

CISM—A Rational Perspective

By Bryan E. Bledsoe, DO, FACEP, EMT-P

It has always surprised me that we emergency services folk are quick to embrace a concept or practice simply because someone with authority tells them it is proper. Such was the case with Critical Incident Stress Management (CISM), introduced to the EMS community in a 1983 issue of the *Journal of Emergency Medical Services (JEMS)*.¹ Following that, it was widely adopted and practiced throughout the emergency services community. But, the problem with CISM was that it was just an idea—a concept—that was never adequately tested before it was adopted lock, stock and barrel by the emergency services community. And, despite mounting scientific evidence that CISM is ineffective and potentially harmful, it is still widely practiced.²

My daughter is a college freshman. She recently pointed out the following paragraph in her freshman psychology textbook:

“For example, in the aftermath of natural and human-made disasters, from earthquakes to terrorist attacks, disaster therapists often arrive on the scene to treat survivors for symptoms of trauma. Survivors are pressured or even required to attend one or more trauma-therapy sessions. The therapists’ intentions are obviously well-meaning. But consider what the research shows about a popular intervention program called Critical Incident Stress Debriefing (CISD). It’s practitioners ‘debrief’ people after a trauma, telling them what symptoms to expect and often encouraging them to vent their emotions. Yet independent assessments of CISD find that most people benefit just as much by simply talking with friends and other survivors. Sometimes the CISD intervention slows recovery, by preventing victims from drawing on their own wellsprings of resilience. And sometimes the intervention actually harms people because of

the scientifically unsupported techniques the therapists use, such as having survivors keep ventilating their emotions without also learning good methods of coping.”³

Following the attack on the World Trade Center and the Pentagon in 2001, an article appeared in the *Wall Street Journal’s* magazine, *Smart Money*. That article, entitled “Good Grief!,” detailed the problems with grief counseling and specifically addressed the problems with CISM.⁴ It is clear that mainstream psychology and even the general public are aware of the problems associated with CISM. Why has EMS not dropped this practice?

The CISM Debate

Proponents of CISM often cite “numerous studies” that reportedly support the effectiveness of CISM. But, you should closely look at these articles before simply accepting them as valid. Most are from trade magazines, obscure mental health journals, non-published graduate school dissertations or from papers written by those who have a financial interest in CISM. In fact, many of these “numerous studies” are published in the *International Journal of Emergency Mental Health* which is owned and edited by the founders of CISM and affiliated with the International Critical Incident Stress Foundation.

Because CISM was launched without any significant scientific evidence to support its practice, mainstream psychological and psychiatric researchers have subsequently studied the practice. Their findings might surprise you. Not only did they find that CISM was ineffective in mitigating stress associated with emergency services, it actually may have made some people worse. These findings have been robust in numerous subsequent studies. Also, when you look at the studies that are critical of CISM you will find that they are published in some of the most prestigious scientific journals in the world.

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. That is, 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 evaluated⁷ studies that specifically evaluated single session debriefing performed within one month after a traumatic event. Five of the studies specifically evaluated CISM, and three evaluated non-CISM interventions (historical group debriefing, a 30-minute counseling session and education). Six of the studies reviewed utilized non-intervention controls. The researchers reported that non-CISM interventions and no intervention were found to have improved symptoms of PTSD, but CISM did not improve symptoms and may have retarded natural resolution for some. Stated another way, persons who received no intervention and those that received non-CISM interventions actually fared better than those who received CISM interventions. Furthermore, they found that CISD did not improve natural recovery with respect to other trauma-related disorders.⁵ The second meta-analysis evaluated 11 studies where single session psychological debriefing was provided within one month after a traumatic event. They found CISM did not reduce psychological distress nor prevent the onset of PTSD. They concluded that there was no current evidence that CISM is a useful treatment for the prevention of PTSD.⁶ Proponents of CISM attempted two meta-analyses of studies they felt supported CISM.^{7,8} But, these 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, Maryland 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."⁹

Several other studies have questioned the validity of CISM. The Federal Emergency Management Agency (FEMA) commissioned a three-year study on the effectiveness of CISD as an early intervention for traumatic stress in firefighters.^{10,11} Thorough assessments were made of 660 firefighters exposed to a critical event—including some firefighters 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 a better image of the world and their place 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, or at six months post-trauma. At one week post-trauma, they found that debriefed subjects exhibited significantly more PTSD symptoms than non-debriefed subjects.¹² These findings were consistent with an earlier study of debriefing for police officers, conducted by these same researchers¹³, where comparison of 46 debriefed and 59 non-debriefed officers found no differences at eight months post-exposure, but significantly more disaster-related hyper-arousal symptoms at 18 months post event in the group who 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.¹⁴ 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 the people who received debriefing. In one study, the levels of anxiety and somatization at four months post-incident had declined more in the non-debriefed group, while levels of hostility and psychiatric symptoms had actually risen in the debriefed group.¹⁵ In the same study group, three years post-incident, 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.¹⁶ At 13 months following their injuries, burn patients who had received debriefing actually had worse anxiety, depression and PTSD symptoms compared to the non-debriefed control group.¹⁷

An early Norwegian study¹⁸ evaluated 115 firefighters involved in a major hotel fire that 47 per cent described as the "worst experience they ever had." Of these firefighters, 39 underwent formal

debriefing. The results showed no significant difference between the group who was debriefed and the group who 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 were low.

Because the 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, the U.S. Department of Defense, U.S. Department of Veterans Affairs, the U.S. Department of Justice and The American Red Cross, held a workshop to reach consensus on best practices in evidenced-based early psychological intervention for victims/survivors of mass violence. In its report, following an exhaustive review of the world literature on the subject, that panel specifically did not recommend CISM, or psychological debriefing as an early intervention practice.¹⁹



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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 push persons to share their personal experiences beyond what they would normally share."²⁰

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."²¹

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, off very acute interventions. CISD debriefing can no longer be recommended."²²

The New South Wales (Australia) Health Department did not recommend CISD in the guidelines for the 2000 Olympic Games in Sydney, Australia. They concluded that: "There is no evidence that it [CISD] prevents PTSD or other psychological morbidity and it may make some people worse."²³

The Australasian 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)"²⁴

What should we be doing?

So, if CISM is bad, what should we be doing? There are actually three types of EMS stresses.

Daily Stresses: In the overall scheme of things, most EMS stress is not related to critical incidents and disasters, but related to such things as pay, working

conditions, dealing with the public, administrative matters and the other hassles of day-to-day living. All emergency services personnel should develop personal stress management strategies to help deal with these. This includes developing a personal support system which may include co-workers, family, clergy and others with whom you can talk and express your feelings and emotions. These strategies will not only help with day-to-day stresses, but also with any major incidents.

Small Incidents: Small incidents, including those where there are injuries or deaths of emergency workers, are best handled by competent mental health personnel in an individual or small group setting. These personnel should be familiar with the emergency services organization and be ready to respond when needed. Emergency personnel should not be "debriefed" or be forced to attend mandatory mental health sessions. Mental health personnel should continue to screen affected personnel for signs and symptoms of abnormal response to the stress and, if detected, refer them accordingly to competent mental health personnel who use accepted mental health techniques in treatment.

Large Incidents and Disasters: Most emergency services personnel will never encounter a disaster situation. However, all must be ready in case such a catastrophe occurs. The stress of large scale disasters can be mitigated by a well-coordinated and organized response. Use of the Incident Command System (ICS) serves to appropriately direct responding personnel. It also rotates personnel through rehabilitation and surveillance stations to monitor their physical and mental health. Those who are showing signs of stress or fatigue should be removed from duty—at least temporarily. Here too there is a role for competent mental health personnel. They should be readily available to provide what experts call "psychological first aid." This entails:

- listening;
- conveying compassion;
- assessing needs;
- ensuring that basic physical needs are met;
- not forcing personnel to talk;
- providing or mobilizing company from family or significant others;

- encouraging, but not forcing, social support; and
- protection from additional harm.

In addition, information and education may be provided to help understand trauma, what to expect, and where to get help if needed. "Psychological first aid" is not a packaged or proprietary intervention technique, but instead is an attempt to provide practical palliative care and contact while respecting the wishes of those who may not be ready to discuss what happened or to deal with a possible onslaught of emotional responses in the early days following exposure. The recommendations add the caveat that competent mental health personnel be available within two months following a critical incident to screen and assist anyone who may be developing stress-related symptoms or PTSD.

Conclusions

There is a limited amount of quality scientific studies related to CISM and CISD. However, the better studies raise serious doubts about the effectiveness of CISM, and some studies seem to indicate that CISM and CISD may actually be harmful. This should be ample reason to reconsider the practice. Additional randomized controlled trials are needed to more fully determine the effectiveness of these practices. The absence of demonstrated effectiveness and the demonstrated potential for iatrogenic injury requires that CISM and CISD be utilized with extreme caution, if at all, in emergency services. ■

About The Author.

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References

1. Mitchell J. When Disaster Strikes... The Critical Incident Debriefing Process. Journal of Emergency Medical Services (JEMS). 1983;8(1):36-39.

2. Bledsoe BE. Critical Incident Stress Management (CISM): Benefit or Risk for Emergency Services? Prehospital Emergency Care. 2003;7:272-279.

3. Wade C, Tavis C. Psychology. Seventh Edition. Upper Saddle River, NJ: Prentice-Hall, 2003, p. 643

4. Kadet A. "Good Grief!" Smart Money. 2002;June, pp. 108-114

5. Van Emmerik AAP, Kamphuis JH, Hulsbosch AM, Emmelkamp PMG. Single-session debriefing after psychological trauma: a meta-analysis. Lancet. 2002;360:766-771.

6. Rose R, Bisson J, Wessley S. Psychological debriefing for preventing post traumatic stress disorder (PTSD) (Cochrane Review). The Cochrane Library. 2002;4.

7. Everly GS, Flannery RB, Eyler VA. Critical Incident Stress Management (CISM): A Statistical Review of the Literature. Psychiatric Quarterly. 2002;73(3):171-182.

8. Everly GS, Boyle SH. Critical incident stress debriefing (CISD): a meta-analysis. International Journal of Emergency Mental Health. 1999;3:165-168.

9. Fullerton CS, Ursano RJ, Vance K, Lemming W. Debriefing following trauma. Psychiatric Quarterly. 2000;71:259-276.

10. Harris MB, Stacks JS. A three-year five state study on the relationships between critical incident stress debriefings, firefighters' disposition, and stress reactions. USFA-FEMA CISM Research Project. Commerce, TX, Texas A&M University—Commerce, 1998

11. Harris MB, Balo-lu M, Stacks JR. Mental health of trauma-exposed fire-

fighters and critical incident stress debriefing. Journal of Loss and Trauma. 2002;7:223-238

12. Carlier IVE, Voerman AE, Gersons BPR. The influence of occupational debriefing on post-traumatic stress symptomatology in traumatized police officers. British Journal of Medical Psychology. 2000;73:87-98.

13. Carlier IVE, Lamberts RD, van Ulchelen AJ, Gersons BPR. Disaster-related post-traumatic stress in police officers: A field study of the impact of debriefing. Stress Medicine. 1998;14:143-148

14. Macnab AJ, Russel JA, Lowe JP, Gagnon F. Critical incident stress intervention after loss of an air ambulance: two-year follow-up. Prehospital Disaster Med. 1999;14(1):8-12.

15. Hobbs M, Mayou R, Harrelson B, Worlock P. A randomized controlled trial of psychological debriefing for victims of road traffic accidents. Br Med J. 1996;313:1438-1439

16. Mayou RA, Ehlers A, and Hobbs M. Psychological debriefing for road traffic accident victims: Three-year follow-up of a randomized controlled trial. Br J Psychiatry. 2000;176:589-593.

17. Rose S, Brewin CR, Andrews B, Lirk M. A randomized controlled trial of individual psychological debriefing for victims of violent crime. Psychological Medicine. 1999;29:793-799.

18. Hytten K, Hasle A. Fire fighters: A study of stress and coping. Acta Psychiatr Scand. 1989;80:50-56.

19. National Institute of Mental Health. Mental Health and Mass Violence: Evidence-Based Early Psychological Intervention for Victims/Survivors of

Mass Violence. A Workshop to Reach Consensus on Best Practices. NIH Publication No. 02-5138, Washington, D.C., U.S. Government Printing Office, 2002. (available at <http://www.nimh.nih.gov/research/massviolence.pdf>).

20. World Health Organization. Mental Health in Emergencies: Mental and Social Aspects of Populations Exposed to Extreme Stressors. Geneva. World Health Organization (available at http://www5.who.int/mental_health/download.cfm?id=0000000640).

21. Parry G (Chair, Development Group). Evidence-Based Treatment Guidelines in Psychological Therapies and Counselling. Department of Health, National Health Service, United Kingdom, (available at <http://www.aaebs.org/guideline/BritishDeptHealth.pdf>).

22. North Atlantic Treaty Organization. North Atlantic Treaty Organization (NATO)-Russia Advanced Research Workshop on Social and Psychological Consequences of Chemical, Biological, and Radiological Terrorism. (available at <http://www.nato.int/science/e/020325-arw2.htm>).

23. New South Wales Health Department. Disaster Mental Health Response Handbook: An Educational Resource for Mental Health Professionals Involved in Disaster Management. NSW Health Department, Sydney, NSW, 2000 (available at <http://www.nswiop.nsw.edu.au>)

24. Australasian Critical Incident Stress Association. Guidelines for Good Practice for Emergency Responder Groups in Relation to Early Intervention after Trauma and Critical Incidents (Glenelg Declaration) 1999 (available at <http://www.ctsn-rcst.ca/glenelg.html>)

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