The classical symptoms of posttraumatic stress disorder (PTSD) result from trauma due to a real or perceived life-threatening event or stressor. Manifestations include intrusive thoughts in the form of flashbacks, nightmares, and vivid imagery; a state of hyperarousal characterized by feeling on-guard, irritable, and easily startled; and avoidance of people, places, thoughts or activities that bring back memories of the trauma. Avoidance behavior often is associated with feeling numb or emotionless, withdrawing from family and friends, or self-medicating with alcohol or other drugs.

RISK TO PHYSICIANS

People at risk for PTSD typically are military personnel and civilians who have been traumatized by war, women who have been raped or sexually or physically abused, and individuals who have been involved in a natural disaster, such as a tornado or an earthquake. PTSD also may occur in healthcare professionals such as paramedics and first responders; very few people, however, appreciate the fact that PTSD may occur in physicians as a byproduct of medical training and practice. The Student BMJ offers the following examples:1

- A doctor arrived on the scene in the immediate aftermath of a bomb and asked a young passerby to help with the injured. Afterward, he believed he had “broken” this young person’s life and had vivid, intrusive images of the “petrified young face.”
- Another doctor felt intensely guilty because she had not stayed with a person who was severely injured in an explosion, despite the fact that not much could be done and she herself was under enemy fire. She appraised her role in a negative way and concluded she was “an appalling, negligent doctor.”
- A third doctor initially interpreted his PTSD symptoms as a “severe mental breakdown.” He believed he would never be able to work again. As his PTSD symptoms abated, he became preoccupied with the belief that he must be “weak” to have been affected by a traumatic experience.

I believe I suffered PTSD during my residency (in psychiatry). One night when I was on call, I was asked to provide a treatment recommendation about a schizophrenic patient
whom I had never seen. My advice was requested over the telephone by an intern in the emergency department who had seen the patient and relayed the history to me. Several hours after our conversation, the physician informed me the patient deliberately and severely harmed himself after leaving the emergency department (the patient jumped from a third-story window in his boarding home and broke his legs). I felt responsible for the patient’s injuries, and I began to experience intense anxiety, as if I had done something terribly wrong. I dreaded being on call, and I tried to avoid seeing difficult patients in the clinic. The anxiety continued after my residency, and I never felt at ease in practice. I eventually left clinical medicine for a career in industry.

**PTSD affects physicians’ well-being and their ability to care for patients.**

In one study of 212 residents, 13% met diagnostic criteria for PTSD attributed to stresses associated with internship. This percentage is much higher than the 8.7% projected lifetime risk for PTSD in the general population in the United States. Recent evidence suggests that PTSD often persists in late life, causing impairment in role functioning, mobility, cognition, and social interactions. For physicians, the implications are obvious: PTSD not only affects their well-being, but also their ability to care for patients.

My review of the literature—most of which is anecdotal rather than based on hard evidence—indicates that certain physicians may be at higher risk for developing PTSD. I consider five categories of physicians most at risk.

**Emergency Medicine Physicians**

Mills and Mills evaluated PTSD in residents in emergency medicine. Of the 59 residents evaluated, all reported experience with patient death or dying. Seven residents (11.9%) reported sufficient symptoms to meet criteria for PTSD. Symptoms of PTSD significantly increased as resident level of training increased. The reason for this trend was unknown, but one possible explanation is that, in some cases, PTSD may result from the cumulative effect of stress over time rather than exposure to a single traumatic event.

Emergency physician Dr. Edwin Leap observed, “A significant number of our colleagues in emergency care . . . become gravely wounded, ironically wounded, one might say, as they try to help and heal. They develop post-traumatic stress disorder. A physician . . . spends decades watching the life-blood drain out of people, giving them bad news, seeing the effects of drugs and violence, and pronouncing people dead . . .” Leap lamented that many physicians with PTSD suffer in silence, and medical stoics consider them “weak for feeling the pain.”

**Physicians Practicing in Underserved Areas**

Ontario family practitioner Dr. Nicola Wilberforce and colleagues evaluated PTSD in 159 physicians practicing in a predominantly rural and remote and medically underserved region of Canada. These investigators found that the prevalence of probable PTSD was 4.4%, which they believed was “unnecessarily conservative.” Physicians identified overwork, insufficient resources, and relationships with colleagues and patients as common stressors.

Interestingly, a large majority of physicians cited work stress rather than significantly traumatic exposures as causing PTSD, further supporting the notion that continuous stress without specific trauma may give rise to PTSD. Not surprisingly, absenteeism from work was significantly greater in physicians with PTSD than those without it. While work productivity was not directly measured in this study, the authors surmised that PTSD could have “profound impacts on work performance [that] would translate into a reduction in the numbers of patients seen and a higher rate of medical error.”

**Medical Residents**

As previously mentioned, survey-based screening studies of residents in training suggest a considerable (12%–13%) rate of PTSD. One of the most compelling cases of PTSD in residents I have come across is described by Dr. Danielle Ofri in her book *What Doctors Feel: How Emotions Affect the Practice of Medicine.*

**Intimidation and bullying may be at the root of some cases of PTSD in trainees.**

Ofri, an associate professor of medicine at New York University School of Medicine, described the story of “Eva,” an intern traumatized when she was forced by a senior resident to enter a supply closet and let a newborn infant die in her arms (the newborn was doomed to instant death due to Potter syndrome). Ofri remarked, “Eva’s residency was truly a traumatic experience in which survival was the mode of operation. And the PTSD that resulted was real.” Ofri, herself, admits to the shame and humiliation of a medication error that nearly killed a patient and her ongoing fear of making another mistake.

Intimidation and bullying may be at the root of some cases of PTSD in trainees. In Eva’s case, an insensitive senior resident was in command and barking orders, forcing her to act against her will. In Ofri’s case, she was gravely reprimanded by a senior resident in the presence of her intern. Ofri felt like “dying away on the spot.” She often relives the details of her mistake, which are “crisply stored in the linings of my heart.”
Physicians Involved in Malpractice Litigation

In their book *Physicians Survival Guide to Litigation Stress,* pulmonologist W. Edward Davis and psychologist John M. James make a convincing case that the symptoms many doctors suffer for years after a malpractice suit best fit the diagnosis of PTSD. Physicians who experience litigation stress tend to revisit many of the painful and distressing memories surrounding depositions and, especially, the trial.

Dr. Thomas L. Schwenk, Dean of the University of Nevada School of Medicine, recently described his experience as a defendant charged with medical malpractice: “In the courtroom, it is an entirely different experience [compared with the medical setting]. The plaintiff’s attorney makes statements that cannot be challenged, makes scientific claims that are fundamentally false, and accuses me of failures to which I cannot respond. I become so phobic about hearing my name that I almost physically jump each time it is said by the plaintiff’s attorney. Eventually I simply cringe at the sound of his voice.”

Schwenk continues, “It is simple to ask questions that make me look incompetent and foolish when I have failed to predict the unknowable future. As the jury is given final instructions, I try to let go of my anxiety about the verdict and my frustration at being unable to control the outcome. I want to focus on my fundamental belief that I did the right thing, that I would make the same decision again (which I would), and that, whatever the jury decides, my life as a physician will go on.”

Unfortunately, for many physicians ensnared in malpractice litigation, ensuing symptoms of PTSD may prevent them from functioning normally again. Functional consequences of PTSD include high levels of social, occupational, and physical disability, as well as considerable economic costs and high levels of medical utilization. Occupational success may be lowered.

Second Victims

“Second victims” are physicians and other healthcare providers involved in unanticipated adverse patient events or medical errors who become victimized in terms of feeling traumatized by the event. Frequently, second victims feel personally responsible for the unexpected patient outcomes and feel as though they have failed their patients. They begin to doubt their clinical skills, knowledge base, and career choice.

Second victims are more or less innocent bystanders to trauma. I believe my own PTSD was the result of being a second victim in the sense that I never saw the patient, nor was I asked to see him. I based my treatment on the word of another physician, albeit a physician with less experience than I. I blamed myself for the bad outcome and regretted not evaluating the patient even though the outcome probably would have been the same had I done the evaluation. Nevertheless, I felt ashamed of my inaction, and I imprisoned myself in a world of “what ifs,” constantly second-guessing my decision-making.

DETECTION AND TREATMENT

According to Dr. James S. Kennedy, formerly a member of the department of medicine at Vanderbilt University, PTSD is an outgrowth of toxic shame. Kennedy commented, “I believe that most physicians have PTSD and that the resulting feeling that physicians ignore most is toxic shame. Shame has been defined as the failure to live up to one’s own expectations. I define shame as a healthy sense that one is limited, and toxic shame as the belief that one is defective.” Apparently, physicians with PTSD are unable to make this distinction.

The road to recovery for physicians with PTSD is difficult, and a full discussion of treatment considerations is beyond the scope of this article. However, a few points should be emphasized.

First, healthcare providers need to maintain a high index of suspicion for PTSD in their physician patients. Physicians, themselves, may not be aware they are suffering PTSD even though they may clearly manifest the symptoms. In one study, only 2% of primary care patients meeting the criteria for PTSD were given a diagnosis of PTSD by their physicians. Attention to a history of trauma, and querying physicians at risk for PTSD about specific symptoms, could improve the detection of this disabling disorder.

Antidepressants and other medications may be useful in selected cases.

Second, cognitive behavioral therapy with a trained psychiatrist, psychologist, or other professional can help change emotions, thoughts, and behaviors associated with PTSD and can facilitate managing panic, anger, and anxiety. In fact, cognitive therapy for PTSD delivered intensively over little more than a week may be as effective as cognitive therapy delivered over three months. Antidepressants and other medications may be useful in selected cases to reduce symptoms such as anxiety, depression, and insomnia, and may decrease urges to use alcohol and other drugs.

Dr. Ellen D. Feld is a physician who helps train physicians’ assistants at Drexel University College of Nursing and Health Professions in Philadelphia, Pennsylvania. When asked about her reluctance to be an organ donor, Feld said her reasons were not rational: “They relate to being a physician and to the trauma of medical training,” she said.
Feld explained, “‘Trauma’ may sound like hyperbole. But however you describe it, medical education is stressful, exhausting, and eye-opening, and most of us emerge from it changed in crucial ways. After taking part in countless ‘codes,’ for example, many of my fellow residents and I vowed never to allow that rib-breaking violence to be inflicted upon our loved ones or ourselves (we joked about getting ‘Do Not Resuscitate’ tattooed on our chests’).”

This brings us to the third and perhaps most important point. Group therapy for trainees and practicing physicians, whether or not they have PTSD, can help them learn to communicate their feelings about trauma and stress and create a support network. Few professions carry the same burden of unrealistically high levels of error-free expectations, personal responsibilities, and the day-to-day levels of stress as that of a practicing physician. If significant progress is to be made in recognizing and treating physicians with PTSD, it may be up to physician leaders to highlight the pressing need for effective support programs to mitigate adverse career outcomes.

Given the vulnerability of medical residents to PTSD, and the potential for symptoms to become chronic, intervention should begin early in training, preferably in medical school. Feld concludes, “Any traumatic experience can have lasting psychological effects, and medical education is no exception. But these effects can be overcome. It is possible to ‘get over it.’”

REFERENCES