

# Is Critical Incident Stress Management Effective?

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As this crisis intervention program undergoes scientific scrutiny, its efficacy has been called into question. These authors explore the discrepancies behind study findings that vary widely.

**S**tress is very much a part of the human experience, and there are probably as many different types of stress reactions as there are potential stressors. Stress reactions may be influenced by a person's knowledge and experience, as well as by his or her level of physiologic and emotional fatigue, but traumatic experiences are long remembered by the individuals involved.<sup>1</sup>

Across the stress continuum, certain traumatic events have the potential to affect those involved tremendously. These events are referred to as critical incidents, and the state of cognitive, physical, emotional, and behavioral arousal that accompanies them is known as critical incident stress.<sup>2</sup>

Certain professionals whose work involves responding to serious incidents and disasters—such as emergency medical technicians (EMTs), firefighters, police officers, and health care providers—frequently face situations that elicit unusually strong emotional reactions and have the po-

tential to interfere with their ability to function either at the scene or later.<sup>3</sup> This critical incident stress may cause these professionals to become secondary victims of trauma, the psychological impact of which can range from work-related burnout to post-traumatic stress disorder (PTSD).<sup>1</sup>

In order to help such professionals cope with critical incident stress, JT Mitchell provided a formal framework known as critical incident stress management (CISM).<sup>4</sup> The effectiveness of CISM has been the focus of many studies, the findings of which have varied greatly. As a result, conflicting research has shown CISM to be beneficial, ineffectual, or even harmful.

This article aims to address the efficacy of CISM in preventing the development of psychological symptoms from exposure to critical incident stressors in secondary victims of trauma, such as support staff members of organizations whose goal is to help those who have experienced a traumatic event. We discuss the components of the CISM program and summarize favorable and unfavorable research regarding its value. We then analyze methodologic flaws in all studies discussed and make recommendations for future crisis intervention programs and further research.

## A MULTICOMPONENT SYSTEM

CISM refers to an integrated, multi-component crisis intervention system that employs numerous technologies

to address potential problems within the precrisis, acute crisis, and postcrisis phases of critical incidents.<sup>4,5</sup> This system consists of eight components: preincident intervention; demobilization and staff consultation or, for larger groups, crisis management briefing; defusing; critical incident stress debriefing (CISD); individual crisis intervention; pastoral crisis intervention; family crisis intervention and organizational consultation; and follow-up and referral for assessment and treatment. (Table 1).<sup>5</sup>

None of these components is a stand-alone process; all are meant to be provided as part of an integrated package of interventions.<sup>2</sup> One component, however, has received more attention and professional scrutiny within the field of mental health than the others: CISD.

The concept of CISD evolved in an attempt to combat the effects of psychological trauma associated with the experiences of emergency workers, and it has since been used in the treatment of other professionals exposed to critical incident stress. Like the umbrella CISM program to which it belongs, CISD is predicated on the assumption that exposure to critical incident stress may elicit symptoms that go beyond what the individual can manage effectively on his or her own.

Typically, the formal CISD is led by a qualified mental health practitioner one to 10 days after the conclusion of the incident and consists of seven

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Continued on page 17

Continued from page 15

phases (Table 2). This structured group discussion was designed to assist a homogeneous group of people after exposure to the same significant, traumatic event.<sup>2</sup> It is not meant to replace psychotherapy, nor is it meant to be used outside of the context of the CISM program. Unfortunately, several of the studies that purport to evaluate CISM focus exclusively on CISD, which is one reason that the efficacy of CISM has been so hotly debated.

**STUDIES SUPPORTING EFFICACY**

**CISD following civil disturbance**

Wee and colleagues studied the effects of CISD on EMTs following the 1992 Los Angeles civil disturbances that erupted after a predominantly white jury acquitted four police officers accused in the videotaped beating of black motorist Rodney King. The authors sent 66 surveys to emergency providers approximately two months after the riots. Of those responding, 42 had participated in a Mitchell-style CISD and 23 had not. Investigators used the Fredrick Reaction Index-Adult (FRI-A) to detect the presence of PTSD symptoms and measure the degree of their severity. Those respondents who participated in a CISD session reported fewer symptoms and scored significantly lower on the FRI-A compared to those who did not participate in CISD.<sup>6</sup>

**CISD for firefighters**

The Los Angeles County Fire Department has one of the oldest CISM programs in the United States. In 1996, Hoakanson and Wirth conducted a survey of 2,073 Los Angeles County firefighters to assess their attitude toward the CISD component of the program. The survey sought to determine: (1) whether CISD participants found the debriefings helpful, (2) how soon after the debriefings they noticed

**Table 1. The components of critical incident stress management<sup>1,5</sup>**

Component	Description
Preincident intervention	Aims to strengthen potential vulnerabilities and enhance psychological resiliency in individuals at risk for psychological crises or trauma. Includes preincident preparation, behavioral response preparation and rehearsal, familiarization with common stressors, stress management education, stress resistance training, and crisis mitigation.
Demobilization and staff consultation/crisis management briefing	Provides an opportunity for temporary psychological “decompression” immediately after exposure to a critical incident. For groups of 300 or more, crisis management briefing (held in a town-meeting style) may be most appropriate to disseminate timely information.
Defusing	Aims to assess, triage, and mitigate acute symptoms in a small group through a three-phase, 45-minute, structured discussion provided within hours of a crisis.
Critical incident stress debriefing	Focuses on psychological and emotional aspects of the event (as detailed in Table 2) in a seven-phase, structured, group discussion. Conducted one to 10 days after the incident.
Individual crisis intervention	Consists of one to three contacts with an individual in crisis, with each contact lasting from 15 minutes to more than two hours, depending on the nature and severity of the crisis.
Pastoral crisis intervention	Integrates traditional crisis intervention with pastoral-based support services.
Family crisis intervention and organizational consultation	Provides systems-level crisis intervention for both family and organizational members in a group setting, with a focus on support and communication.
Follow-up and referral for assessment and treatment	Provided to individuals for whom acute crisis intervention techniques prove insufficient.

Continued on next page

# CRITICAL INCIDENT STRESS MANAGEMENT

Continued from previous page

significant symptom reduction, (3) how stress symptoms after CISD compared with stress symptoms following critical incidents of similar severity for which they were not debriefed (particularly in terms of time until significant symptom reduction), and (4) whether they would recommend the debriefing process to others. Respondents reported significantly faster symptom reduction following incidents for which they were debriefed, and the majority of those individuals reported that they would recommend the debriefing process to others.<sup>7</sup>

## THE EVIDENCE AGAINST

### Crisis intervention for road trauma

Brom and colleagues randomly assigned 83 subjects who had been involved in moderate to severe traffic accidents in the Netherlands to an intervention or control group. The former, a CISM-like program that combined practical help, information, support, reality testing, confrontation with the experience, and appropriate referral for psychotherapeutic treatment, involved four contacts over a six-month period. Using the Impact of Event Scale, Trauma Symptom Survey, and Evaluation Questionnaire, the intervention and control groups were assessed at one and six months after the accident. Although more than 90% of the subjects in the intervention group were content with the intervention, the two groups demonstrated no significant differences in improvement at six months. Therefore, the effectiveness of the psychological intervention could not be proven.<sup>8</sup>

### Single-session debriefing after psychological trauma

Van Emmerik analyzed seven studies that involved single-session debrief-

Phase	Intervention
Introductory	Team members are introduced. Rules are explained. Confidentiality and respect are discussed. Participants are assured that open discussion of feelings is not to be used against them. This is not a scene critique.
Fact	Participants discuss the incident and their individual roles in it.
Thought	Participants share what they thought while on scene.
Reaction	Participants describe how they felt while on scene, the worst aspects of the event, and how they have been feeling since the incident.
Symptom	Participants report any unusual experiences that occurred at the time of the incident or since that time.
Teaching	Facilitator discusses commonalities, describes the stress response syndromes, reinforces that they are normal, and provides additional available resources.
Reentry	Facilitator answers outstanding questions, provides assurance, and suggests direction to take after the debriefing. Events, such as memorial services, may be planned.

ing performed within one month of trauma. Symptoms were assessed on the basis of widely accepted clinical outcome measures, and data from psychological assessments were collected before and after the interventions. Five studies were randomized, controlled trials; one was a nonrandomized, controlled trial; and one included no controls.

After statistical analysis, the authors concluded that non-CISD interventions and no interventions improved symptoms of PTSD but that CISD did not improve symptoms. They went on to say that CISD has no efficacy and even may be detrimental to participants.<sup>9</sup>

### A proposed explanation

Herbert and Sageman have hypothesized that, in the acute period follow-

ing an intense trauma, physiologic arousal may promote susceptibility to suggestion in those who have experienced trauma.<sup>10</sup> Through this process, they hold, the teaching phase of CISD may inadvertently cause some of the very symptoms it is designed to alleviate.

In other words, CISD may make trauma survivors hypersensitive to their own reactions to a traumatic event. Learning what symptoms to expect may increase self-directed focus of attention, exacerbating or bringing on symptoms. The notion that traumatic symptoms should receive professional attention also may cause survivors receiving CISD to view such symptoms as maladaptive. As a result, survivors who do develop symptoms may view such symptoms as beyond their control or ability to

Continued on page 25

Continued from page 18

deal with them, thus beginning a stress reaction that could go on to fuel PTSD.<sup>11</sup>

Furthermore, Gist and Woodall suggest that, by participating in CISD, trauma survivors may overlook or underutilize other mechanisms of support, such as coworkers, family members, and friends.<sup>12</sup>

### FLAWS IN METHODOLOGY

The literature pertaining to CISM and CISD has several methodologic flaws, most notably the lack of consistent terminology. Many authors, such as Van Emmerik, fail to differentiate CISM and CISD and use the terms “counseling,” “psychotherapy,” and “crisis intervention” as if they were synonymous, grouping all under the label of CISD.<sup>2</sup>

Not only have investigators evaluated distinct interventions as if they were identical, but they have used variable outcome measures to determine their efficacy, thus making it difficult to compare outcomes across different studies. In future CISM research, investigators should evaluate

outcome measures, it is difficult to dismiss such claims.

Further compounding the confusion, in many of the reviewed studies, CISD is used as a stand-alone measure, which was never the intention of those who introduced it within the context of crisis intervention. CISD is meant to be used as one component of the larger concept of CISM. Research needs to focus on the effectiveness of CISM when all components are employed and not concentrate on effects observed one month after a single debriefing, as in the studies reviewed by Van Emmerik.

It is also difficult to find studies of CISM or CISD that employ true randomization. Wee and colleagues, as well as Hoakanson and Wirth, conducted studies based on surveys. Their control groups were either people who were not given the opportunity to undergo CISD or people who chose not to do so. It is difficult, of course, to deny individuals access to intervention for the purpose of research. The priority of CISM is to provide assistance to secondary vic-

tim discuss emergency services personnel as possessing a number of personality characteristics that are distinctive to those in their profession: a great need for control, an action orientation, a high level of dedication, a need for immediate gratification, risk taking tendencies, and a strong need to be needed.<sup>14</sup> As secondary victims of trauma, emergency services personnel may find that these unique personality traits and psychological needs make them more amenable to the process of CISM than those in other professions. As such, attempts to apply CISM beyond this group could be expected to produce variable results.

### FUTURE RECOMMENDATIONS

Despite discrepancies in the medical literature, CISM has long been held to be efficacious in a wide variety of crisis situations. As such, CISM should continue to be offered to secondary victims of trauma. Involvement in CISM, however, needs to be voluntary. It is important for critical incident teams to ensure that the individuals leading the debriefing sessions are trained mental health professionals and are well versed in the Mitchell model of CISM. In addition, it is essential that participants have easy access to all components of CISM, including adequate follow-up and proper referral if needed.

Rescuers will continue to face critical incidents that cause them to become secondary victims of trauma. Additional empiric studies are necessary to examine further the effects of CISM, but the program should be studied in its entirety, not through investigations narrowly focused on its CISD component. ●

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the formal CISM model and standardize outcome measures, allowing for better comparison between studies. McNally and colleagues surmise that some participants in crisis intervention studies who endorse CISD and describe its helpfulness are expressing gratitude for the counselors' efforts rather than reporting actual treatment efficacy.<sup>13</sup> Without standardized

tim

tims of trauma, and randomization is viewed by many as intentionally withholding such assistance.

Finally, the fact that Mitchell's intended target group for CISM is secondary victims of trauma—specifically, emergency services personnel—raises the question: Can results achieved by this unique group be generalized? Mitchell and Bray often

Continued on next page

# CRITICAL INCIDENT STRESS MANAGEMENT

Continued from previous page

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