



Pennsylvania Patient Safety Reporting System

# Patient Safety Advisory

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## Stress Management in Response to Practice Errors: Critical Events in Professional Practice

Zane Robinson Wolf, Ph.D., R.N., F.A.A.N.  
Dean and Professor, La Salle University School of Nursing

*PA-PSRS invited this article from Dr. Wolf in response to reports submitted to PA-PSRS in which it was evident that healthcare workers also needed support following events involving patient harm. Those readers who have attended PA-PSRS training sessions may remember Dr. Wolf, who was featured in the video Beyond Blame, which was shown during the training sessions.*

*John R. Clarke, M.D., Editor*

Healthcare providers have been educated to believe that they must perform perfectly in clinical practice. Recent studies and initiatives are dispelling this myth and compelling providers to accept their fallibility. Many safety initiatives require nurses, physicians, and pharmacists to change entrenched behaviors and develop additional interdisciplinary skills. However, accepting human imperfections and practicing safety initiatives fail to eliminate the immediate and persistent stress that providers experience because of occurrences involving healthcare errors.

When nurses, physicians, and pharmacists make medication errors, they respond emotionally, socially, culturally, spiritually, cognitively, and physically. They are fearful and distressed by the real or imagined consequences of the mistakes. Chief among providers' concerns is that they have harmed a patient.<sup>1</sup> The personal and professional impact on them is tremendous. The stress that accompanies the error remains throughout the provider's career as situations bring the memory back.

A medication error is described below. In this passage, the nurse expresses her concern for the patient, her embarrassment, and her vow regarding how she intends to behave when colleagues make mistakes:

*I was a new R.N. in PICU. I had previously worked in NICU for several years, so that was the experience, knowledge that I was coming with. Anyway, I had received a 15-year-old boy post-op from open heart surgery. I was to start a calcium infusion, so I did. What I did wrong was I did not run the infusion through a central line, but rather through a peripheral line (this was our practice in NICU). Several hours later, I noticed a red area*

*above his IV dressing, and when I took down the dressing, I realized that he had a calcium burn of about 3 to 4 cm long and 1 to 2 cm wide on his forearm. I immediately stopped the infusion and notified the physician, and told him and his parents what I had done. I was noticeably upset. The physician tried to make me feel better by saying, "At least his fingers won't fall off" which was okay; that comment did not bother me. The charge nurse said, "Don't you know we do not run calcium through peripheral lines here?" That comment upset me greatly—what a stupid thing to say—"Yes I did know but did it anyway?" That night I dreamt that when I removed the dressing from his arm, his fingers were black and fell off. I was scared to come to work the next day and see the shape of his arm. When I arrived at work, I asked the charge nurse (a different one than the previous day) how his arm was. She said, "It is horrible. Who could be so stupid as to do that?" Again, I was horrified. When I did finally get the courage to check his arm, the burn had been reduced to about 1 cm by ¼ cm and was healing wonderfully. If I am ever the one to deal with a medication error, I will never use the words "Didn't you know?" I learned that conscientious healthcare workers who make mistakes will punish themselves way more than we can or ever should. They need our support, not to be belittled and made to feel stupid.*

This critical event, similar to those in which many nurses, physicians, and pharmacists have been involved, provides a picture of hospital life. Analysis of incidents in acute care and other healthcare agencies helps healthcare professionals to evaluate safety systems in work environments.<sup>2-4</sup> The critical-incident

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technique<sup>5,6</sup> and root-cause analysis play a crucial role in determining the patterns and processes involved in healthcare errors and provide options for systems improvements. What is seldom examined using the critical-incident technique is the impact of healthcare errors on the providers involved in the mistakes. Their suffering is often poorly understood. When not supported, they are at risk of exhibiting lower productivity and terminating their employment. Providers may be expected to cope with the aftermath of practice errors. They often must cope alone.

Three types of approaches to healthcare-associated critical events exist, and all three are applicable to practice errors and focus on normal working environments and self-reporting. The critical-incident technique originated with the idea that to be considered critical, an event “must be performed in a situation where the purpose or intent of the act seems fairly clear to the observer.”<sup>7</sup> The technique has been used to stimulate reflection about clinical practice and develop problem-solving skills.<sup>8-11</sup> The critical-incident technique has also been used to evaluate healthcare provider performance<sup>10</sup> and has been used in research.<sup>12-15</sup> The technique provides a method of evaluating systems in work environments that plays a crucial role in interpreting systems behavior.<sup>16</sup> In this last application, the technique revolves around using procedures systematically to identify behaviors that contribute to the success or failure of individuals or organizations in specific situations and, as such, addresses task performance.

Critical-incident stress management (CISM) is a complex program intended to decrease the effects of critical-incident stress before reactions are well established. It has been used to assist healthcare providers who are involved in work-related critical incidents to reduce emotional and physical stress responses associated with serious occurrences. It is intended to promote healthy coping and high morale in organizations.<sup>17,18</sup> In the context of CISM, a critical incident is defined as a traumatic event that is shocking; a strong response occurs during or after the event and can interfere with normal coping abilities. Examples of critical incidents are serious injury, the death or homicide of a staff member at work, line-of-duty injury or death; multiple events that involve serious trauma, the unexpected death or serious injury of an infant or a child, patient suicide, care of perpetrators and survivors of domestic violence, prolonged rescue work, disasters, high-publicity events and crimes, exposure to dismemberment, and assaults directed at the staff.<sup>19-21</sup>

CISM protocols are based on a team approach; the team is composed of mental health professionals and peer-support personnel. Team members attend training programs. Many services, such as defusing, de-

*Clinical practice is high-consequence work performed in high-consequence systems.*

briefing, referral, and education, are provided to personnel involved in traumatic events.<sup>22</sup> Early intervention is emphasized, using needs assessment intended to support involved personnel. Although CISM protocols are typically used to mediate the effects of traumatic experiences on

personnel involved in large-scale missions related to rescue or disaster relief, some programs may be used to support individuals. The core components of CISM are pre-crisis preparation; demobilization and staff consultation (rescuers); group information briefing for stakeholders; defusing; critical incident stress debriefing; individual crisis intervention; family CISM; organization consultation; and follow-up referral.<sup>17</sup>

Healthcare providers work in high-risk areas, and emergency units, operating rooms, and intensive care units are considered to be areas of higher risk than others.<sup>23</sup> Clinical practice is high-consequence work performed in high-consequence systems. Thus, the impact of errors on patients, providers, and family members can be personally devastating. Published accounts on CISM programs do not indicate that crisis counseling has been used explicitly to support health-care providers involved in devastating and serious healthcare error events. Nonetheless, it is worthwhile to apply CISM to “offset the potentially devastating impact that exposure to trauma can have.”<sup>24</sup> The CISM model can be expanded to assist wounded providers who have made errors.

For more than 10 years, the University of Virginia Health System has included a CISM program within its Faculty and Employee Assistance Program (FEAP). The FEAP newsletter provides guidelines on critical-incident stress and its management.<sup>25</sup> The program manager stated that the FEAP program does not differentiate incidents involving healthcare errors and other abnormal stress events. He estimated that each year, the program staff meets with three healthcare providers who have been involved in healthcare errors.<sup>26</sup>

CISM programs have not been consistently used to support healthcare professionals involved in serious

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errors. However, interventions that support recovery are worth considering because of the high likelihood that errors will occur and that providers will suffer from such traumatic events. For example, nurses, pharmacists, and physicians experience a barrage of emotions that exhibit their distress. They feel guilty, worried, nervous, humiliated, uncomfortable, and frustrated; become hyper-vigilant; and wish to make amends. In addition to worrying about how patients suffer because of errors, providers fear facing disciplinary action, being sued, and losing the respect of co-workers, patients, and family members. Providers lose confidence in their clinical abilities and fear being judged as incompetent or careless. Aside from reprimands from colleagues and supervisors, the public disclosure of errors is very embarrassing and takes various forms, including listing of names on incident reports, involvement in root-cause analyses, notations on personnel records, referrals for education and remedial action, criminal prosecution, and termination of employment.<sup>1,27,28</sup> Incidents involving healthcare errors differ from other critical incidents because providers often attribute the occurrence of the mistake to their own performance and to systems problems. The effects of serious practice errors as situational crises include personal uncertainty about performance, changes in family relationships, disruptions of work environments, and potential threats to financial stability. CISM programs support recovery and focus on caring for caregivers. They are professional social support systems staffed by well-trained full-time employees and volunteers. These programs are needed to manage and reduce the stress of healthcare providers. CISM programs augment the support given to healthcare providers by the network of friends, family members, colleagues, and managers as well as supportive patients, patients' family members, nurses, pharmacists, and physicians. They help new and experienced providers deal with the myriad stressors associated with mistakes made at work.

CISM training focuses on the value of human resources to organizations. CISM training is becoming more common and may be helpful for personnel who respond to critical incidents in the workplace. Employee assistance programs have translated the principles and strategies of CISM models, crisis intervention theory, and treatment of traumatized and bereaved individuals into work site interventions.<sup>29</sup> It is important to recognize the need to have CISM programs to assist healthcare providers who have made errors, as those programs have been created to mitigate responses so that suffering is reduced and competent professionals are retained.

Healthcare providers will continue to take personal responsibility for safe practice and to strive to prevent errors. Patient safety committees work determinedly to reduce and eliminate errors and to improve provider safety and agency safety practices, illustrating one aspect of an expanding commitment to safety. Moreover, avoiding punitive responses when providers make mistakes and ensuring that no reprisals occur when errors are reported will help to reduce the amount of additional stress on providers after they make an error. Developing a work culture in which employees communicate freely regardless of authority level will greatly assist safety efforts, as will evaluating provider competencies and supporting ongoing educational programs.

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