., McGovern, P. M., Hansen, H. E., Nachreiner, M. S., Geisser, A. D., et al. (2004). An epidemiological study of the magnitude and consequences of work related violence: *The Minnesota Nurses' Study. Occupational & Environmental Medicine*, 61, 495–503.
- Gerberich, S. G., Church, T. R., McGovern, P. M., Hansen, H. D., Nachreiner, N. M., Geissner, M. S., et al. (2005). Risk factors for work-related assaults on nurses. *Epidemiology*, 16(5), 704–409.
- Gillespie, G. L. (2008). Violence against healthcare workers in a pediatric emergency department. Unpublished dissertation, University of Cincinnati.
- Hartley, D., Biddle, E. A., & Jenkins, E. L. (2005) Societal cost of workplace homicides in the United States, 1992–2001. *American Journal of Industrial Medicine*, 47, 518–527.
- Hegney, D., Eley, R., Plank, A., Buikstra, E., & Parker, V. (2006) Workplace violence in Queensland, Australia: The results of a comparative study. *International Journal of Nursing Practice*, 12, 220–231.
- Hegney, D., Plank, A., & Parker, V. (2003). Workplace violence in nursing in Queensland, Australia: A self-reported study. *International Journal of Nursing Practice*, 9, 261–268.
- James, A., Madeley, R., & Dove, A. (2006). Violence and aggression in the emergency department. *Emergency Medicine Journal*, 23(6), 431–434.
- Keely, B. R. (2002). Recognition and prevention of hospital violence. *Dimensions of Critical Care Nursing*, 21, 236–241.
- Keough, V. A., Schlomer, R. S., & Bollenberg, B. W. (2003). Serendipitous findings from an Illinois ED nursing educational survey reflect a crisis in emergency nursing. *Journal of Emergency Nursing*, 29, 17–22.
- Kowalenko, T., Walters, B. L., Khare, R. K., & Compton, S. (2005). Workplace violence: A survey of emergency physicians in the state of Michigan. *Annals of Emergency Medicine*, 46(2), 142–147.
- Lawoko, S., Soares, J. J. F., & Nolan, P. (2004). Violence towards psychiatric staff: A comparison of gender, job and environmental characteristics in England and Sweden. Work & Stress, 18(1), 39–55.
- Lee, S. S., Gerberich, S. G., Waller, L. A., Anderson, A., & McGovern, P. (1999). Work-related assault injuries among nurses. *Epidemiology*, 10(6), 685–691.
- Lin, Y.-H., & Liu, H.-E. (2005). The impact of workplace violence on nurses in South Taiwan. *International Journal of Nursing Studies*, 42, 773–778.
- Magin, P. J., Adams, J., Ireland, M., Heaney, S., & Darab, S. (2005). After hours care: A qualitative study of GPs' perceptions of risk of violence and effect on service provision. Australian Family Physician, 34(1–2), 91–92.
- Mandiracioglu, A., & Čam, O. (2006). Violence exposure and burn-out among Turkish nursing home staff. *Occupational Medicine*, 56, 501–503.
- McAneney, C. M., & Shaw, K. N. (1994). Violence in the pediatric emergency department. *Annals of Emergency Medicine*, 23(6), 1248–1251.

- Miedema, B., Easley, J., Fortin, P., Hamilton, R., & Tatemichi, S. (2009). Disrespect, harassment, and abuse: All in a day's work for family physicians. *Canadian Family Physician*, 55, 279–285.
- Nachreiner, N. M., Gerberich, S. G., McGovern, P. M., Church, T. R., Hansen, H. E., Geisser, M. S., et al. (2005). Impact of training on work-related assault. *Research in Nursing & Health*, 28, 67–78.
- National Institute of Occupational Safety and Health. (1996). *Violence in the workplace* (DHHS NIOSH Publication No. 96–100). Cincinnati, OH: Author.
- Occupational Safety and Health Administration. (2004). OSHA Act of 1970. Retrieved February 15, 2009, from www.osha.gov/pls/oshaweb/owadisp.show\_document?p\_table=OSHACT&p\_id=2743.
- Peek-Asa, C., Cubbin, L., & Hubbell, K. (2002). Violent events and security program in California emergency departments before and after the 1993 Hospital Security Act. *Journal of Emergency Nursing*, 28(5), 420–426.
- Privitera, M., Weisman, R., Cerulli, C., Tu, X., & Groman, A. (2005). Violence toward mental health staff and safety in the work environment. Occupational Medicine, 55, 480–486.
- Rose, J. L., & Cleary, A. (2007). Care staff perceptions of challenging behavior and fear of assault. *Journal of Intellectual & Developmental Disability*, 32(2), 153–161.
- Schat, A. C. H., & Kelloway, E. K. (2003). Reducing the adverse consequences of workplace aggression and violence: The buffering effects of organizational support. *Journal of Occupational Health Psychology*, 8(2), 110–122.
- Spector, P. E., Coulter, M. L., Stockwell, H. G., & Matz, M. W. (2007). Perceived violence climate: A new construct and its relationship to workplace physical violence and verbal aggression, and their potential consequences, Work & Stress, 21(2), 117–130.
- Thomas, N. L., Brown, N. D., Hodges, L. C., Gandy, J., Lawson, L. Lord, J. E., et al. (2006). Risk profiles for four types of work-related injury among hospital employees. *AAOHN Journal*, 54(2), 61–68.
- Tolhurst, H., Baker, L., Murray, G., Bell, P., Sutton, A., & Dean, S. (2003). Rural general practitioner experience of workrelated violence in Australia. *Australian Journal of Rural Health*, 11, 231–236.
- Tolhurst, H., Talbot, J., Baker, L., Bell, P., Murray, G., Sutton, A., et al. (2003). Rural general practitioner apprehension about work related violence in Australia. *Australian Journal of Rural Health*, 11, 237–241.

### Earn nursing contact hours

Rehabilitation Nursing is pleased to offer readers the opportunity to earn nursing contact hours for its continuing education articles by taking a posttest through the ARN website. The posttest consists of questions based on this article, plus several assessment questions (e.g., how long did it take you to read the article and complete the posttest?). A passing score on the posttest and completion of the assessment questions yield one nursing contact hour for each article.

To earn contact hours, go to www.rehabnurse.org and select the "Education" page. There you can read the article again, or go directly to the posttest assessment by selecting "RNJ online CE." The cost for credit is \$10 per article. You will be asked for a credit card or online payment service number.

Contact hours for this activity are available at no cost to ARN members September 1, 2010, to October 31, 2010, after which time, regular pricing will apply. Contact hours for this activity will not be available after October 31, 2012.

The Association of Rehabilitation Nurses is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation (ANCC-COA).