Second, in most of the negative studies, the researchers did use the "Mitchell model" of debriefing, albeit often with one-on-one debriefings. And some of the studies cited in support of CISD depart even more dramatically from the recommended protocol (Busuttil et al., 1995; Chemtob et al., 1997) than do the RCTs on individual debriefing (Bisson et al., 1997).

## CONSIDERATIONS FOR CRISIS INTERVENTION

### The Right Time to Talk About the Trauma

Studies showing null effects for psychological debriefing motivate reexamination of a belief shared by many trauma specialists: that expressing thoughts and feelings about the trauma hasten healing, and that "bottling up" these feelings will impede recovery. Some evidence supports this view. Pennebaker and his colleagues have found that repeated writing about one's thoughts and feelings concerning a very upsetting personal event has positive long-term effects on one's mood and health (e.g., Pennebaker & Beall, 1986). Conversely, attempts to avoid thinking about one's trauma and to avoid reminders of trauma are associated with persistent PTSD symptoms (e.g., Ehlers et al., 1998). Furthermore, most trauma therapies emphasize the importance of talking about one's feelings and thoughts about the trauma.

These research findings seem to suggest that helping people ventilate their emotions soon after a critical event will hasten recovery from posttraumatic stress. However, the problem with this inference is that this research was done weeks, months, or years after the trauma, and thus may not apply to the immediate aftermath of an event. Indeed, as Pennebaker (2001) emphasized, his research focused on the psychobiological benefits of writing about traumatic events that had remained undisclosed for months or years. Hence, Pennebaker's work cannot be adduced in support of psychological debriefing that occurs shortly after the traumatic event.

What do people (most of whom will recover on their own) actually do to process a traumatic event? They appear to alternate between phases of avoidance and phases of processing (e.g., Horowitz, 1986; Pennebaker & Harber, 1993). Furthermore, if given a choice, only about 10% of trauma survivors seek to discuss their experience with mental health professionals (e.g., Rose et al., 1999). In the days and even weeks after a traumatic event, "an individual may or may not be in a state in which he or she wishes, or is prepared, to discuss what has happened" (Raphael, Wilson, Meldrum, & McFarlane, 1996, p. 466).

Professionals working with trauma survivors may have too quickly concluded that the initial disinclination of survivors to discuss their trauma constitutes a form of dysfunctional avoidance likely to hinder recovery. The intermittent processing favored by most survivors may adaptively enable them to begin rebuilding their lives and to concentrate on the practical problems they face, and thereby help them to put the event in the past. Furthermore, memories tend to fade with time, and it remains untested whether very early exposure to traumatic memories promotes or retards this process. Research has shown that certain conditions are necessary to facilitate emotional processing of distressing material: "The material, especially in the early stages of treatment, should be made predictable, controllable, presented in small chunks, and tackled in a progressive but gradual way" (Rachman, 2001, p. 166). These conditions are seldom met in the immediate aftermath of trauma. Thus, encouraging survivors to discuss their thoughts and feelings right away may increase the risk that they will be overwhelmed by the experience, which will be counterproductive. Furthermore, as Rachman (2001) has pointed out, there are several routes to emotional processing, and the activation of the trauma memory by reliving the experience may be only one of them.

Thus, contrary to a widely held belief, pushing people to talk about their feelings and thoughts very soon after a trauma may not be beneficial. Perhaps systematic exposure to the trauma memories should be reserved for people who fail to recover on their own. Similarly, Brewin (2001) concluded that

> any intervention that is carried out within two or three days following a mild trauma, or within a month following a severe trauma, is probably coinciding with natural recovery processes. An obvious concern is that the intervention should interfere as little as possible with these processes, at least until some hindrance of recovery is evident. (p. 166)

Thus, clinicians working with trauma survivors soon after the event face a dilemma. On the one hand, any intervention they offer should not interfere with natural recovery. On the other hand, they will want to offer treatment as soon as possible to those survivors who are unlikely to recover on their own, to shorten their suffering and to prevent the development of secondary problems such as job loss, problems with relationships, or substance abuse. In Identification of Individuals at Risk for Chronic PTSD, we address how best to identify trauma survivors who are unlikely to recover on their own.

The practice of talking about a traumatic event shortly after its occurrence has a long historical tradition in military settings. The principles of proximity, immediacy, and expectancy (PIE) have often governed early intervention in the military (Artiss, 1963). Distressed soldiers are treated close to the battlefield (proximity), as soon as possible (immediacy), and with full expectation that they will return to duty (expectancy). The treatment seldom involves more than providing food, rest, and reassurance that they will be feeling better soon. Although these principles have often been accepted as useful in military contexts, the PIE approach has seldom been evaluated rigorously. In one ambitious study, Solomon and Benbenishty (1986) studied troops involved in the Lebanon War. Some were managed according to PIE principles, and others were treated some distance from the battlefront. Solomon and Benbenishty reported that troops managed according to the principles of PIE

displayed reduced rates of PTSD 1 year later. The findings cannot be considered definitively supportive of PIE because whereas proximity was objectively defined by the location of the intervention, immediacy and expectancy were operationally defined by requesting soldiers to rate how immediate the intervention was and how much they were expected to return to their unit; unfortunately, these ratings were made 1 year after the treatment was administered. Considering the evidence that memory for initial posttraumatic experiences and responses is strongly influenced by current severity of PTSD symptoms (Harvey & Bryant, 2000a; Schwarz, Kowalski, & McNally, 1993; Southwick, Morgan, Nicolaou, & Charney, 1997), it is likely that soldiers' retrospective ratings were influenced by their current symptoms.

### Survivors' Needs in the Aftermath of Trauma

We are not arguing that mental health professionals should leave trauma survivors alone in the immediate aftermath of trauma. Indeed, perceived lack of social support is strongly linked to heightened risk for PTSD (Brewin et al., 2000). Thus, assessing and, if necessary, facilitating social support may promote recovery from trauma. Many survivors have good support networks and may prefer to rely on their trusted confidants, but others may need help in activating social support because they do not have access to good support (whether because of the loss or separation from significant others, preexisting poor support, or the perception that previously trusted people do not understand their plight). Recent recommendations for crisis intervention programs (e.g., Litz et al., 2002; Raphael & Dobson, 2001) take into account that the posttrauma environment has an important influence on recovery and urge that social support be facilitated (including by trying to increase community cohesion if an entire community is affected; Meichenbaum, 1994). Controlled evaluations of such efforts are lacking, however. Dunmore, Clark, and Ehlers (1999, 2001) found that the perception of negative social interactions with others in the aftermath of trauma predicted chronic PTSD to a greater extent than did lack of perceived positive support. This implies that sensitive, respectful attitudes on the part of emergency, hospital, and police staff may help buffer survivors against developing PTSD.

As Raphael et al. (1996) observed, "The provision of practical help may ultimately be seen as more helpful and positive than the specific psychological care offered" (p. 466). Trauma survivors have many different immediate needs in their efforts to adjust to the event. Their needs will depend on the kind of trauma they have experienced (e.g., individual traumas vs. disasters), the nature and extent of their physical injuries, the nature and extent of other losses they are facing (e.g., loss of housing and loved ones), and their emotional responses to the event. For example, survivors may need immediate comfort, reassurance, and help establishing safety (e.g., housing); help to overcome extreme fatigue and exhaustion; financial support; help finding relatives and friends; time to themselves to come to terms with what happened, and therefore practical help with child care or other duties; and advice and support to cope with the additional burdens caused by the aftermath of the trauma (e.g., Raphael et al., 1996; Ursano, Grieger, & McCarroll, 1996).

Many survivors will need information, such as information about what exactly happened during the event and to their relatives, or what their chances of recovery from serious injuries are (see also Brewin, 2001). Although provision of information alone does not appear to promote recovery (Brewin, 2001; Rose et al., 1999), it is generally recommended that survivors be provided information about common reactions to trauma, including natural recovery. This information should acknowledge the magnitude of the trauma and reassure survivors that it is normal to have symptoms of PTSD in the aftermath of a traumatic event.

Crisis intervention methods that sensitively focus on the individual's needs are currently under discussion, and empirical data are largely lacking (see Orner & Schnyder, in press). Current guidelines usually recommend a range of immediate measures under the umbrella term of "psychological first aid" (e.g., Litz et al., 2002; Raphael et al., 1996). This includes

> the basic human responses of comfort and consoling a distressed person; protecting a person from further threat or distress, as far as is possible; furnishing immediate care for physical necessities, including shelter; providing goal orientation and support for specific reality-based tasks ("reinforcing the concrete world"); facilitating reunion with loved ones from whom the individual has been separated; facilitating some telling of the "trauma story" and ventilation of feelings as appropriate for the particular individual; linking the person to systems of support and sources of help that will be ongoing; facilitating the beginning of some sense of mastery; and identifying the need for further counseling or intervention. (Raphael et al., 1996, pp. 466–467)

Some of these goals overlap with those of CISM. As in psychological debriefing, the ventilation of feelings and telling of the trauma story is recommended with the proviso that it should be appropriate for the particular individual. Thus, psychological first-aid respects an individual's wishes regarding whether to talk about the trauma.

Litz et al. (2002) described how psychological first aid deals with the issue of whether or not trauma survivors should be encouraged to talk about the traumatic event in its immediate aftermath:

> Individuals who choose not to participate in groups should be given the opportunity to meet with individual therapists with trauma expertise and experience. Those survivors not interested in any formal intervention should be asked if they care to discuss their thoughts and feelings about the event and urged (if possible) to voice their ideas about the personal implications of the experience to significant others when they feel most comfortable doing so. The goal is not to maxi-

mize emotional processing of horrific events, as in exposure therapy,[5] but rather to respond to the acute need that arises in many to share their experience, while at the same time respecting those who do not wish to discuss what happened. (p. 128)

Foa (2001) suggested that in the immediate aftermath of trauma, people should follow their natural inclination with regard to how much and to whom they talk, and that professionals should listen actively and supportively, but not probe for details and emotional responses or push for more information than survivors are comfortable providing.

The bottom line is that in the immediate aftermath of trauma, professionals should take their lead from the survivors and provide the help they want, rather than tell survivors how they will get better. As Raphael and Dobson (2001) pointed out, "There has been a failure in many formats of acute posttrauma intervention to develop and utilize a systematic, scientifically based, and clinically appropriate framework of assessing need" (p. 153). Given present knowledge, it is impossible in the immediate aftermath to tell which survivors will later need psychological treatment.

It remains to be tested empirically whether psychological first aid is effective in promoting recovery from posttraumatic stress. As the debate about psychological debriefing has shown, plausible ideas about what interventions make sense in the aftermath of trauma do not necessarily mean that these interventions will promote recovery from posttraumatic stress. Raphael and Dobson (2001) arrived at a similar conclusion, noting that although psychological first-aid interventions "are intended to be generic and supportive, they have not been subjected to research and evaluation, so that the usefulness and validity of their application needs to be established. Their general supportive nature and nonactive intervention suggest that they are unlikely to do harm" (p. 143).

It is interesting that the consensus opinion appears to be returning to views that prevailed in military circles 50 years ago. During World War II, American officers held group debriefing following combat, and the process was conceptualized as a review and reconstruction of the event in which the perspectives of all participants were validated nonjudgmentally (for a review, see Shalev, 2000). Advice, interpretation, or other directive interventions were not provided. History has turned full circle in that trauma counselors are again recognizing that approaches that are supportive and noninterventionist may be optimal in the immediate aftermath of trauma. It appears that the focus is shifting from directly encouraging people to review and disclose their experiences (reflected in CISD) to providing support and a forum for people to discuss their reactions if they are so inclined.

5. Exposure therapy for PTSD is a behavioral treatment that helps the person confront trauma memories and reminders of the event that evoke intense emotional or physical responses. It involves emotional and detailed recounting of the traumatic memories in the temporal order in which the event (or events) unfolded. The recounting includes the person's thoughts and feelings. Recounting is done either by visualizing the event in one's imagination and talking about what one visualizes (imaginal exposure) or by writing a detailed account of the traumatic event. The recounting is usually repeated until it no longer evokes high levels of distress. In addition to imaginal reliving, exposure often entails an *in vivo* (real-life) component in which patients enter situations or engage in activities associated with the trauma until the stress diminishes. For example, a survivor of a motor vehicle accident may practice driving his or her car past the scene of the accident until distress associated with the memories of the accident subsides.

## IDENTIFICATION OF INDIVIDUALS AT RISK FOR CHRONIC PTSD

As we discussed earlier, the majority of people exposed to trauma will experience transient stress reactions that remit within 3 months of the traumatic event. If mental health resources are allocated to those who will experience a chronic mental disorder, an important goal for mental health professionals in the acute posttrauma phase is to identify individuals who will develop a chronic disorder. That is, there is a need to identify people who will subsequently develop a chronic disorder because this subset of trauma survivors, unlike those who experience a transient stress reaction, will require treatment. This identification procedure has been termed the "triage" (Raphael et al., 1996) or "screen and treat" approach (Brewin, 2001).

There are important reasons for screening trauma survivors before providing an intervention. First, one has to bear in mind that traumatic events can trigger not only PTSD, but also a range of other disorders, such as psychosis. Second, the purpose of screening is to identify those survivors who are unlikely to recover on their own and therefore in need of treatment. Prospective longitudinal research has identified predictors that can be used for this task. Current research indicates that the single most important indicator for the risk of chronic PTSD is the severity of PTSD symptoms. Although symptom severity in the initial days after a trauma is not a good indicator of PTSD risk (Shalev, 1992), from about 1 to 2 weeks after the event onward, the number of symptoms, their severity, or both predict chronic PTSD (Harvey & Bryant, 1998b; Koren et al., 1999; Murray et al., 2002; Shalev et al., 1997). Brewin (2001) recommended carefully monitoring symptoms in the aftermath of the event, preferably with validated screening instruments. He recommended intervention only when symptoms fail to subside naturally by about 4 to 6 weeks posttrauma. Schnyder and Moergeli (in press) emphasized that a single screening may be insufficient because a certain number of people will have a delayed onset of chronic PTSD symptoms.

Practitioners need economical instruments for screening large populations of survivors to identify those at risk for chronic PTSD. Brewin et al. (2002) have developed a promising screening questionnaire. It identifies PTSD by any combination of six reexperiencing or hyperarousal symptoms and has excellent agreement with clinician diagnoses of PTSD. Although this instrument shows promise for screening for chronic