DOES EARLY PSYCHOLOGICAL INTERVENTION PROMOTE RECOVERY FROM POSTTRAUMATIC STRESS?

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Summary—In the wake of the terrorist attacks at the World Trade Center, more than 9,000 counselors went to New York City to offer aid to rescue workers, families, and direct victims of the violence of September 11, 2001. These mental health professionals assumed that many New Yorkers were at high risk for developing posttraumatic stress disorder (PTSD), and they hoped that their interventions would mitigate psychological distress and prevent the emergence of this syndrome. Typically developing in response to horrific, life-threatening events, such as combat, rape, and earthquakes, PTSD is characterized by reexperiencing symptoms (e.g., intrusive recollections of the trauma, nightmares), emotional numbing and avoidance of reminders of the trauma, and hyperarousal (e.g., exaggerated startle, difficulty sleeping). People vary widely in their vulnerability for developing PTSD in the wake of trauma. For example, higher cognitive ability and strong social support buffer people against PTSD, whereas a family or personal history of emotional disorder heightens risk, as does negative appraisal of one's stress reactions (e.g., as a sign of personal weakness) and dissociation during the trauma (e.g., feeling unreal or experiencing time slowing down). However, the vast majority of trauma survivors recover from initial posttrauma reactions without professional help. Accordingly, the efficacy of interventions designed to mitigate acute distress and prevent long-term psychopathology, such as PTSD, needs to be evaluated against the effects of natural recovery. The need for controlled evaluations of early interventions has only recently been widely acknowledged.

Psychological debriefing—the most widely used method—has undergone increasing empirical scrutiny, and the results have been disappointing. Although the majority of debriefed survivors describe the experience as helpful, there is no convincing evidence that debriefing reduces the incidence of PTSD, and some controlled studies suggest that it may impede natural recovery from trauma. Most studies show that individuals who receive de-

Following the terrorist attacks at the World Trade Center, more than 9,000 grief and crisis counselors arrived in New York City to provide aid to families, rescue workers, and others briefing fare no better than those who do not receive debriefing. Methodological limitations have complicated interpretation of the data, and an intense controversy has developed regarding how best to help people in the immediate wake of trauma.

Recent published recommendations suggest that individuals providing crisis intervention in the immediate aftermath of the event should carefully assess trauma survivors' needs and offer support as necessary, without forcing survivors to disclose their personal thoughts and feelings about the event. Providing information about the trauma and its consequences is also important. However, research evaluating the efficacy of such "psychological first aid" is needed.

Some researchers have developed early interventions to treat individuals who are already showing marked stress symptoms, and have tested methods of identifying those at risk for chronic PTSD. The single most important indicator of subsequent risk for chronic PTSD appears to be the severity or number of posttrauma symptoms from about 1 to 2 weeks after the event onward (provided that the event is over and that there is no ongoing threat).

Cognitive-behavioral treatments differ from crisis intervention (e.g., debriefing) in that they are delivered weeks or months after the trauma, and therefore constitute a form of psychotherapy, not immediate emotional first aid. Several controlled trials suggest that certain cognitive-behavioral therapy methods may reduce the incidence of PTSD among people exposed to traumatic events. These methods are more effective than either supportive counseling or no intervention.

In this monograph, we review risk factors for PTSD, research on psychological debriefing, recent recommendations for crisis intervention and the identification of individuals at risk of chronic PTSD, and research on early interventions based on cognitive-behavioral therapy. We close by placing the controversy regarding early aid for trauma survivors in its social, political, and economic context.

exposed to the mayhem of September 11, 2001 (Kadet, 2002). The assumption driving these well-intentioned efforts was that many New Yorkers were likely to develop posttraumatic stress disorder (PTSD) if they did not receive counseling soon after the trauma. Crisis Management International, a firm based in Atlanta, Georgia, sent 350 therapists, booking every room in one of New York's prominent hotels. The Church of Scientol-

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Early Psychological Intervention

ogy sent 800 volunteers to provide "spiritual first aid" to Ground Zero rescue workers. Sites were quickly established throughout the city to accommodate the countless numbers of people expected to seek psychological help. Yet few people showed up. The demand for psychological services was far less than most experts had predicted (Kadet, 2002).¹

Yehuda (2002a)—an eminent neuroscientist and PTSD expert—said that many therapists suspected that New Yorkers were in denial. A failure to seek counseling, they surmised, reflected avoidance behavior—a sign of PTSD. Accordingly, some therapists planned to approach citizens on the street and conduct quick sidewalk assessments and brief interventions for those presumably too avoidant to seek help on their own.

There were other reasons, besides denial of distress, why many New Yorkers did not avail themselves of proffered psychological services during the months following the attacks. People directly affected by the attacks—those who lost their loved ones or their jobs when the towers collapsed—were often too busy trying to put their lives back together to take time out for psychological counseling. And when they did seek professional assistance, it was often to obtain help in practical matters (e.g., getting death certificates for insurance purposes).²

Another explanation was that mental health experts had underestimated both the psychological resilience of New York's citizens and their extant sources of emotional support. Traumatized people often relied on family, friends, and church groups rather than seeking professional counseling. Not everyone exposed to trauma either needed or wanted psychological services.

Some experts predicted a surge in delayed-onset PTSD. People too preoccupied with urgent practical matters might fail to process the trauma shortly after it occurred, thereby suffering its effects many months later, once life began to return to normal. Anticipating an epidemic of delayed psychiatric problems, authorities obtained \$23 million in federal funds to establish Project Liberty, a program designed to provide free counseling for New Yorkers (Kadet, 2002). An additional \$131 million was requested to pay for the 3,000 therapists hired by the project. Its director, April Naturale, predicted that one out of every four citizens of New York City would need therapy for emotional problems resulting from the attacks of September 11. However, as of March 2003, only 643,710 people had sought help through Project Liberty, whereas officials had expected to treat 2.5 million New Yorkers. As of May 2003, \$90 million of therapy funds remained unspent (Gittrich, 2003).

Concerns about preventing posttraumatic psychopathology, either immediate or delayed, motivated these massive intervention efforts. But do psychological interventions delivered shortly after traumatic events mitigate distress and prevent later problems, especially PTSD? In particular, do trauma-exposed people who receive psychological debriefing-the most popular intervention-experience fewer difficulties than do people who are not debriefed? Or does debriefing impede natural recovery from the effects of trauma? Answers to these questions are urgently needed because counselors trained to provide this service have become seemingly ubiquitous at the scene of diverse traumatic events (Deahl, 2000), from school shootings to natural disasters. If these interventions either have no effect or are harmful, are there promising alternatives that might prevent posttraumatic psychopathology? If so, should everyone exposed to trauma receive an intervention, or should only those individuals at high risk for psychopathology receive one? Finally, should resources be directed toward helping individuals who have already developed PTSD rather than toward attempts to prevent its emergence among those recently exposed to trauma?

Psychological debriefing is a generic term for a brief crisis intervention that is usually delivered within several days of a traumatic event and is designed in part to mitigate emotional distress and to prevent long-term psychopathology, especially significant symptoms of PTSD (Raphael & Wilson, 2000). Its key elements are ventilating emotions about the trauma while discussing one's thoughts, feelings, and reactions with a trained professional who, in turn, provides psychoeducation about traumatic stress responses and attempts to normalize these reactions. Many people believe that it is better to talk about one's feelings than to "bottle them up inside," and any intervention requiring one to process and express emotions about a traumatic event within a supportive context would seem to be of unquestionable value. Indeed, many people are likely to assume that the quicker emotional first aid is provided, the less likely trauma-exposed people are to develop long-term psychological problems.

Despite the intuitive plausibility of these assumptions, psychological debriefing has sparked a heated international controversy that captured the attention of government policymakers, the media, and the general public after the recent terrorist attacks (e.g., Goode, 2001; Herbert et al., 2001). The controversy has grown as increasing numbers of studies have failed to confirm the efficacy of psychological debriefing as a method for at-

^{1.} Kadet arrived at the 9,000 figure by contacting representatives of the organizations whose members were offering counseling to people in New York City and asking them how many counselors each organization was supplying. She spoke to representatives from the International Critical Incident Stress Foundation, the Church of Scientology, the American Psychological Association, the Eve Movement Desensitization and Reprocessing Humanitarian Assistance Program, the Association of Traumatic Stress Specialists, Project Liberty, the Red Cross, the Green Cross, the City Department of Health Public Affairs, the International Society for Traumatic Stress Studies, the Center for Mental Health Services, and Crisis Management International (A. Kadet, personal communication, March 20, 2003). These organizations offered various services to New Yorkers (e.g., psychological debriefing, eye movement desensitization and reprocessing). Kadet's conclusion about few people showing up for help was based on her interviews with clinicians who expressed surprise at the underutilization of their counseling services. Although articles in magazines and newspapers are seldom cited in scholarly journals, the facts uncovered by journalists, such as Kadet, appear in ordinary news media, not scientific publications, Therefore, we cite data from these sources when necessarv.

^{2.} Although providing assistance in obtaining death certificates might conceivably be considered a form of crisis intervention, it is certainly not counseling or psychotherapy.

Richard J. McNally, Richard A. Bryant, and Anke Ehlers

tenuating posttraumatic distress (Raphael & Wilson, 2000). Critics assert that public funds must be allocated only for methods shown to work; continuing to employ methods that are either inert or harmful will prevent clinical scientists from developing and testing methods that mitigate distress and prevent long-term psychiatric impairment.

In this review, we first briefly discuss PTSD and risk factors for the disorder. We then scrutinize the evidence regarding the efficacy of psychological debriefing, focusing on prevention of psychopathology, especially PTSD. We also discuss new research on cognitive-behavioral therapy (CBT) for recent-onset PTSD. In contrast to crisis-intervention methods delivered hours or days posttrauma (e.g., psychological debriefing), these new CBT intervention methods are applied weeks or months after the trauma. They are designed not to prevent disorder, but rather to help individuals whose symptoms have failed to abate within the first few weeks posttrauma. Finally, we close by considering the controversy in its larger social context.

DEFINITION OF PTSD

PTSD was first recognized as a psychiatric disorder in the third edition of the American Psychiatric Association's (APA) *Diagnostic and Statistical Manual of Mental Disorders* (1980). The current criteria, in the fourth edition of this manual (DSM-IV; APA, 1994), define PTSD as a syndrome comprising three clusters of signs and symptoms: (a) repeated reexperience of the trauma (e.g., intrusive recollections of the event, nightmares); (b) emotional numbing (e.g., difficulty experiencing positive emotions) and avoidance of activities and stimuli reminiscent of the trauma; and (c) heightened arousal (e.g., exaggerated startle reflex, insomnia; see Table 1). Finally, a diagnosis of PTSD requires that these symptoms still be evident at least 1 month after trauma exposure and cause impairment or clinically significant distress.

What Constitutes a Traumatic Event?

Unlike the criteria for most DSM-IV disorders, those for PTSD require a specific etiologic event: exposure to a traumatic event. Regardless of how symptomatic a person might be, if the person has not been exposed to an event that counts as "traumatic," then the diagnosis cannot be assigned.

Trauma theorists originally conceptualized PTSD as a syndrome caused by exposure to extreme stressors occurring outside the boundary of everyday life—events likely to trigger marked distress in nearly everyone. Prior to revising the DSM, the DSM-IV PTSD committee discussed the pros and cons of revising the definition of a traumatic stressor. Some members worried that a such high threshold for classifying an experience as traumatic would exclude many people from receiving the diagnosis and the treatment they deserve. Others worried that broadening the definition would create other problems, both forensic and scientific. If, for example, the definition were to certify *any* event as traumatic, as long as it was perceived as such, then the diagnosis would be prone to abuse in the courts. For example, a Michigan woman filed suit against her employer, claiming she developed PTSD as a result of repeatedly being exposed to practical jokes and foul language in the workplace (McDonald, 2003). She won, and the court awarded her \$21 million. Also, scientists worried that broadening the definition of a traumatic event would make it difficult to identify psychobiological mechanisms underlying symptoms arising from extremely diverse events.

As it turns out, the definition of traumatic stressor did broaden in DSM-IV and did emphasize the subjective perception of threat. To qualify as trauma exposed, one no longer needs to be a direct victim. As long as one is confronted with a situation that involves threat to the physical integrity of one's self or others and one experiences the emotions of fear, horror, or helplessness, then the experience counts as exposure to a PTSD-qualifying stressor. For two reasons, DSM-IV dropped the earlier requirement that a traumatic stressor had to be "an event that is outside the range of usual human experience" (APA, 1987, p. 250). First, it was unclear what constitutes "usual" human experience. Stressors outside this boundary for an affluent American might well be within the boundary of usual experience of someone in an impoverished, war-torn country in the Third World. Second, many events triggering PTSD, such as automobile accidents and criminal assaults, are far from uncommon.

The Psychological Impact of the September 11 Terrorist Attacks

The broadened definition of a traumatic event is relevant to concerns about people developing PTSD symptoms following indirect exposure to the events of September 11, such as watching television footage of the attacks on the World Trade Center. Given that one no longer had to be the direct victim (or even direct witness) of trauma-having been "confronted with" a terrible event on television now qualified as a DSM-IV traumatic stressor-concerns arose about posttraumatic responses throughout the country. For example, the RAND Corporation interviewed a representative sample of 560 adults throughout the United States on the weekend after the attacks, concluding that 44% of Americans "had substantial symptoms of stress" (Schuster et al., 2001, p. 1507), and ominously warning that the psychological effects of terrorism "are unlikely to disappear soon" (p. 1511) and that "clinicians should anticipate that even people far from the attacks will have trauma-related symptoms" (p. 1512). The researchers arrived at these conclusions as follows. Respondents were asked whether they had experienced any of five symptoms "since Tuesday" (i.e., September 11, 2001) and rated each symptom on a 5-point scale ranging from 1 (not at all) to 5 (extremely). Respondents qualified as "substantially stressed" if they assigned a rating of