EMMYTHOLOGY

Part 3

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EMS Myth #3
Critical Incident Stress Management (CISM) is effective in managing EMS-related stress

Like most, I did not give Critical Incident Stress Management (CISM) much thought when it was introduced into EMS in the 1980s. Intuitively, it seemed like a good idea. Although I was unsure whether stress was more severe or different in EMS than in other occupations, CISM seemed like a benign method of mitigating EMS stress. CISM was integrated into the EMT and paramedic curricula, and we included it in our textbooks. Without looking into it significantly, I made CISM mandatory for all agencies I served as medical director. In fact, I attended a CISM session following a bad accident where two adult women and a six-year-old child burned to death in their car following the impact. I had been at the accident scene and was not particularly distressed following it, but attended the CISM session to show solidarity with the field personnel. The session seemed to go well, although I felt most there were uncomfortable with the process. A few weeks later, I received communications from several firefighters, who basically threatened to get the union involved if CISM continued to be mandatory. They provided research that made me question whether CISM was beneficial. When I looked into it further, I found that CISM in EMS may not hold the promise of continued emotional well-being that its proponents believe.1,2

CISM History
CISM was introduced to EMS in 1983 through an article by Dr. Jeffrey Mitchell published in a trade magazine.3 The process was called Critical Incident Stress Debriefing (CISD) and was described as “an organized approach to the management of stress responses in emergency services. It entails either an individual or group meeting between the rescuer and a caring individual (facilitator) who is able to help the person talk about his feelings and reactions to the critical incident.” Later, the goals of CISD were expanded to include prevention of disorders that may develop as a result of traumatic stress, such as post-traumatic stress disorder (PTSD). It also came to serve as a tool to help identify personnel who should be referred for further treatment; to facilitate verbalization of experiences; to normalize reactions to stressful events; and to improve peer group support and cohesion.4 The name of the process was changed to CISM, purportedly to reflect these more global objectives.

The Scientific Evidence
Although there are numerous studies pertaining to CISM and psychological debriefing, most are anecdotal and of poor scientific quality. The better studies seem to indicate that CISM is, at best, ineffective. Furthermore, some research seems to indicate that CISM may actually make people worse.

Two of the better studies were meta-analyses of other published studies of CISM and psychological debriefing. Meta-analyses of randomized controlled trials, when properly conducted, represent the highest level of scientific validity. The more valid the study, the closer it is to the truth. A well-conducted meta-analysis allows for a more objective appraisal of the evidence, thus leading to resolution of uncertainty and disagreement. In addition, it may reduce the probability of false negative results and thus prevent undue delays in the introduction of effective treatments into clinical practice.

The first meta-analysis evaluated seven studies that specifically examined single-session debriefings performed within one month after a traumatic event. Five of the studies specifically evaluated CISM, and three evaluated non-CISM interventions (a historical group debriefing, a 30-minute counseling session, and education). Six of the reviewed studies utilized non-intervention controls. The researchers reported that non-intervention and non-CISM interventions were found to have improved symptoms of PTSD, but CISM did not improve symptoms and may, for some, have retarded natural resolution. Stated another way, persons who received no intervention and those who received non-CISM interventions actually fared better than those who received CISM interventions. Furthermore, the researchers found that CISD did not improve natural recovery with respect to other trauma-related disorders.8

The second meta-analysis evaluated 11 studies where single-session psychological debriefings were provided within one month after a traumatic event. These authors found CISM neither reduced psychological distress nor prevented the onset of PTSD. They concluded there was no evidence that CISM is a useful treatment for the prevention of PTSD.9
Proponents of CISM attempted two meta-analyses of studies they felt supported CISM. These, however, were extremely flawed and highly criticized by mainstream psychologists. In fact, researchers from the Department of Psychiatry at the Uniformed Services University of the Health Sciences in Bethesda, MD, criticized these two meta-analyses, stating, "Reports cited in a meta-analysis by Everly, Boyle and Lating, and Everly and Boyle, are not representative outcome studies."

Several other studies have questioned the validity of CISM. FEMA commissioned a three-year study on the effectiveness of CISM as an early intervention for traumatic stress in firefighters. Thorough assessments were made of 660 firefighters exposed to critical events, including some involved in the Oklahoma City bombing response. Of these, 264 had attended one or more CISM sessions. Standard objective psychological measures found a weak inverse relationship with negative affectivity and a weak positive correlation with positive world assumptions. That is, participants actually felt worse after the sessions, but overall had better images of the world and their places in it. No relationship was found between debriefing and PTSD.

In the Netherlands, researchers studied 243 traumatized police officers who were assigned to a debriefing group or to one of two control groups. Pre-tests and post-tests were administered. No differences in psychological morbidity were found between the groups at pre-test, at 24 hours post-trauma, or at six months post-trauma. At one week post-trauma, however, they found that debriefed subjects exhibited significantly more PTSD symptoms than non-debriefed subjects. These findings were consistent with an earlier study of debriefing for police officers, conducted by these same researchers, in which a comparison of 46 debriefed and 59 non-debriefed officers found no differences at eight months post-exposure, but significantly more disaster-related hypersensitive symptoms at 18 months post-event in the group that received debriefing.

Following the crash of an air ambulance in British Columbia in which five people died, Canadian researchers evaluated the effectiveness of CISM provided for paramedics, physicians and nurses. They found that CISM did not appear to affect the severity of stress symptoms. They also found that those who had pre-existing stress-management routines appeared to have less severe symptoms at six months post-incident.

Several studies have demonstrated an actual worsening of stress symptoms in people who have received debriefings. In one study, the levels of anxiety and somatization at four months post-accident had declined more in the non-debriefed group, while levels of hostility and psychiatric symptoms had actually risen in the debriefed group. In the same study group three years post-accident, patients in the debriefed group had marginally more severe psychiatric symptoms, more severe pain, had recovered less well, reported more impaired functioning and had greater financial problems as a result of the accident. At 13 months following their injuries, burn patients who had received debriefings actually had worse anxiety, depression and PTSD symptoms compared to the non-debriefed control group.

An early Norwegian study evaluated 115 firefighters involved in a major hotel fire that 47% described as the worst experience they’d ever had. Of these firefighters, 39 underwent formal debriefing. The results showed no significant difference between the debriefed group and the group that simply talked to their colleagues. In addition, they found that in spite of an extreme stress situation, the frequency of disturbing stress reactions following the event was low.
"No Longer Recommended"

Because research is starting to show that CISM and similar interventions are harmful, numerous organizations are dropping or forbidding the practice. The National Institute of Mental Health (NIMH), in conjunction with the U.S. Department of Health and Human Services, Department of Defense, Department of Veterans Affairs, Department of Justice and American Red Cross, held a workshop to reach consensus on best practices in evidence-based early psychological intervention for victims/survivors of mass violence. In its report, following an exhaustive review of world literature on the subject, that panel specifically did not recommend CISM or psychological debriefing as an early-intervention practice.

In a recent document on mental health in emergencies, the World Health Organization (WHO) stated, “Because of the possible negative effects, it is not advised to organize forms of single-session psychological debriefing that pushes persons to share their personal experiences beyond what they would normally share.”

Following a systematic evidence-based review, backed by an expert consensus panel, the British Health Service listed routine debriefing as a contraindicated procedure. They concluded, “Review of the best-designed studies suggests that routine debriefing (a single-session intervention soon after the traumatic event) is not helpful in preventing post-traumatic disorders.”

The North Atlantic Treaty Organization (NATO)-Russia Advanced Research Workshop on Social and Psychological Consequences of Chemical, Biological and Radiological Terrorism, convened to discuss the social and psychological implications of terrorism, similarly concluded, “There is still no consensus on the role, if any, of very acute interventions. CISM can no longer be recommended.”

In its guidelines for the 2000 Olympic Games in Sydney, the New South Wales (Australia) Health Department, did not recommend CISM. They concluded that, “There is no evidence that (CISM) prevents PTSD or other psychological morbidity, and it may make some people worse.”

The Australian Critical Incident Stress Association (ACISA), in their Guidelines for Good Practice for Emergency Responder Groups, stated, “Experience and systematic investigations have revealed a marked discrepancy between outcomes once presumed to be achievable (Mitchell, 1983; Mitchell and Everly, 1995) and those that can be reliably delivered (Rose and Bisson, 1998).”

British Navy researchers performed a narrative review of various studies related to psychological debriefing and CISM with particular emphasis on how it impacted the British Royal Navy and Royal Marines. They concluded that, “Psychological debriefing cannot be considered safe, and thus it should not be routinely used.”

Conclusion

Why doesn’t CISM work? It appears that CISM and other forms of psychological debriefing may actually interfere with the natural recovery process inherent in normal individuals. The alternation of intrusive and avoidant thoughts characterizes normal psychological processing following a traumatic event that may be disrupted by this approach to intervention. CISM may also lead affected personnel to bypass established personal support systems (family, friends, coworkers, clergy) usually used for non-occupational-related crises in the belief that the CISM session should be sufficient to alleviate their distress. Furthermore, a certain amount of time appears necessary for an individual to process the psychological impact of exposure to a traumatic event, and no external stimulus or program may be capable of

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shortening this interval. Thus, what role should mental health play in modern emergency services? Several organizations and researchers have addressed this issue. Leading psychological researchers who specialize in traumatic stress,2 the NIMH and the WHO5 have recommended that competent mental health personnel provide psychological first aid to trauma survivors. This includes such things as listening to rescuer concerns, conveying compassion, assessing needs, ensuring that basic physical needs are met, and protecting the rescuer from further harm. Most important, those who do not wish to talk should not be compelled to talk. For those who want to talk, somebody should be there simply to listen—not to provide any sort of care or intervention. In addition, education and information can be provided to better help personnel understand psychological trauma, specifically what to expect and where to get help if needed. If additional help is needed, affected personnel should be referred to competent, licensed mental health professionals with experience treating trauma-related stress. Psychological first aid is not an intervention technique, but only provides practical supportive care while at the same time respecting the wishes of those who may not want to discuss what happened or are not ready to deal with a possible onslaught of emotional responses in the early days following exposure. They do, however, recommend that competent mental health personnel be available within two months of a critical incident to screen and assist any personnel who may be developing stress-related symptoms or PTSD.

Recently, the negative effects of CISM were described to me by a paramedic who works in a small town in Texas. Following a call where a child died, she and coworkers were forced to attend a CISM session. She reported that none of the personnel involved were particularly distressed after the call, and she felt the CISM session was unnecessary. After the session, she reported that all who attended were uncomfortable and actually felt worse. She felt the facilitator chastised them for not feeling particularly bad after the call. It was not a positive experience.

Several years later, this paramedic’s partner was accidentally killed. Following this tragedy, the EMS service she worked for assumed that her physical and emotional needs were met. No CISM or debriefing was provided, but they arranged for her to speak with a professional therapist, who simply allowed her to talk. She reported that in contrast to her earlier CISM session, she felt much better after the latter approach and was able to return to work sooner than expected.

The last thing we want to do is provide a service that may actually harm our colleagues. Like many archaic and anecdotal EMS practices, CISM is a bad idea and does not work. Let’s put it behind us and practice, instead, simple psychological first aid.

**Next Month: EMS Myth #4**

Lights and sirens save a significant amount of travel time and lives

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**References**


