Crisis Debriefing Groups for Emergency Responders: Reviewing the Evidence

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Rescue workers who are exposed to mutilated bodies, mass destruction, multiple casualties, and life threatening situations may become the hidden victims of disaster. In response to concerns about the mental health implications of exposure to workrelated trauma in emergency service personnel, the crisis debriefing model has arisen as an early intervention strategy designed to mitigate stress reactions. Recently however, controversy has arisen about the efficacy of the crisis debriefing group model. Initial reports supporting the efficacy of crisis debriefing groups have relied on anecdotal evidence, client satisfaction surveys, and clinical impressions of group leaders. Subsequent research has suggested that the model fails to reduce and may in fact exacerbate symptoms of post-traumatic stress disorder (PTSD). This article reviews the crisis debriefing model as it has been applied to workers in various emergency fields and discusses the conflicting data surrounding efficacy. It concludes that there is some empirical support for the social support and psychoeducational components of the model. However, the component of the model that reviews graphic details of the event may increase intrusion symptoms through a process of vicarious traumatization. [Brief Treatment and Crisis Intervention 1:87–100 (2001)]

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On September 11, 2001, the unthinkable occurred. In one single, coordinated terrorist attack, thousands of Americans lost their lives. During the rescue efforts, more than 200 fire-fighters and 86 police officers were lost. In the weeks that followed, other emergency responders worked tirelessly to recover bodies of the missing. The contributions of these heroes will not be forgotten. The impact of this event on the individual rescue workers and their organizations will also not easily disappear. It is vitally

important that mental health specialists determine the most effective approaches to support and assist emergency workers in the aftermath of disaster.

While events such as the attack on America are rare, emergency responders, such as police, fire, and ambulance workers are regularly exposed to violent events that are outside of the average person's experience. For instance, in a sample of 165 firefighters in Australia, 78% indicated that they had been exposed to at least one critical incident at work including the death of a colleague, injury on duty, mass casualties, or the death of a child (Regehr, Hill & Glancy, 2000). In addition, 56% of volunteer firefighters in New South Wales reported that their safety had been seriously threatened at some time, 26% in the last year (Marmar et al., 1999). Similarly,

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82% of ambulance personnel in Scotland reported exposure to a particularly disturbing incident in the past 6 months (Alexander & Klein, 2001). While in many ways, the training and personality style of emergency responders prepares them to deal with high drama situations, nevertheless, this exposure has an impact on their emotional and psychological well-being. McFarlane (1988b) reported that 32% of firefighters in Australia had significant levels of symptoms on the General Health Questionnaire (GHQ) 4 months after a huge brushfire and 30% continued to have significant levels of symptoms at 29 months. Another firefighter study reported rates of significant distress or severe distress on the Impact of Event Scale (IES) of 26% (Bryant & Harvey, 1996). In a general sample of 508 police officers in New Zealand, 13.6% were classified as having PTSD (Stephens, 1997), and in a group of 37 police officers involved in a shooting, 46% had PTSD symptoms and a further 46% fulfilled the PTSD diagnostic criteria (Gersons, 1989). Finally, 30% of the paramedics in the Alexander and Klein (2001) study had high levels of symptoms on the IES.

In response to concerns about the mental health implications of exposure to work-related trauma, the crisis debriefing model has arisen as an early intervention strategy designed to mitigate post-traumatic stress reactions (Dyregrov, 1989; Mitchell, 1982; Raphael, 1986). This model offers a brief group treatment approach that is usually limited to a single session. It is based on the premise that emergency service professionals possess the internal resources to deal with most work-related events but can benefit from limited extra assistance in extreme circumstances. The group modality allows for ventilation of feelings, encourages mutual aid within the organization, and reinforces innate abilities to cope. Follow-up individual sessions are available to workers experiencing acute distress.

In the past few years, controversy has arisen about the efficacy of the crisis debriefing group

model. In large part, this has been due to the sudden popularity and widespread use of the model in the absence of supporting empirical validation. Initial reports of the efficacy of crisis debriefing groups have relied on anecdotal evidence, client satisfaction surveys, and clinical impressions of group leaders. Burns and Harm (1993) for example, report the results of a survey of 682 emergency room nurses. Thirty-two percent of the nurses had attended crisis debriefings and 88% of those who had attended debriefings found them helpful. Robinson and Mitchell (1993) similarly report that 90% of 288 emergency and hospital workers who attended debriefing groups found them helpful. Other literature reports the clinical impressions of group leaders as evidence of efficacy (Armstrong, O'Callahan, & Marmar, 1991).

Recent review articles however, have questioned the conclusion that crisis debriefing groups reduce traumatic stress reactions and have expressed concern that debriefing may in fact exacerbate symptoms (Bisson & Deahl, 1994; Bisson, McFarlane, & Rose, 2000; Raphael, Meldrum, & McFarlane, 1995). Deahl, Gillhas, and Thomas (1994) for instance, studied psychological morbidity in British soldiers who were involved in body handling duties during the Gulf War and found no difference in scores on a PTSD scale between soldiers who attended debriefing groups and those who did not. Similarly Stephens (1997) reported no difference in PTSD scores for police officers who attended debriefings and those who did not. McFarlane (1988b) compared two groups of firefighters, those attending psychological debriefings and those who did not, and discovered that while the debriefing group had lower levels of acute post-traumatic stress, they were more likely to experience delayed reactions. Mayou, Ehlers, and Hobbs (2000) randomly assigned road traffic accident victims to psychological debriefing or no treatment groups. At 4 months post injury, they reported that the psychological debriefing

was ineffective and at 3 years, the intervention group remained significantly more symptomatic. Bisson, Jenkins, Alexander, and Bannister (1997) reported that burn victims who received debriefings had significantly higher rates of anxiety, depression, and PTSD 13 months following their injury than burn victims who did not. The authors note however, that the people who attended the debriefing groups did have higher rates of these problems prior to the intervention (though not significantly) and had suffered more severe injuries. Further, it may not be appropriate to compare individuals suffering from catastrophic injuries with workers exposed to traumatic events in the line of duty.

A previous study conducted by this author, addressed the issue of crisis debriefings in 164 firefighters in Australia (Regehr & Hill, 2000). In that study the majority of firefighters attending crisis debriefing groups felt that they were beneficial to them personally (86%) and assisted in reducing their level of stress (77%). This confirmed the findings of prior studies in which participants in crisis debriefing groups responded to interview questions or questionnaires (Armstrong et al., 1991; Burns & Harm, 1993; Robinson & Mitchell, 1993). However, when depressive and post-traumatic stress symptoms were measured utilizing the Beck Depression Inventory (BDI; Beck & Beamesderfer, 1974) and the IES (Zilberg, Weiss, & Horowitz, 1982), those individuals exposed to critical events who attended debriefing groups had significantly higher scores on the IES intrusion subscale than those who did not. There was no significant difference in BDI scores between the groups. Further, there were no significant associations between subjective rating of benefit from crisis debriefing groups and IES or BDI scores. The cross-sectional design of that study did not allow for clarification of whether the findings supported the contention of some researchers that exposure to traumatic stimuli in the process of a crisis debriefing group may be iatrogenic (Bisson

& Deahl, 1994; Bisson et al., 1997; Raphael et al., 1995) or whether more highly distressed individuals are more likely to attend crisis debriefing groups.

In reviewing research literature on debriefings, Neria and Solomon (1999) conclude that virtually all noncontrolled studies point to the effectiveness of debriefings, while the controlled studies at best show no effect and at worst reveal higher vulnerability and increased psychopathology among debriefed subjects. In light of these mixed findings, many questions remain unanswered as yet regarding crisis debriefings. Nevertheless, the controversy does require that the crisis debriefing model be reconsidered and attention be directed to what aspects of the model may be helpful and what aspects of the model may be counterproductive. This article reviews the crisis debriefing model as it has been applied to workers in various emergency fields and seeks to understand some of the conflicting data surrounding efficacy.

The Development of the Crisis Debriefing Model

Traditional approaches for dealing with trauma in emergency workers tended to ignore the problem or attribute the traumatic reactions to inherent character flaws. These tendencies are most evident when one considers the history of awareness of traumatic reactions related to exposure to horrifying events in the line of duty in the military. During World War I, 25 soldiers in the Canadian Army are reported to have been executed for cowardice. Current analysts now assume that the label cowardice was applied to dysfunction caused by psychological distress including PTSD symptoms of hyperarousal, avoidance, and dissociation (Copp & McAndrew, 1990). By World War II, army medical corps had begun to deal with stress reactions. However, commanding officers still asked

whether "demoralizing malingering cases cropping up whilst in action should be shot on the spot as an example" (Birenbaum, 1994, p. 1484). While no Canadians were executed for cowardice in World War II, controversy continued about whether to treat soldiers with battle fatigue. In the end, many received a dishonorable discharge on the grounds of LMF—lack of moral fiber (Copp & McAndrew, 1990). As stated by Col. F. H. van Nostrand, an army neuropsychiatrist in 1947, "Although we are interested in rehabilitation . . . our primary function is early diagnosis, early treatment, and above all, early disposal of the mentally unfit" (Birenbaum, 1994, p. 1489).

While the approach of emergency services to trauma was in no way as dramatic as that of the military, there has been a traditional notion that a person suited to the job of police officer, ambulance attendant, or firefighter should be immune to the effects of trauma. In many organizations, the culture has not allowed for the expression of distress. The crisis debriefing model arose in the 1980s and found increasing acceptance in the 1990s as a response to heightened recognition of the impact of exposure to trauma on emergency responders. Several variations of crisis debriefings are described in the literature, including psychological debriefings (Dyregrov, 1989; Raphael, 1986), critical incident stress debriefings (Mitchell & Bray, 1990), community crisis response teams (Young, 1991), and the multiple stressor debriefing model (Armstrong et al., 1991). Detailed descriptions and comparisons of these various models can be found in McCammon and Allison (1995), Miller (1999), and Tehrani and Westlake (1994). Although the various models were developed to meet the differing needs of professionals, volunteers, and victims, they all share some common features.

Each of the crisis debriefing models involves a psychoeducational group meeting. During the groups, a structured procedure is followed in order to allow individuals to process the tragic

event and its aftermath. In general, there is an opportunity to review the event, and discuss their reactions to the event, including the emotional and behavioral consequences both for themselves and their family life. Following this, the debriefer provides educational information designed to normalize reactions and reinforce coping skills. In addition, suggestions are made regarding specific stress management techniques. As the session draws to a conclusion, participants are invited to discuss their accomplishments and reinforce one another's efforts. Finally, participants are encouraged to provide mutual aid as required, and opportunities for professional follow-up are presented. One variation of the model suggested by Dyregrov (1997) places greater emphasis on the group process in a debriefing and the encouragement of mutual aid through the creation of an environment characterized by warmth, support, and openness.

One of the most widely used models of crisis debriefings is the Critical Incident Stress Debriefing (CISD) model proposed by Mitchell and Bray (1990). The debriefing component of this model encompasses seven stages that take approximately 1–3 hr to complete. The groups are held on average 2–10 days after the event with a maximum of 25 individuals who were directly involved in the incident. Everly, Lating, and Mitchell (2000) describe the stages as follows:

- 1. Introduction Phase. The leaders explain the purpose and process of the meeting, introduce debriefers, and explain the guidelines for conduct (confidentiality, talk only for yourself).
- 2. Fact Phase. Each participant is invited to share his or her account of the event and his or her involvement in the event.
- Thought Phase. Participants share their most prominent thought during the event
- 4. Reaction Phase. At this point the debrief-

ing becomes somewhat less structured and participants are invited to answer the following questions: "What was the worst thing about this situation for you? If you could erase one part of the situation, what part would you chose to erase? What aspects of the situation cause you the most pain?" (p. 84). This is described as the most emotional component of the debriefing and the one that allows for cathartic ventilation and emotional abreaction.

- Symptom Phase. The group is moved away from the emotional material and into more cognitively oriented descriptions of current symptoms.
- Teaching Phase. Symptoms are normalized and stress management strategies are reviewed.
- 7. Reentry Phase. The leaders answer questions, make summary statements, and provide referral information.

In general the debriefing is not intended to be an intervention that stands on its own, but rather is considered one component of a comprehensive, integrated crisis response program (Mitchell & Everly, 1993). Other aspects of the program may include preventative education, informal group opportunities to discuss the event (defusings), individual defusings, onscene support family outreach, and follow-up counseling (Everly et al., 2000).

Enhancing Individual Coping Through Crisis Debriefings

Several variables have been identified in the literature as contributing to the intensity and duration of the traumatic stress reactions that crisis debriefings attempt to address. One obvious set of factors is the magnitude of the exposure, the length of exposure, and the number of repeated exposures to traumatic stimuli. This no-

tion that "dosage" of traumatic exposure influences severity of reactions has received research support (Marmar et al., 1999; Mollica, McInnes, Poole, & Tor, 1998; Resnick et al., 1992). However, while the severity of the trauma undoubtedly contributes to distress experienced by individuals, it is becoming increasingly clear that trauma and distress do not have a simple cause and effect relationship. Rather, traumatic events may act as precipitants, the response to which is determined by individual vulnerabilities (Paris, 1999; van der Kolk, McFarlane & Weisaeth, 1996; Yehuda & McFarlane, 1995). These vulnerabilities may include biological determinants (True et al., 1993; Yehuda, 1999), cumulative life stressors (McFarlane, 1988b; Mollica et al., 1998), previous mental health problems and a family history of mental illness (McFarlane, 1988a; Skodol et al., 1996), and individual personality variables (Regehr, Hemsworth, & Hill, 2001).

One individual variable that contributes to trauma response is the sense of control that an individual has over his or her environment and over unforeseen stressors (Rotter, 1975). Individuals who, in the face of disaster, manage to retain a belief that they can control outcomes have been found to manage the experience far more effectively than individuals who believed they were controlled by external forces (Gibbs, 1989; Regehr, Cadell, & Jansen, 1999). For instance, it has been demonstrated that firefighters experience difficulty coping and have higher levels of traumatic stress symptoms when they perceive that they have lower levels of control (Bryant and Harvey, 1996; Regehr, Hill, & Glancy, 2000).

An important aspect of the crisis debriefing then, is the psychoeducational component that focuses on regaining control through understanding common reactions to trauma exposure and formulating strategies for symptom management. Cognitive and behavioral strategies discussed in the group session may include the use of exercise to reduce arousal symptoms, acceptance of symptoms as normal and time limited, reduction of reliance on alcohol and drugs during times of high stress, and self-care. Thus, despite the limited nature of the intervention, participants are provided with some tools to increase their sense of control over the recovery process.

Rothbaum and Foa (1996) and Follette, Ruzek, and Abueg (1998) provide extensive overviews of the effectiveness of cognitive-behavioral approaches for PTSD. They conclude that cognitive-behavioral therapy (CBT) is effective in reducing the severity of PTSD symptoms in the majority of cases. Similarly, Foy et al. (2000) review six studies of CBT group treatment with trauma survivors (three wait list control and three single group pretest-posttest) and indicate that all showed positive outcomes on PTSD symptom measures. Reported effect sizes ranged from 0.33 to 1.09 with a mean of 0.68. Larger treatment effects were reported for avoidance symptoms than intrusion symptoms. This conclusion must be tempered somewhat considering the short duration of this treatment in a crisis debriefing group. One would expect that the results will be more modest than is generally found for CBT and that severe PTSD symptoms will not be ameliorated by the group intervention alone.

Social Support and Crisis Debriefings

In addition to individual strengths and vulnerabilities, other external factors such as social supports and the recovery environment have been found to influence responses to traumatic events (Leffler & Dembert, 1998; King, King, Fairbank, Keane, & Adams, 1997; Weiss, Marmar, Metzler, & Ronfeldt, 1995). While several studies confirm that traumatic events encountered in the line of duty cause stress responses in rescue workers, other researchers have argued that it is organiza-

tional stressors that cause the greatest degree of distress in emergency service personnel. For instance, events such as dealing with victims of serious accidents, being attacked by aggressive offenders, or dealing with protesters may cause stress in police officers. However, several largescale studies in England, Australia, Canada, and the United States have concluded that the greatest source of stress for officers is the police organization, with its rules, procedures, communication paths, bureaucratic hierarchy, and management style (Brown & Campbell, 1990; Burke, 1993; Buunk & Peeters, 1994; Coman & Evans, 1991; Hart, Wearing, & Headley, 1995). The outcomes of this stress include high levels of alcoholism, a suicide rate that is 30% higher than that of comparison groups, and a rate of marital problems that is double that of comparison groups (Golembiewski & Kim, 1990). Similarly, ambulance workers involved in body recovery duties following mass disasters in England identified that poor relationships with management, not being valued for their skills, and shift work were the major stressors they encountered (Thompson, 1993).

Not surprisingly then, a primary mediating factor of traumatic stress reactions is social support within the organization, particularly from superiors (Buunk & Peeters, 1994; Gibbs, Drummond, & Lachenmeyer, 1993; Regehr et al., 2000). That is, when people feel supported and valued within their work environment, they experience lower levels of distress. This concept of social support is highly related to the importance of crisis debriefings. That is, the crisis debriefing is an obvious indicator that the organization supports its workers through the purchase of mental health services and the provision of time to deal with the aftermath of a critical event. It is also an acknowledgement that traumatic stress reactions are normal and expected following a tragic event and will be accepted (or at least tolerated) within the organizational culture. Thus workers who perceive that organizational support is being

demonstrated though the debriefing are likely to respond positively when asked if the crisis debriefing that they attended was helpful. This is compatible with the relatively consistent findings that workers value the debriefing experience (Burns & Harm, 1993; Regehr & Hill, 2000; Robinson & Mitchell, 1993). However, when considering other factors that may contribute to PTSD symptoms, such as individual vulnerabilities and chronic workplace stressors, it is unlikely that any brief intervention is going to ameliorate symptoms exacerbated by these factors.

Secondary Trauma and Crisis Debriefing Groups

Secondary trauma in mental health professionals working with traumatized individuals is becoming increasingly recognized. Figley (1995) defines secondary traumatic stress as "the natural, consequent behaviours and emotions resulting from *knowledge about* a traumatizing event experienced by a significant other. It is the stress resulting from helping or wanting to help a traumatized or suffering person" (p. 10). As result of this exposure, therapists are reported to experience symptoms that parallel those of individuals suffering the aftereffects of traumatic experiences. Symptoms include nightmares, intrusive imagery, sleep disturbances, hypervigilance, emotional numbing, and changed world view (Chrestman, 1995; Regehr & Cadell, 1999). Consequently, several authors speak to the importance of debriefing the debriefers in order to protect their emotional and psychological health (Kahill, 1998; McCann & Pearlman, 1990b; Talbot, Manton, & Dunn, 1992).

McCann and Pearlman (1990a) have offered a theory of vicarious traumatization based on the concept of self-schema theory or constructivist self-development theory. From this perspective, individuals develop mental templates of self and others based on their interactions with the world. While for the most part, these are based on personal lived experiences, it is posited that with repeated exposure to traumatic imagery in providing therapy, mental health workers may begin to incorporate an accumulation of clients' traumatic material into their own view of self and the world. The understanding of memory processes subsequent to encountering traumatic events remains for the most part speculative (see Appelbaum, Uyehara & Elin, 1997 for a comprehensive review), nevertheless, it appears possible to incorporate the experiences of others into one's own memory system or schematic structures in situations of high social influence or in times of high emotional intensity (Brewin, 1996; Paris, 1996). In the process of trauma treatment, emotions such as rage, horror, and dismay are often present. Therapists may feel overwhelmed by the emotional state of their clients or by the atrocity of the material presented. At this stage if they are unable to integrate the material presented into their own cognitive structures, it may be experienced as intrusive thoughts, flashbacks, or dreams and lead to feelings of hopelessness and despair (Horowitz, 1976; McCann & Pearlman, 1990b).

If we accept that vicarious traumatization is possible in therapists, it seems more probable in individuals who have been exposed to a traumatic event. These individuals will more likely be in a state of emotional and psychological vulnerability and may be struggling with symptom management and with making meaning of the experience. A central component of the CISD model described by Everly et al. (2000) is the Reaction Phase in which members are encouraged to recount their worst experience during the event, often in graphic detail in order to allow for cathartic ventilation and emotional abreaction. Dunning (1999) suggests that the traumatized person in a group debriefing session, listening to the graphic descriptions of others' experiences, may be triggered into the same neurobiological response as they experienced

during the traumatic event. In this environment of affective overload, the images described by other members may become incorporated into the individual's trauma set. This conceptualization is extremely useful in our attempts to understand the findings that attendance at crisis debriefings increases risk of PTSD, particularly intrusion symptoms.

In cognitive-behavioral group therapy with trauma victims, participants are frequently encouraged to repeatedly experience their own traumatic events and in addition be exposed vicariously to the experiences of others for the purposes of cognitively processing the traumatic material (Foy et al., 2000). From this perspective, trauma reduction occurs through the process of first reactivating the fear memory and secondarily providing new information that is incompatible with the fear structure in order that a new memory can be formed (Resick & Schnicke, 1993; Rothbaum, Meadows, Resick, & Foy, 2000). However, it is suggested that this model of treatment should be used only when a sound therapeutic alliance has been formed and a thorough assessment has been completed (Calhoun & Atkeson, 1991). Further, individuals in this type of treatment group should be assessed to have the capacity to tolerate high anxiety arousal, have no active suicidal ideation, no comorbid substance abuse, and most importantly no current life crises (Foy et al., 2000).

Thus while a cognitively based model of treatment that incorporates exposure to traumatic imagery has evidence of success in individuals with PTSD, the tested group model differs in several ways from the CISD model. The first important difference is the duration of treatment. Neria and Solomon (1999) posit that the discussion of emotional reactions in the CISD model is "sandwiched between fact finding and cognitive reframing," (p. 316) and that therefore individuals may be given insufficient opportunities to process and place closure on the feelings that are aroused. Secondly, intervention models that

utilize exposure techniques are initiated a considerable time after the traumatic event has occurred and at a time when PTSD symptoms have developed. They are not employed at a time when the person is in the early stages of crisis when techniques rather focus around containment through reducing exposure to further stress and harm. Finally, the nature of crisis debriefings do not allow for prior assessment of the strengths and vulnerabilities of participants. There is no opportunity to assess the ego strengths, prior coping strategies, current social supports, and other concurrent stressors in order to determine the ability of the individual to manage the effects of exposure. In addition, while individuals experiencing acute distress are to be referred on for additional individual assistance, the size of the group, and the limited time to engage with each member may preclude the ability of the debriefers to identify those individuals who may experience higher levels of distress. Therefore, the approaches described in therapeutic groups employing cognitive exposure and abreaction do not apply to crisis debriefings that are aimed at prevention of trauma, not amelioration of entrenched symptoms.

Reviewing the Strengths and Limitations of Crisis Debriefing Groups

When considering the history of equating trauma response with an absence of the "right stuff" to do the job, a considerable strength of the crisis debriefing model is its ability to acknowledge the existence of trauma responses and normalize symptoms. Emergency responders encountering symptoms such as nightmares, intrusive imagery, increased arousal, and irritability may reach the conclusion that they do not possess the psychological attributes required to do the job properly. The crisis debriefing encourages discussion of the aftermath of

symptoms and opens the door for further discussions within the group of individuals who have attended.

Organizational stressors and supports have consistently been demonstrated to be major factors that mitigate or intensify traumatic stress reactions (Buunk & Peeters, 1994; Gibbs et al., 1993; Regehr et al., 2000). The crisis debriefing both demonstrates support of the workers by management and provides the opportunity to enhance social supports within the work team. By virtue of supporting the program both in terms of time and economic resources, management can often demonstrate their concern for workers. Further, the debriefer can facilitate the process of encouraging mutual aid and support within the work team. He or she can identify characteristics within the team that serve as evidence of the strength of working relationships and mutual support.

An additional strength of the crisis debriefing model is the psychoeducational component. This not only describes possible reactions to trauma, but also generally includes cognitive-behavioral strategies for symptom management. The introduction of these CBT strategies help group participants learn alternative strategies to self-medication through alcohol use and can assist them in gaining a sense of control over their reactions. This approach is supported by a large body of literature that points to the efficacy of this approach in treating PTSD (McCann & Pearlman, 1990a; Resick & Schnicke, 1993; Rothbaum & Foa, 1996).

The major limitations of the crisis debriefing model are the inability to reduce symptoms of PTSD (Bisson & Deahl, 1994; Raphael et al., 1995) and the possibility of vicarious traumatization of participants. This finding must not be ignored by mental health professionals practicing this model of intervention. It appears highly likely that these iatrogenic effects may result from the graphic descriptions of traumatic experiences during the event provided by the various group participants. This information is received by individuals who may already be vulnerable due to their own traumatic experiences during the event and their own current level of traumatic response. The process of flooding individuals with additional gruesome material may add to their traumatic imagery and symptoms of intrusion. The inability to assess and screen out individuals who may have vulnerabilities such as difficult life histories, concurrent life crises, and comorbid substance abuse or mental health problems, may further increase the risk for some people. As a result, it would appear that debriefers should discontinue encouraging detailed descriptions during the reaction stage.

A modified approach to a crisis debriefing model must therefore build on the strengths of models presented by the pioneers in this area and modify aspects that may be counterproductive (see Table 1). Such an approach could involve the following components:

- Introduction
 - —Describing the purpose of the group.

TABLE 1. Strengths and Limitations of the Crisis Debriefing Model

Strengths of the CD Model	Limitations of the CD Model
Normalizing of symptoms.	Inability to reduce symptoms of PTSD.
Increasing control of symptoms through education regarding cognitive-behavioral strategies.	Possibility of vicarious traumatization.
Mobilizing of social supports within the organization.	Limited opportunities to assess vulnerabilities of participants and risk of PTSD.

- Expressing support for the members who have shared a traumatic experience.
- —Establishing credibility of the debriefers.
- —Establishing ground rules for respectful interactions (stay until the end, do not critique each other).
- Shared understanding In the CISD model (Mitchell & Everly, 1993) there is an expectation that debriefers collect information about the event that is as comprehensive as possible prior to beginning a debriefing. This is reinforced by Dyregrov (1997) who focuses attention on the prior preparation of the leaders. In addition to this preparation however, a brief factual review of the event as suggested by Everly et al. (2000) can be an important tool for creating an alliance between leaders and group members thorough developing a shared understanding of the event and expressions of empathy. This component of the debriefing could help answer questions regarding the event, fill in gaps in information, and therefore assist participants to develop a more comprehensive understanding of what has occurred. Frequently, workers may have not seen colleagues during the event and have been worried about their safety. This discussion is not, however, meant to be graphic in nature but rather a description of how the event unfolded for each member.
 - —An opportunity to chronicle the event and the involvement of various individuals.
 - —Updates, if any, on the state of colleagues who were injured.
- Impact of the experience
 - Discussing current emotional, physical, cognitive symptoms experienced by participants.

- —Discussing subsequent impacts relationships with family and friends.
- Leaders normalize reactions through education and through drawing parallels between the experiences of group members.
- Strategies for coping
 - —Participants are given an opportunity to discuss their strategies for coping (both maladaptive and adaptive) and the effectiveness of these strategies for reducing distress.
 - —Group members are invited to make suggestions to one another regarding effective symptom management.
 - —Leaders acknowledge the strengths of participants.
 - Leaders can then present cognitivebehavioral strategies for managing acute symptoms.
- Mobilizing of social supports
 - —Identifying strengths in team interactions.
 - —Encouragement of continued support among group members.
 - —Identifying strategies to engage others in members' personal support network.
- Wrap-up
 - —Thanking participants for their willingness to engage and share.
 - —Reinforcing strengths.
 - —Providing opportunities for follow-up.

Conclusions

The crisis debriefing model has quickly become one of the most popular approaches for dealing with trauma in groups of individuals affected by the same event. From its early days of addressing the needs of military personnel, it has spread throughout emergency service organizations and health care organizations. It is also now used for victims of large-scale disasters, such as floods and tornadoes and in organizations such as schools where a shooting has occurred. As one watches news reports of tragic events, it is now common to see the debriefing team members interviewed and offering impressions and suggestions for self-care.

While acceptance of mental health needs is a positive step in our society, we as practitioners must ensure that the intervention models that we are selecting are likely to be helpful and will not increase morbidity in terms of posttraumatic symptoms. We must be aware of the research conducted into our chosen methods of intervention and attempt to discern how often conflicting data may fit together. Research in the area of crisis debriefings is still at an early stage and has not yet clearly delineated which aspects of the process may be helpful or harmful. Many potentially important aspects that have not been evaluated include the length of time between the trauma and the debriefing, the nature of the trauma, and the quality of both the debriefer and the debriefing (Bisson et al., 2000). At this point, there is no evidence to support the notion that single session group debriefings prevent PTSD symptoms and some suggestion that it may increase PTSD symptoms, in particular intrusion symptoms. On the other hand, anecdotal data and subjective ratings by participants in debriefings suggest that they do offer some clear benefits.

The two primary components of crisis debriefing that have some empirical support are the provision and enhancement of social support and the psychoeducational components—specifically the use of cognitive-behavioral strategies for symptom management. It would appear however, that the benefits of reviewing in graphic detail the nature of the events experienced by various participants are not empirically supported. It is likely that this flooding of group members with disturbing imagery is the factor that increases intrusive symptoms such as

nightmares, flashbacks, and repetitive thoughts. Consequently, it would seem that the efficacy of debriefings may be enhanced if debriefers do not encourage graphic descriptions of the event and focus instead on the beneficial aspects of building supports and augmenting coping strategies.

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