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INSIDE

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The Joint Commission Issues Sentinel Event Alert on Violence

Prevention efforts required under several standards

By Gary Evans, Medical Writer

A young woman in a traditional hijab head cover recently entered a Michigan hospital ED and walked up to the triage desk. Within seconds, she was attacked from behind by another patient, a man apparently enraged by her religious garb. She has fully recovered, but is suing the hospital for failing to protect her from assault.[1]

With reports of violence increasingly common, The Joint Commission (TJC) has issued a Sentinel Event Alert[2] emphasizing that accreditation standards require measures to protect healthcare workers and patients.

> THE JOINT COMMISSION HAS ISSUED A SENTINEL EVENT ALERT EMPHASIZING THAT ACCREDITATION STANDARDS REQUIRE MEASURES TO PROTECT HEALTHCARE WORKERS AND PATIENTS.

"Workplace violence is a serious and prominent safety issue in healthcare," **Katie Bronk**, TJC corporate communications, tells *Hospital Employee Health*. "We encourage our accredited organizations to use this alert to help their healthcare workers recognize violence from patients and visitors, become prepared to handle it, and more effectively address the aftermath."

TJC has several accreditation standards that can apply to workplace violence prevention. These include Leadership and Rights and Responsibilities of the Individual, which require a "framework for safety

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and security of all persons in the organization," the alert states.[2] Other applicable standards include Provision of Care, Treatment, and Services, which address patient assessment and interventions. "Environment of Care standards address the physical environment and practices that enhance safety," TJC notes. "Emergency Management standards address planning for more extreme risks of workplace violence, such as active shooters, community unrest, and terrorist attack."

The goal is to work with healthcare facilities on workplace violence to address improvements in procedures and practices as guided by the accreditation standards, Bronk says.

"Should our Office of Quality and Patient Safety receive a report related to workplace violence, it will assess the concern as it relates to safety and quality to evaluate whether or not the report describes unsafe conditions or incidents," she says. "Based on an analysis of the risk of harm in the report, an onsite survey or other action may be taken. Ultimately, if our surveyors identify an issue, the organization must address it or its accreditation status may be affected."

The alert complements TJC's web-based Workplace Violence Prevention Resources portal, which was launched several years ago to raise awareness of workplace violence. *(The portal can be found at: https://bit.ly/2d8U2IW.)* The Occupational Safety and Health Administration (OSHA) was working on a violence prevention standard to protect healthcare workers, but that effort is in limbo in the current political climate.

The Joint Commission alert should spur action by healthcare facilities, some of which have too long taken the position that some level of violence comes with the chaotic territory of healthcare delivery.

"The Joint Commission is the biggest accrediting body for hospitals, so I think this will put some pressure on them," says **Patricia A. Lenaghan**, RN, MSN, NE-BC, FAAN, senior healthcare clinical and operations analyst at Leo A. Daly in Omaha, NE. A former ED manager, Lenaghan is now with the Leo A. Daly architectural firm that designs violence prevention into new construction and renovations in healthcare. *(See related story, page 65.)*

The Joint Commission alert emphasizes the importance of creating "simple, trusted, and secure" reporting systems for incidents of violence and threats.

"Hospitals don't necessarily track these events," Lenaghan says. "Anytime you track something, it gets a lot more attention. You should not treat violence as part of normal operations or people get numb. Whether it is a verbal assault or physical, those should be tracked and reviewed by the quality team and hospital security. The Joint Commission can make that happen."

Although shootings in healthcare are certainly occurring, the more common manifestation of violence in hospitals are assaults not involving a firearm, and verbal abuse. Recognizing verbal assault as a form of workplace violence that should not be overlooked, TJC cites the "broken window" theory that acceptance of insults eventually leads to injuries.

Approximately 11,000 healthcare workers are victims of assaults annually, and more than 50% of ED nurses experience verbal or physical assault regularly.[3] The corrosive effects of the threat of violence contribute to low worker morale

and high job turnover, both of which contribute to staff burnout.

TJC's Sentinel Event Alert calls for a comprehensive system analysis of events that lead to death, permanent harm, or severe temporary harm to patients and healthcare staff, including rape and assault.

"While the policy does not include other forms of violence, it is up to every organization to specifically define acceptable and unacceptable behavior and the severity of harm that will trigger an investigation," the alert states. "Workplace violence includes abusive behavior toward authority, intimidating or harassing behavior, and threats."

Gathering Storm

Something close to the proverbial perfect storm seems to be taking shape: A healthcare system under pressure faces an opioid epidemic, which is exacerbated by breakdowns followed by the lack of mental health services in many communities.

"The most common characteristic exhibited by perpetrators of workplace violence is altered mental status associated with dementia, delirium, substance intoxication, or decompensated mental illness," TJC states. "Increasingly, hospitals are providing care for potentially violent individuals."

This is particularly true in the ED, where on any given night patients may show up in the aftermath of domestic assault or gang activity, or under the influence of the powerful opioids that are offered on the streets.

"Any time you have a patient that's under the influence of any kind of drug — alcohol, opioids, other narcotics — it creates an environment where people cannot control their behavior," Lenaghan says. "There is also a lot of tension in the families because they have been dealing with these issues for quite some time and then they get a call, and they come to the ER. It creates a lot of anxiety."

This volatile situation is ratcheted up further by the possible involvement of drug dealers or gang members, she adds. "It creates a lot of challenges for the staff," she says.

> "IT'S IMPORTANT FOR ORGANIZATIONS TO COMMUNICATE A ZERO-TOLERANCE ATTITUDE TOWARD WORKPLACE VIOLENCE AND UNNECESSARY RISKS."

The Sentinel Event Alert emphasizes that healthcare workers must be alert and ready to act when they encounter verbal or physical violence from patients or visitors who may be under stress or "who may be fragile, yet also volatile," TJC states.

"You have to always remind yourself that you are there to take care of a very vulnerable patient," Lenaghan says.

Healthcare organizations are encouraged to address this growing problem by looking beyond solutions that only increase security, TJC advises.

In that regard, reporting systems and prevention efforts are the responsibility of healthcare organization — not the victims of violence at the facility.

"It's important for organizations to communicate a zero-tolerance attitude toward workplace violence and unnecessary risks," says **Cory Worden**, MS, CSHM, CSP, CHSP, ARM, REM, CESCO, manager of system safety at Memorial Hermann Health System in Houston. "This drives the safety culture and helps to reverse the unfortunate perception of workplace violence in healthcare being 'just part of the job' or 'the cost of doing business.'"

Other administrative or work practice solutions may include developing workplace violence response teams and policies, the alert recommends. Beyond that, train all staff — including security — in de-escalation, self-defense, and response to emergency codes.

"When threatening language and agitation are identified, initiate de-escalation techniques quickly," TJC reports. "Regarding de-escalation and self-defense, experts suggest that hospitals prohibit firearms from campus, except for […] law enforcement officers. The Centers for Medicare & Medicaid Services does not permit the use of weapons by any hospital staff as a means of subduing a patient."

Conduct practice drills that include response to a full spectrum of violent situations, which could range from a verbally abusive family member to an active shooter, TJC notes.

"These practice drills can be part of an ongoing safety program, as indicated in The Joint Commission Environment of Care (EC) standards," the alert states. "However, a situation such as an active shooter requires more extensive coordination with community responders, and can be addressed in exercises as described in the Emergency Management (EM) standards."

TJC recommends violence prevention efforts be periodically assessed for effectiveness, looking at the following areas:

• reported incidents and leadership's responses to them;

• trends in incidents, injuries, and fatalities relative to baseline rates and measuring improvement;

• surveying workers to determine effectiveness of initiatives;

• tracking if recommendations were completed.

"By 'tracing the cord back to the wall,' we can determine what gaps exist in which workplace violence can develop," Worden says. "If violence becomes imminent, employees will need to know defensive techniques to egress the area with minimal injury, if any. This requires specific training and conditioning to ensure these techniques are not only known, but ready for use in an escalating situation." ■

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Conditions That Trigger Healthcare Violence

The Joint Commission (TJC) recently issued a Sentinel Event Alert[1] on violence in healthcare that identifies some key triggers and prevention measures.

Potentially violent patients may have underlying mental health issues or addiction problems when they present for care. In addition to caring for patients with these characteristics, other factors associated with violence include:

• stressful conditions, such as long wait times, crowding in the clinical environment, or being given "bad news" related to a diagnosis or prognosis;

• lack of organizational policies and training for security and staff to recognize and de-escalate hostile and assaultive behaviors from patients, clients, visitors, or staff;

• gang activity;

• domestic disputes among patients or visitors;

• the presence of firearms or other weapons;

• inadequate security and mental health personnel on site;

• understaffing, especially during mealtimes and visiting hours;

• staff working in isolation or in situations in which they can be trapped without an escape route;

• poor lighting or other factors restricting vision in corridors, rooms, parking lots, and other areas;

• no access to emergency communication, such as a cellphone or call bell;

• unrestricted public access to hospital rooms and clinics;

• lack of community mental healthcare.

Among other recommendations, TJC recommends the following measures to prevent violence in healthcare settings:

• Encourage conversations about workplace violence during daily unit huddles, including team leaders asking each day if any team members have been victims of physical or verbal abuse or if any patients or family situations may be prone to violence.

• Develop systems or tools to help staff identify the potential for violence, such as a checklist or questionnaire that asks if a patient is irritable, confused, or threatening.

• Develop a protocol, guidance, and training about the reporting required by the hospital safety team, OSHA, police, and state authorities.

• Remove all impediments to staff reporting incidents of violence toward workers, such as retribution or disapproval of supervisors or co-workers, and a lack of follow-up or positive recognition from leadership.

• Capture, track, and trend all reports of workplace violence, including verbal abuse and attempted assaults when no harm occurred.

• Gather this information from all hospital databases, including those used for OSHA, insurance, security, human resources, complaints, employee surveys, legal or risk management purposes, and from change of shift reports or huddles.

• Regularly distribute workplace violence reports throughout the facility. ■

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Violence Prevention by Design in EDs

In the increasing threat of violence in healthcare, the ED is ground zero.

Given the threat, it is time to start designing violence prevention in the ED structure, creating physical changes that direct traffic flow by car or on foot and putting barriers and checkpoints between the healthcare worker and the potentially violent patient, says **Patricia A. Lenaghan**, RN, MSN, NE-BC, FAAN, senior healthcare clinical and operations analyst at Leo A. Daly, an architectural firm in Omaha, NE, that designs violence prevention into new construction and renovations in healthcare.

"Twenty years ago when I remodeled my first ED, working with the architects and the engineers, I wanted to put in bulletproof glass and locked access doors," she says. "It was not a popular decision. People tried to talk me out of it, but having been an ED staff nurse, I cared a lot about the staff. I insisted that those things happen."

While some inner-city hospitals may use metal detectors and ask incoming patients to identify themselves, other hospitals perceive the risk of violence to be so low that people can easily gain access and move undeterred within the facility.

"In many suburban hospitals, basically you can still walk in kind of unannounced," she says. "That is why I wrote the article. I just don't think there is enough attention being paid to securing emergency departments and providing a safe environment. It is really not that hard."

A paper written by Lenaghan and colleagues[1] provides a review of design practices to help guide clinical user groups in meetings with hospital leaders, architects, and engineers. In general, environmental designs that influence ED safety and security are to be divided into key areas like parking, entry zone, care zones, and room clustering.

> "EVERYBODY HAS TO BE SUPER AWARE OF THE COMINGS AND GOINGS AND THE SITUATIONS. YOU HAVE TO BE PROACTIVE ABOUT THAT."

"Best practices to prevent or contain violence include methods to secure high-risk departments or areas, cordon off the ED entrance and access to the rest of the facility, create safe spaces for staff, and provide opportunities for rapid egress from secured spaces," Lenaghan and colleagues noted. "Camera surveillance and intrusion alarms should be considered as standard features for all healthcare facilities."

In trying to renovate existing facilities for violence prevention, a common approach is to create barriers between receiving staff and incoming patients and visitors.

"I think also stationing security at the front door," she says. "If you don't have an office, then just having their presence there [is a deterrent]. Those kinds of things do not require redesigning anything."

Have increased awareness for people in and around the hospital, erring on the side of security, she says.

"I think it is perfectly fine for the front-end staff to stop people and ask them who they are there to see," Lenaghan says. "Everybody has to be super aware of the comings and goings and the situations. You have to be proactive about that."

It is becoming more common to require visitors to wear badges, particularly in pediatric hospitals where infant abduction also is an issue, she adds.

"They are requiring people to sign in and to get a badge with their picture on it," she says. "Those are simple steps that are pretty easy to take, and will minimize people just wandering around."

The emphasis on patient satisfaction and staff friendliness has led to some discouragement of these types of approaches, but Lenaghan makes a cogent point: "People can't be friendly if they don't feel safe."

One way to feel safe in the ED is to have sight lines that afford viewing of other staff, open rows of seating with no bottlenecks, and use of mirrors to reveal blind hallways. Sequencing patients through the system into separate waiting areas can ease frustration of waiting and demonstrate equity in the flow toward care. Furnishings should be fixed to prevent objects from being used as weapons.

"Create waiting areas for patients after triage with distinct areas for fast-track, pediatric, and low- and high-acuity," the authors noted. "These sub-waiting areas avoid the need for patients to return to a previous physical location. By having patients move in one direction during the entire process,

emergency departments can reduce the perception that patients are being neglected or unfairly made to wait."

As part of this, the triage and admitting staff should have clear egress to a safe fallback area. Security alert systems in the lobby and strategically located "duress alarms" can speed the response to an incident. Importantly, staff need clear lines of sight that leave no team member in a blind spot.

"Clinicians who cannot see each other cannot help each other, and, predictably, reduced visibility results in a sense of isolation," the authors state. "Isolation is not good for staff morale, patient monitoring, or communication among caregivers. It also reduces safety for staff. To increase transparency, workstations can be strategically located to be within view of each other."

If possible, design a "safe room" that can be locked down to protect staff, patients, and visitors during an incident. While design and renovation can keep violence at bay, it is still important to train workers to de-escalate situations, Lenaghan notes.

"When I ran emergency departments, we did de-escalation techniques as part of our annual reviews," she says. "We made sure that the staff knew what to say and how to say it, and the body language to use to de-escalate a situation. Almost everyday nurses and doctors in the ED have to de-escalate some type of situation." ■

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CDC Drafts New Pertussis Guidelines

Updating infection control guideline issued in 1998

The CDC has drafted new pertussis guidance for healthcare workers as part of an ongoing update of its Guideline for Infection Control in Healthcare Personnel. A draft section of pertussis recommendations was discussed at a recent meeting of the CDC's Healthcare Infection Control Practices Advisory Committee (HICPAC).

Pertussis — also called whooping cough — has become a recurrent problem, in part due to the fading efficacy of the vaccine over time. *Bordetella pertussis* can cause hospital outbreaks that expose healthcare workers. The CDC reports that there are from 10,000 to 40,000 cases annually with about 20 deaths.

Antibiotic post-exposure prophylaxis (PEP) typically is given to exposed healthcare workers to prevent transmission to vulnerable patients like infants. HICPAC member **Hilary Babcock**, MD, MPH, medical director of infection prevention and occupational health at Barnes-Jewish Hospital in St. Louis, outlined the pertussis recommendations at a Feb. 15 meeting.

The CDC draft recommendations for asymptomatic healthcare personnel — regardless of vaccination status — who have unprotected exposure to pertussis are broken down into categories with the following recommendations.

Those likely to interact with persons at increased risk for severe pertussis:

• Administer PEP. If they do not receive PEP, restrict from contact (e.g., furlough, duty restriction/reassignment) with patients and other persons at increased risk for severe pertussis for 21 days after their last exposure.

For similarly exposed workers not likely to interact with patients at high risk for pertussis, the HICPAC recommends:

• Administer PEP or implement daily monitoring for 21 days after the last exposure for development of signs and symptoms of pertussis.

"Work restrictions are not necessary for asymptomatic healthcare personnel who have had unprotected exposure to pertussis and receive post-exposure prophylaxis, regardless of their risk for interaction with persons at increased risk for severe [pertussis] complications," the HICPAC draft states.

However, employee health professionals should exclude symptomatic healthcare personnel with known or suspected pertussis from work for 21 days from the onset of cough, or until five days after the start of effective antimicrobial therapy.

"The objective of post-exposure prophylaxis is to prevent transmission and disease in others, and we recognize populations at particular risk for serious complications," Babcock said at HICPAC.

These high-risk patients include:

- infants under 12 months;
- women in their third trimester of pregnancy;
- people with pre-existing health conditions that may be exacerbated by a pertussis infection (e.g., immunocompromised persons and persons with moderate to severe asthma).

Healthcare settings may have patients at high risk for severe pertussis infections in neonatal and pediatric care settings as well as maternity, transplant, and oncology.

"We tried to balance the discussion from the group last time about providing this information, but not be overly prescriptive so that healthcare facilities could identify these areas for themselves," she said.

When finalized, the draft will note the limitations of the current vaccine, which can wane in immunity without booster shots. The HICPAC guidelines will incorporate the recommendations for pertussis vaccination of healthcare workers by the CDC's Advisory Committee on Immunization Practices (ACIP).

ACIP currently recommends that healthcare workers be vaccinated and then receive a booster every 10 years thereafter. Pregnant personnel should be immunized against pertussis during each pregnancy. The HICPAC guidelines also include a discussion of exposures, which will include not wearing a face mask when in close, face-to-face contact with an infectious patient.

"Close contact may include, but is not limited to, performing a physical examination, feeding, or bathing a patient; bronchoscopy; intubation; or administration of bronchodilators," the HICPAC draft guidelines state. "Determination of close contacts may be more inclusive in settings where interaction with persons at risk for severe pertussis is more likely."

The guidance on exposures was appreciated by **Darlene Carey**, RN, a liaison representative for the Association of Professionals in Infection Control and Epidemiology.

"I think a lot of infection prevention and occupational health staff members have concerns about that whenever an exposure happens," she said. ■

The Shocking Suicide Rate in Female Veterinarians

CDC sheds light on healthcare overdoses, PTSD in aid workers

Employee health professionals are probably aware that their colleagues in veterinary medicine are at suicide risk, but there is a striking disparity in terms of gender that is just coming to light. Female veterinarians — the rising demographic in this field of medicine — have a fourfold higher suicide rate than their male colleagues, the CDC recently reported.

Burnout and suicide rates are increasing in medical care, particularly among physicians, but these are the first data that point to the high risk to female veterinarians.

This cutting-edge occupational health information was recently reported by the "disease detectives" in the CDC's Epidemic Intelligence Service (EIS) at a conference in Atlanta. Although the findings come with several caveats — they are often a broad sweep over large data sets — EIS officers identify trends and emerging issues that can predict future public health problems.

Knowing that U.S. male veterinarians had suicide mortality almost twice as high as the general population, EIS investigators sought to identify the suicide risk in female vets. The issue is critical because more and more women are going into the field. Currently, some 80% of U.S. veterinary students are female, and they currently comprise more than half of practicing vets.

12% suicide rate

The EIS investigators looked at death certificates and life insurance databases for veterinarians who died during 1979-2015 to obtain underlying causes of death. Of the 11,620 people analyzed, 11,047 (95%) were male and 573 (5%) were female. A total of 398 (3%) deaths were attributable to suicide. Of those, 326 (82%) suicide deaths occurred among males and 72 (18%) among females.[1]

That translates to a 12% suicide rate for female vets, fourfold higher than the 3% rate for men. Though the reasons for the gender difference are not completely understood, it could be that women are more susceptible to the contributing factors that lead to depression, anxiety, and suicidal ideation in veterinary medicine. It's also possible that, since men have dominated the field over the earlier years studies, more of their deaths may have been

attributed to causes other than suicide, says **Suzanne Tomasi**, MPH-VPH, DACVPM, a CDC EIS officer. It is a troubling finding in any case.

"We know this is a multifactorial problem," she tells *Hospital Employee Health*. "Some of the things include the demands of practice that include long work hours and work overload, along with practice management responsibilities, managing client expectations and complaints."

Though suicide rates are high among physicians who know how to administer fatal doses, veterinarians also have a culture of euthanizing animals to ease suffering.

"Vets have knowledge and training of euthanasia procedures and they are trained to infuse euthanasia as a normal and acceptable method to relieve suffering," Tomasi says. "They have the pharmacological training to calculate a lethal dose. When they do attempt suicide, it is not just an attempt."

In addition, the educational debt-to-income ratio for veterinarians is higher than that of most clinicians, she adds.

There has been some suggestion that euthanizing animals on a regular basis may contribute to depression in vets.

"There are some reports that suggest the mental health effects from euthanizing animals as part of the profession could have a long-term [effect]," she says. "It may add to the multifactorial problems that can build up on each other and lead to anxiety, depression, compassion fatigue, and potentially suicidal ideations."

Efforts to understand and prevent drivers to suicide in female vets are critical as the field continues a demographic shift.

"The profession is definitely trending toward females, and that's where the concern comes in," Tomasi says. "Our concern is that as the population of female vets gets bigger, we will continue to see a [suicide increase] if we don't have suicide prevention resources available to address this problem."

HCW Overdose Deaths

Healthcare and related fields had the fourth-highest rate of opioid overdose deaths, following only construction, miners, and food service, CDC investigators report.

"FINDING THAT HEALTHCARE PRACTITIONERS AND SUPPORT [ARE AT RISK] IS AN IMPORTANT FINDING AND REALLY NEEDS FURTHER RESEARCH."

The data help to characterize which jobs may be most at risk for drug- and opioid-related overdose deaths.

"What an individual does for work has a significant influence on their lives outside of work as well as their physical and psychological well-being," the CDC investigators reported. This study is a first step in understanding what role work plays in the opioid epidemic and provides the groundwork for future research to evaluate the role of work. Additional research is warranted to illustrate how workplace interventions may help in addressing this public health emergency.

In data findings prior to the recent explosion of the opioid epidemic, the U.S. drug overdose mortality rate increased by 137% between 2000 and 2014, largely driven by opioid-related overdoses. The occupational groups with significantly higher proportional mortality ratios (PMRs) included healthcare practitioners and healthcare support, which would include physicians, nurses, dentists, pharmacists, and a variety of support staff. The categories are very broad, and will be subject to further investigation and data refinement.

Among the unanswered questions is the effect of potentially contributing factors like commonly reported healthcare worker injuries, and the longstanding — but largely underground — problem of drug diversion in hospitals. One telling detail is that healthcare-related occupations had the highest PMR for synthetic opioids, including fentanyl. This suggests that — again, before synthetic fentanyl became widely available on the streets — that healthcare workers were overdosing from prescription medications.

"One of our next steps is to partner with states that have more recent data, such as 2016 and 2017," says **Laurel Harduar Morano**, PhD, MPH, an EIS officer. "We will dig further into these subgroups. The groups that we looked at are broad, occupational categories. Finding that healthcare practitioners and support [are at risk] is an important finding and really needs further research."

The next step is refining the data and going beyond death certificates to tighten the focus. For example, the CDC has a number of surveillance programs that would include morbidity information — "people who have survived a drug overdose," Morano says.

International Aid Workers

International aid workers respond to natural disasters and other events that often are marked by violence and chaos. They provide critical care and bear witness to human suffering. Having done so, they may become vulnerable to post-traumatic stress disorder (PTSD).

CDC researchers identified potential risk factors that make it more likely that an aid worker may experience such symptoms. Based on the analysis, women, people who have children, and those previously treated for mental illness were more susceptible to PTSD.

"Establishing these risk factors allows organizations to identify workers who may need additional support, as well as organizational actions that can help workers cope," says **Blanche Greene Cramer**, DrPH, MPH, an EIS officer. "We were looking at workers who would be expatriates in the country where they were working."

They included people from the United States, Europe, and Australia, who were working in other countries in such groups as Doctors Without Borders.

The data are preliminary, but if the risk groups identified are borne out in subsequent analysis, they could be targeted with PTSD prevention strategies. Organizational support would include "providing medical insurance and evaluation, vacation policies, disability insurance, life insurance, a psychological debriefing after deployment, and psychiatric support systems, counseling services," Cramer says.

"We have become aware of the importance of allowing personal phone calls from the field, to be able to connect to folks back at home and feel supported by that network," she adds. ■

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Abstract and Commentary: Mindfulness and Hospital Employee Health

By Ellen Feldman, MD
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Dr. Feldman reports no financial relationships relevant to this field of study.

SYNOPSIS: A review of studies regarding brief mindfulness interventions for healthcare providers found an association with improved measures of provider well-being and no evidence of behavioral changes.

SOURCE: Gilmartin H, Goyal A, Hamati MC, et al. Brief mindfulness practices for healthcare providers — A systematic literature review. *Am J Med* 2017; July 4. pii: S0002-9343(17)30633-2. doi: 10.1016/j.amjmed.2017.05.041. [Epub ahead of print].

The popularity of mindfulness can be a double-edged sword. Some may be wrongfully tempted to dismiss the term as part of a new trend with "Mindful Eating," "The Mindful Teen," and "Mindful Work" publications offering seemingly unlimited possibilities of finding solutions to life problems through this technique. Yet, the concept of mindfulness dates back to the late 1800s, when the term emerged as an adaptation of a Buddhist concept, Sati, one of the factors considered to be on the pathway to enlightenment.[1] This Buddhist construct appears unrelated to the Hindi use of Sati.[2]

About 100 years later, the Buddhist concept was secularized by molecular biologist and meditator Jon Kabat-Zinn, who defined mindfulness as "the awareness that arises through paying attention on purpose in the present moment, and nonjudgmentally."[3]

Medical evidence for use of mindfulness techniques, such as meditation, guided imagery, yoga, and

desensitization-relaxation exercises, coexist with a more casual use in lay literature. Quality studies looking at use of these interventions to decrease stress and improve decision-making are growing.[4] Given the high-tension and high-stakes outcomes inherent in medical practices, it is no surprise that attention has been paid to the use of mindfulness techniques among medical providers.

Preliminary studies show some promise for use of mindfulness interventions in healthcare practitioners, but the time required for training medical providers in these techniques is identified as a limitation to implementation.[5] Brief interventions were developed as an attempt to surmount this obstacle. Gilmartin et al conducted a review of 14 relevant studies to determine if these brief mindfulness interventions showed significant association with improvement in provider well-being and/or behavior. For the study purposes, brief interventions were defined as those with training periods lasting less than four hours. Within this time frame, any technique that fit a general definition of mindfulness was included. Delivery systems ranged from in-person to recordings to virtual.

Measurements of well-being included self-reports of stress and anxiety levels, depression, symptoms of burnout, and quality of life. Behavior changes were more objective and included changes in academic performance, tests of attention, or incidence of diagnostic errors.

Fourteen studies met inclusion criteria, with just more than half of the studies published since 2015. More than 800 healthcare providers participated within hospital or inpatient settings. Studies were drawn from four countries — United States (nine studies), Canada (two studies), Thailand (two studies), and Australia (one study). Almost 80% of the participants were female. Half of the studies were conducted with nurses or nursing students, while the other half used physicians, medical students, or residents.

All 14 studies used multiple measures of provider well-being. Although several of the studies identified significant change in only a subgroup of measures of well-being, only two studies found no significant improvement in any measure of provider well-being. On the contrary, only two studies included an assessment of changes in provider behavior following intervention, and neither found a significant association between a brief mindfulness intervention and change in provider behavior.

This effort to better understand the effect of brief mindfulness interventions on healthcare providers is a welcome approach to a poorly studied area of healthcare: how to best take care of the caregivers. It is tough to argue against the concept that better-functioning providers lead to better medical care, but the scientific connection is essential to explore, delineate, and document.

While looking at the combined results analyzed in this review, it is important to be cautious assigning causality. The heterogeneity of the included studies (in design, population, methodology, and outcomes) makes understanding and generalizing these results particularly challenging. This leads to the hope that the future will bring more robust and rigorously conducted investigations to best understand interventions that offer healthcare providers the maximum benefits.

Do healthcare providers need care? Results of multiple recent studies regarding the rise of burnout in this profession, as well as the association of an engaged and empathic provider to improved care outcomes, suggest the importance of addressing symptoms of stress, anxiety, and burnout in providers.[19,20] It is interesting that this review was not able to identify any provider behaviors that were changed in association with the interventions, but important to note that only two studies attempted measurements in this area. Large-scale studies looking at specific targeted provider behaviors are needed before drawing conclusions regarding brief mindfulness interventions and these type of outcomes.

Prior to this publication, studies of the effect of mindfulness interventions for healthcare providers concluded that the techniques hold promise for the field, but that the time required to train, practice, and implement represented a significant barrier to use in hospital work.[5,21] This review study helps bring some clarification to this area, suggesting that brief mindfulness training is associated with a reduction in healthcare providers' perception of stress and anxiety. The results do not lean strongly toward any one type of training — it may be that the type of mindfulness training is not as important as accessibility to providers.

It is worth noting that although many studies measured lower rates of stress and anxiety, few studies showed an association of these brief measures with reduction in burnout symptoms. This is consistent with other studies in the area of provider burnout that have suggested the need for organizational interventions along with individual interventions to affect this syndrome.[22]

Criteria for inclusion in this review were limited to studies only involving inpatient settings; the results showed no evidence or implication that these brief measures have a place in outpatient settings. Healthcare providers work in many environments — even within the broad categories of inpatient and outpatient work

specifics of job description — patient population, administrative strategies, and mission create unique, site-specific demands and challenges. It is not clear how to generalize results of studies (such as the ones included in this review) to all settings and to all healthcare providers, but it is important to clarify this point through future work. Even though data are lacking, there is little evidence of downsides to the use of brief techniques and time commitment, the only identified barriers to the use of the more comprehensive mindfulness interventions.

In the practice of medicine, we tend to rely on evidence-based studies to make recommendations to our patients. Make no mistake — we should expect no less for ourselves. Despite some limitations to the studies, the results point to clear potential benefits of incorporating a degree of mindfulness into the professional life of healthcare providers. Providers can be confident that trying a time-limited or more extensive mindfulness technique to help modulate stress and/or anxiety has merit and emerging evidence of effectiveness. ■

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HOSPITAL EMPLOYEE HEALTH

CE INSTRUCTIONS

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CE QUESTIONS

1. **The Joint Commission issued a Sentinel Event Alert emphasizing that accreditation standards require measures to protect patients and healthcare workers from violence. Which accreditation standard was cited as applicable for planning to prevent an active shooter incident?**

   a. Leadership
   b. Rights and Responsibilities of the Individual
   c. Environment of Care
   d. Emergency Management

2. **The most common characteristic exhibited by perpetrators of workplace violence is:**

   a. altered mental status.
   b. grievance against co-workers.
   c. history of past trauma.
   d. elaborate planning for the event.

3. **Which of the following was recommended for designing in violence prevention in EDs?**

   a. A "safe room"
   b. Clear lines of sight to other workers on the unit
   c. Avoid waiting room bottlenecks, have patients move in one direction
   d. All of the above

4. **CDC draft guidelines recommend excluding symptomatic healthcare personnel with known or suspected pertussis from work for 21 days from the onset of cough, or until 5 days after the start of effective antimicrobial therapy.**

   a. True
   b. False

CE OBJECTIVES

After reading each issue of *Hospital Employee Health*, the nurse will be able to do the following:

1. Identify particular clinical, administrative, or regulatory issues related to the care of hospital employees;
2. Describe how the clinical, administrative and regulatory issues particular to the care of hospital employees affect health care workers, hospitals, or the healthcare industry at large;
3. Cite solutions to the problems faced in the care of hospital employees based on expert guidelines from relevant regulatory bodies, or the independent recommendations of other employee health professionals.