Finding Something to Do: The Disaster Continuity Care Model

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In this article, the authors outline a practice model that provides a disaster continuity of care (DCC) for mental health professionals. The authors argue that mental health professionals have been underutilized and that current practice models do not encompass the full spectrum of services that are needed by disaster victims. The alternative model builds on Omer and Alon's (1994) work in which four stages of disaster are hypothesized: planning, warning, impact, and aftermath. The authors propose that current practice models primarily are aimed at the impact and aftermath stages of disaster response. The authors review the use of Critical Incident Stress Management and Critical Incident Stress Debriefing as employed during disasters. The authors also critique the use of cognitive-behavioral therapies and Eye Movement Desensitization and Reprocessing and its effectiveness. The last set of trauma therapies reviewed are the "power therapies" and Traumatic Incident Reduction. The authors suggest that mental health professionals should be more active in the planning and warning stages where their knowledge of human development can prove invaluable. The authors end by suggesting how current models can be incorporated into the DCC model. [*Brief Treatment and Crisis Intervention* 2:183–196 (2002)]

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Within the past decade, the United States has experienced disaster in the form of earthquakes, floods, fires, and terrorist attacks. Because of their knowledge of the extraordinary personal, fiscal, and physical costs that disasters inflict on victims and communities at-large, mental heath practitioners stand eager and ready to lend a helping hand. Unfortunately, the need for mental health services is not always understood, nor are the services appreciated (Armstrong, Lund, McWright, & Tichenor, 1995; North & Hong, 2000). In this article, we discuss the theoretical reasons for this phenomenon, the stages and foci of traditional disaster responses, and the customary division of labor at such times. Most importantly, we suggest a model of continuity of

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care in relation to disaster services, the preparedness for mental health professionals to contribute to each stage of the model, and the benefits of these contributions.

Disasters are critical incidents that overwhelm our normal coping strategies (Figley, 1985, 1986 [as cited in Bell, 1995]; Kureczka, 1996; Maggio & Buddress, 1998; Mitchell, 1983 [as cited in Linton, 1995]). Whether fires, floods, earthquakes, wars, or terrorist attacks, disasters place us and/or our loved ones in harm's way. They often destroy lives, health, dwellings, jobs, and relationships. They disturb our sense of safety, self-sufficiency, and connectivity with others. They also overload us cognitively, emotionally, and physiologically (Omer & Alon, 1994). Worse yet, traumatic events are occurring with alarming frequency (Figley, 1985 [as cited in Curtis, 1995]). In the United States alone, there are approximately 30 federally declared disasters per year (Jacobs, 1995).

Great costs are involved in the relief efforts of such disasters. In 1989, Hurricane Hugo hit the coast of South Carolina, leaving a toll of $7 billion in damages (David & Baish, 1999). Only 3 years later, Hurricane Andrew came through Florida, resulting in over $30 billion in damages (David & Baish, 1999). Unfortunately, these figures fail to include the many other costs, such as property loss, missed work days, low production rates, and countless other social problems that can occur in the aftermath of disaster (David & Baish, 1999).

Disasters can also cause mental health disturbances. The disturbances may appear as an inability to focus, a numbing of emotions, a disconnection with loved ones, depression, anxiety, intrusive thoughts, startle responses, and nightmares (Kureczka, 1996; Linton, 1995; Mitchell, 1983 [as cited in McWhirter & Linzer, 1994]). When such symptoms last less than 4 weeks, the condition is referred to as acute stress reaction (ASR); when they last more than 4 weeks, it is called post-traumatic stress disorder (PTSD) (Barton, Blanchard, & Hickling, 1996; Harvey & Bryant, 1998). Persons with either ASR or PTSD experience a disturbed sense of peace that affects their personal relationships and their quality of life (Harvey & Bryant, 1998; Kureczka, 1996).

Unfortunately, due to the nature of their work, emergency service workers are at particular risk for developing ASR or PTSD. Working with the dying, handling dead or dismembered bodies, and coping with the loss of family members and/or coworkers create particular risk factors for developing PTSD (Kureczka, 1996; Linton, 1995; Tucker & Pfefferbaum, 1998). Residual effects of high exposure to traumatic events may also explain why public safety workers have higher rates of substance abuse, divorce, and job attrition than the general public (Linton, 1995).

Because of the extraordinary personal, fiscal, and physical costs of disasters, immediate response is needed from a number of organizations and professions (Omer & Alon, 1994). Typically, the first to arrive on the scene of a disaster are local authorities such as firefighters, police, and emergency management workers. These public safety workers begin the immediate rescue operations, such as getting people to safety, putting out fires, and attending to the wounded. When an event is declared a federal disaster by the President, however, a number of federal agencies become involved. In cases of weapons of mass destruction (WMD), the Federal Bureau of Investigation (FBI) leads the federal response to ensure national security. The FBI is followed by The Federal Emergency Management Agency (FEMA), who deals with consequent management such as evacuation and search and rescue efforts (Carlson, 1999). They also provide individual assistance (Jacobs, 1995). The American Red Cross (ARC), though not a governmental organization, responds to every federally declared disaster in the United States and its territories (ARC, 1982).

Since its beginnings over 100 years ago, the ARC has focused its efforts toward providing

food, clothing, shelter, and medical attention to victims of disasters (Aguilera & Planchon, 1995). It was not until 1989, however, that the ARC officially recognized the need for mental health services in the wake of a disaster (Weaver, Dingman, Morgan, Hong, & North, 2000). The ARC's Disaster Mental Health Service (DMHS) was subsequently created in 1991 and has gradually developed over the past decade, providing services to thousands of victims such as those of Hurricane Andrew in 1992 (Shelby & Tredinnick, 1995).

As shown by the recent incorporation of mental health services by the ARC, the place for social work and other mental health professionals in disaster response is often unclear and tangential. Reasons for this lack of clarity vary. One likely reason for this lack of clarity can be found in traditional texts that define a hierarchy of needs (Maslow, 1943). Maslow argued that people's needs occur in a hierarchical manner, with basic survival needs preceding those that are less vital for survival. For example, ensuring the safety of individuals through adequate food, medical care, shelter, and clothing precede questions of marital and family harmony. Extending Maslow's argument to disaster response implies that disaster response agencies may perceive clients' needs for mental health services as frivolous or even unnecessary as compared to more basic survival needs (*The Economist*, 1999). When mental health practitioners are insensitive to the timing of perceived needs and fail to differentially apply mental health services, they may insist on applying their specialized training during an early stage of disaster response and face resistance from disaster aid workers who are providing basic survival services.

Although mental health practitioners are ill-advised to insist on providing mental health counseling immediately after a disaster, such services are ultimately needed. The literature on PTSD and other anxiety disorders provides ample evidence about the need to eventually provide mental health counseling to address traumatic events. The question that remains for mental health practitioners is how and when their expertise should be applied. Also, what other disaster-related services should they provide that both fill a need and pave the way for the application of mental health services at the appropriate time? To answer those questions, we propose a Disaster Continuity of Care Model.

The Disaster Continuity of Care Model

For the underpinnings of our Disaster Continuity of Care (DCC) model, we draw on three concepts presented by Omer and Alon (1994): continuity theory, the normalcy-abnormalcy bias, and the four distinct disaster stages. The continuity theory poses that since disaster disrupts systems, prevention and care responses should provide continuity of systems. Provision of continuity incorporates the preservation of social support (Cohen & Wills, 1985), coping mechanisms (Elias et al., 1986), and roles (Heller, 1990). That is, disaster disrupts one's social support, coping mechanisms, and role functions; effective restoration links one back to previously existing social networks, coping styles, and role-functions.

These three aspects of continuity can be framed as interpersonal continuity (social support), functional continuity (coping mechanisms), and historical continuity (preservation of one's roles) (Omer & Alon, 1994). Interpersonal continuity consists of having significant others of the past continue to be significant in the present, with the expectation that they will also be there in the future. Functional continuity, or coping mechanisms, refers to one's ability to function despite disturbances. Finally, historical continuity refers to roles or a feeling of sameness within one's self, one's family, and one's community over time.

The normalcy-abnormalcy bias consists of two extreme assumptions people make in response to disaster (Drabei, 1986 [as cited in Omer & Alon, 1994]). The normalcy bias underestimates the effects of disaster, while the abnormalcy bias underestimates people's adequacy to cope with disaster. An example of the normalcy bias is the belief that "it can't happen to us" or "life will be unchanged, even after a disaster." Two likely outcomes of the normalcy bias are that those in authority fail to plan for disaster, or they fail to involve the public in taking preparation measures. For example, the Israelis, in the Persian Gulf, failed to distribute gas masks in a timely manner, and eight people suffocated (Omer & Alon, 1994) as a result.

An example of the abnormalcy bias is the belief that the people cannot handle a threat of impending disaster (Omer & Alon, 1994). Three common behavioral responses are expected: panic, shock, and looting. This, too, can lead authorities to withhold pertinent information from the public from fear that the public will panic, overreact, and create a disturbance. Even in the September 11, 2001, World Trade Center (WTC) attack, it was reported that after the first tower was hit, a voice came over the intercom telling people to return to their offices, and that all was well. Such misinformation may have unintentionally placed people's lives at risk. Further, the calm self-sacrificing actions taken by many New Yorkers as they escaped harm and helped others escape harm in the WTC attack is a vivid demonstration that people do not necessarily respond to disaster with panic and shock. Omer and Alon (1994) draw on the Persian Gulf War for another example of the fallacy of the abnormalcy bias. They write that even though homeowners' houses were bombed, the owners displayed courteous behavior. Rather than others perceiving these homeowners' demeanor as heroic, they labeled it as shock, thereby assigning pathology to calm responses. Adhering to the abnormalcy bias can lead to the belief that assistance must come from outsiders and that helpers must move affected people away from their normal surroundings. As seen in the continuity theory, people who believe and act with a normalcy-abnormalcy bias have untoward effects on disaster victims.

A final premise of the DCC model is that of stages of disaster response. Whereas one normally thinks of disaster as having the occurrence and aftermath stages, Omer and Alon (1994) suggest that four stages of disaster response will best combat the normalcy-abnormalcy bias and provide continuity of care: (a) preparation (see Table 1), (b) warning (see Table 2), (c) impact (see Table 3), and (d) aftermath (see Table 4). The preparation stage involves acknowledging the likelihood of a disaster and taking preparatory measures. The warning stage serves two purposes: (a) It issues specific, clearly stated warnings; and (b) it facilitates the public's ability to take in the message and believe the warning that has just been issued. The impact stage is the stage at which emergency service workers are called, and all systems work together in search and rescue efforts. Finally, the aftermath stage involves reestablishing equilibrium after a time of tremendous disruption. Long-lasting efforts at repairing disrupted economic, physical, psychological, social, and spiritual systems take place during the aftermath stage. We believe that mental health practitioners have skills that are useful in any of the four stages and that involvement across the stages will legitimize them in the eyes of other disaster workers and facilitate later application of mental health services as needed.

Application of Mental Health Skills to the DCC Model

Preparation Stage

While scientific experts are required to foretell the likelihood and degree of damage resulting

TABLE 1. Preparation Stage

- Theory
  - Empowerment, self-control, decision-making enhancement (Omer & Alon, 1994)
- Tasks
  - Dissemination of protocols
    - Public advisement of evacuation placements and shelter arrangements
    - Lists of shelf items to stock
    - Family distribution of tasks
    - Preplanning how to contact family members in case of separation
  - Critical Incident Stress Management (CISM) (Everly, 2000)
    - Educate public prior about emotional reactions to disaster
    - Prepare for CISD (debriefing) after disaster
- Primary personnel
  - Public health officials
  - Mental health practitioners
    - Working with EMS organizations
    - Working in public schools
    - Working in conjunction with media

TABLE 2. Warning Stage

- Theory
  - Empowerment, self-control, decision-making enhancement (Omer & Alon, 1994)
- Tasks
  - Issue clearly stated warnings
  - Facilitate public's ability to receive and believe the message, once issued
- Primary personnel
  - Government agencies
  - Public health officials
  - Mental health practitioners
  - Media

from a particular type of disaster, mental health practitioners have skills to help plan for disaster, mitigate the consequences, and disseminate related information. Mental health professionals are trained in systems analysis and problem-solving skills. Such skills can spur think tanks to draw up specific disaster-preparation protocols. The dissemination of protocols can mitigate the consequences of disasters by reducing confusion and ambiguity in their wake. Disseminating disaster-response protocols includes advising the public about the importance of hav-

TABLE 3. Impact Stage

Theory
Maslow's hierarchy of needs (Maslow, 1943)
Tasks
Rescue
Recovery
Debriefing
Case management and referral
Primary personnel
Emergency service workers
FEMA, FBI
ARC, United Way, and the Salvation Army
Social workers and mental health practitioners trained in CISD

TABLE 4. Aftermath Stage

Theory
Continuity of social support, coping, and roles (Omer & Alon, 1994)
Traumatic grief (Green, 2000; Jacobs & Prigerson, 2000)
Cognitive-behavioral theory (Janoff-Bulman, 1992)
Heightened physiological state theory (Straton, 1990)
Tasks
To link victims back to previous support, coping, and role
Formation of groups who share and support through the grief and loss processes
Brief trauma-history
Assessment of trauma-related symptoms
Intervention via a theory-based, effective, brief trauma intervention
Primary personnel
Mental health practitioner

ing evacuation placements, shelter arrangements, lists of items to be stocked or taken when evacuated, distributing tasks among family members, and spelling out procedures for contacting family members in case of separation. The advantages of disaster planning are that it can give the public an increased sense of empowerment and self-control; it can reduce ambiguity; and it can facilitate decision-making (Omer & Alon, 1994).

Another preparatory measure for which mental health practitioners are well suited is that of Critical Incident Stress Management (CISM) (Mitchell, 1983 [as cited in Omer & Alon, 1994]). CISM, the "psychological first aid" (Everly, Lating, & Mitchell, 2000, p. 87), is not psychotherapy. Rather, its purpose is two-fold: (a) to educate the public about typical emotional reactions to disaster *before* disasters occur and (b) to prepare for Critical Incident Stress Debriefing (CISD) after the disaster. Adherents of CISM and CISD believe that they lower the impact of disaster, increase the speed of recovery, and facilitate the speedy return to work (Omer & Alon, 1994).

CISM, or precrisis preparation, usually involves stress management education, mental preparedness training, stress resistance, and crisis mitigation training for both individuals and organizations (Everly et al., 2000). CISM includes the debriefing component called CISD, plus defusing, family crisis intervention, organizational consultation, and follow-up and referral services. It can also mean one-on-one crisis intervention counseling or psychological support throughout the impact stage of the disaster. According to Everly et al. (2000), CISM can also occur on a large-scale basis in times of disaster. That is, CISM can involve school and community support programs such as town meetings and informational briefings.

Because CISM is designed primarily for emergency service workers, its protocols reflect this orientation. For example, CISD teams consist of a mental health counselor and an EMS peer counselor. The coupling of a mental health counselor with an EMS worker lowers EMS workers' resistance to receiving mental health services (Linton, 1995). The criteria for a mental health professional to serve as a CISD counselor are being available on 1 to 2 days' notice and working without pay. In keeping with this service being pro bono, mental health practitioners who wish to serve as CISD counselors understand that they may not later treat the same persons whom they debriefed (Linton, 1995). The criteria for the peer counselor include 3 years of field experience, being respected by associates, being sensitive to emotional issues, understanding confidentiality, being available on 1 to 2 days' notice, and working without pay.

We suggest that CISM be extended beyond emergency service workers to the public at large. While emergency service workers are undoubtedly at highest risk of contracting ASR or PTSD as a result of a disaster and will presumably benefit the most, the general public can be left with its own challenges about making meaning of horrific events such as the attack on the WTC and the Pentagon. The concept of vicarious traumatization (Pearlman & MacIan, 1995) explains that trauma can occur to those who have not been directly affected by a critical incident but who have mentally put themselves in the place of direct victims. Such empathy can shatter assumptions of justice and safety, just as it does in direct victims of traumatic events (Janoff-Bulman, 1992). When assumptions are shattered, one often needs to engage in cognitive-emotive processing so that a new or repaired cognitive schema or mental map may be formed (Valentine & Smith, 2001) and trauma-related symptoms diminished. CISD can help the public process the disaster and find meaning afterwards; CISM should be able to prepare the public for disasters and normalize psychological disaster responses. Mental health practitioners can use their skills at the preparatory stage of disaster planning and become engaged in dissemination of information, education, training, and the implementation of CISM.

Warning Stage

The second stage of a disaster is the warning stage (Omer & Alon, 1994). Here, mental health practitioners can work on interdisciplinary teams. The purpose of the teams would be two-fold:

(a) to issue specific, clearly stated warnings and (b) to facilitate the public's ability to take in the message and believe the warning that has just been issued. Mental health practitioners, with their experience in human behavior and development and health promotion, should be key players in devising clear warnings and making them easy to assimilate.

Impact Stage

The impact state, or third stage of disaster, is the immediate response to disruption. It is the stage when the public becomes aware of the disaster, even if it was not prepared for it or if it did not receive or believe the warnings issued. Emergency service workers engage in rescue and recovery efforts. FEMA, the FBI, and the ARC are likely to be on the scene, providing safety, order, and basic needs to those directly affected by the disaster. The social service agencies most likely to respond to the impact phase of a disaster are the ARC, United Way, and the Salvation Army. Here, social workers and mental health professionals can link with these agencies, providing case management, brokering, and linking services.

A myriad of crisis intervention techniques exist for dealing with initial emotional components of disaster responses in the impact stage. They include Traumatic Event Debriefing (TED), CREST (Community Resources for Education, Support, and Training), Multiple Stress Debriefing (MSD), and CISD. Of those, CISD is best known and, therefore, addressed at some length.

During the impact phase, mental health professionals who have been trained in CISD can be called to begin to provide CISD. CISD is the "reactive activity" of the CISM team (Linton, 1995, p. 569). CISD is a one-time, group debriefing in which EMS workers discuss their experience of the disaster, focusing on similarities, not differences, and thereby fostering a sense of normalcy. They answer the following types of questions: Where were you when you first heard about the incident; what were your immediate thoughts; what were your initial reactions; what are your responses now; and what does this event mean to you (Everly et al., 2000)? CISD meets the criteria of crisis intervention in its aim to provide acute psychological support, stabilize and mitigate symptoms, restore functions, and offer referrals (Everly, 2000). In keeping with the continuity theory, CISD should be provided close to the trauma site.

Even with ample psychological preparedness, few EMS workers are prepared for the "horrific psychological devastation" (Everly et al., 2000, p. 87). CISD, a form of crisis intervention, is based upon the principle that one is most open to receiving help when in a state of disequilibrium. To prevent long-term, mental-health problems, CISD should, therefore, happen relatively soon after the disaster. In most cases, CISD is provided 1–10 days after an acute crisis. In cases of mass disasters, the services may not occur until 3–4 weeks later. Each session lasts about 2 hours. CISD counselors lead participants through the seven-step protocol and are trained to recognize those who may need referral to more intense mental health services.

The empirical evidence on the effectiveness of CISD with disaster workers is slight. Most reports about its effectiveness are anecdotal. CISD participants report high satisfaction with the procedure, and counselors report observing (a) a reduction of tension and distance, (b) increased relief in facial expressions, and (c) increased talkativeness and laughing weeks after a session. The empirical studies of CISD's effectiveness report conflicting findings. Dyregrov and Mitchell (1992 [as cited in Linton, 1995]) found long-term positive outcomes, while Kenardy et al. (as cited in Linton, 1995) used a comparison group and found no evidence of improved recovery 2 years after an earthquake.

Everly's conceptualization of the critical stages in formulating CISD differs from those of Omer

and Alon. He labels the four stages as: heroic, honeymoon, disillusionment, and reconstruction. Although evocative, we believe that these stages speak only to victims' emotional reactions rather than to their entire experience of a disaster. While Everly's conceptualization is helpful, we believe that a conceptualization that incorporates mental health professionals' activities during the impact stage will be accentuated if they have also been involved in the planning and warning stages of disaster response. We also believe that the heroic and honeymoon stages constitute two subcategories of the Omer and Alon's impact stage while the disillusionment and reconstruction phases are part of the aftermath stage (1994). The heroic stage consists of rescue and recovery workers risking personal safety to fulfill their calling and save the lives of those in danger. The honeymoon stage involves that short time when survivors are reunited with family and coworkers, when they rejoice to be alive and to be with their loved ones. During this phase, survivors and families may speak of rearranged priorities, as if life will never again be mundane or taken for granted. Mental health practitioners need to understand that the honeymoon stage will likely disintegrate into disillusionment before victims fully recover. With such recognition, mental health professionals can differentially apply appropriate mental health skills.

Aftermath Stage

The aftermath is the disaster stage in which survivors seek to reestablish equilibrium after a time of tremendous disruption. This stage involves long-lasting efforts at repairing disrupted economic, physical, psychological, social, and spiritual systems. The aftermath stage is largely defined by the passage of time. The immediate survival needs have been addressed; the residual effects of disaster now remain. Enough time has passed for survivors to believe that life should now be normal, but it is not. In the aftermath stage, survivors may be impatient with themselves, their loved ones, and/or environmental systems such as work, government, and social services whenever systems are not functioning as they did prior to the disaster. At this point, survivors will have used their coping skills and will have accessed immediate disaster response services as best they could. When problems still are not solved, survivors will grow more discouraged. Everly (2000) calls this stage the disillusionment stage. The disillusionment stage occurs after the honeymoon stage and is marked by a tendency to find fault and to grow discouraged.

These responses can occur whether or not one has developed PTSD. Assuming that the victim has not developed PTSD, Omer and Alon (1994) suggest three foci for reconstructing life in the aftermath stage: focusing on the traumatic event itself, focusing on pretraumatic experiences (that is, who the person was before the critical incident), and focusing on the restoration of work and roles. In this conceptualization, Omer and Alon have incorporated the continuity of social support, coping, and roles. Omer and Alon also encourage mental health practitioners to dissuade clients from rejecting, blaming, and avoiding behaviors.

Another reaction to a disaster, apart from PTSD, is a grief response. Grief has recently been linked to the field of trauma by focusing on the concept of loss (Green, 2000; Jacobs & Prigerson, 2000). The distinction is made between so-called normal grief and that of complex grief or what Jacobs and Prigerson (2000) refer to as traumatic grief. Traumatic grief or loss is defined as loss in which the mode of death is sudden, violent, or unexpected (Green, 2000). Grief counseling practices vary widely due to the personal nature of the grieving process (Cordell & Thomas, 1997). Practices may include individual or group interventions over time periods ranging from weeks to years and may be per-

formed by trained mental health professionals or volunteer community organizations (Forte, Barrett, & Campbell, 1996; Neimeyer, 2000). However studies suggest that intervention is most effective when performed on a short-term, high-frequency basis (2 to 7 weeks, meeting at least weekly) and by professionals (Potocky, 1993). It has also been found that grief therapy is more beneficial for those suffering from more complex or traumatic grief (Neimeyer, 2000).

No discussion of mental health services in the aftermath of disaster would be complete without addressing PTSD. The symptoms associated with PTSD group into three clusters: (a) avoidance of anything related to the traumatic incident, (b) intrusive thoughts that may present themselves in obsession and nightmares, and (c) hyperarousal, increased startle responses and jumpiness. In addition to PTSD-like symptoms, other symptoms such as depression, anxiety, low self-efficacy, physiological symptoms, and substance abuse exist (Clarke, 2000; Keane & Wolfe, 1990; Moscarello, 1991; Tucker & Trautman, 2000; Valentine & Smith, 1998).

An integrated link between theoretical explanations of traumatization and treatment can result in informed, effective trauma treatment. A variety of psychotherapies exist to treat the harmful effects of PTSD. One common means of treating PTSD is cognitive-behavioral therapy. An analysis of clinical trials by Sherman (1998 [as cited in Tucker & Trautman, 2000]) reports that cognitive behavioral therapies in group and individual settings have shown positive results among PTSD patients. One challenge with cognitive-behavioral therapies, however, is that they often are used in combination with varied theoretical explanations and treatment packages. The use of treatment packages makes it difficult to determine which of the components is essential to the resolution of trauma-related symptoms and which are superfluous (Valentine, 1998). A second problem with cognitive behavior therapies is that of length. Valentine found that treatments ranged from 12 weeks to a year. The longest treatments were groups, and the shortest were a form of imaginal exposure. A final challenge with cognitive-behavioral therapies is the frequent exclusion of incest survivors. In such instances, the effectiveness of cognitive-behavioral therapies does not address trauma resolution in incest victims. This is problematic since there is no assurance that victims of women battering are not also incest victims.

Another treatment of PTSD is Eye Movement Desensitization and Reprocessing (EMDR) (Huber, 1997; Tucker & Trautman, 2000). The concept behind EMDR is that in cases of severe trauma, a person's information processing systems shut down, resulting in an inability to reach a resolution of the event (Huber, 1997). In the actual EMDR session, the client mentally focuses on the traumatic event, remembering particularly troubling aspects or beliefs associated with the event while the practitioner rapidly waves two fingers or a wand back and forth in front of the client's face. This visual tracking desensitizes the client's feelings of anxiety, allowing a new awareness about the traumatic event to emerge (Huber, 1997). Studies by Sheck, Schaeffer, and Gillette (1998) and Wilson, Silver, Covi, and Foster (1996 [as cited in Tucker & Trautman, 2000]) have been supportive of the benefits of EMDR. However, EMDR remains controversial and many believe that insufficient empirical support exists for EMDR's bold claims (Rosen, McNally, & Lilienfeld, 1999).

A form of PTSD treatment that flows from energy field theories consists of a group of therapies referred to as power therapies (Swenson, 1999). Power therapies are so designated because of their alleged rapid and strong results. They have emerged as managed care has begun limiting the number of sessions for which psychotherapy patients could be reimbursed. Power therapies are considered alternative approaches and are promoted by testimonials; they lack, by and large, well designed studies that point to their effectiveness.

The group of power therapies is large, consist-

ing of: Thought Field Therapy (TFT), Touch for Health (TH), Therapeutic Touch (TT), Tapas Acupressure Technique (TAT), Ear Tapping Desensitization and Remobilization (ETDR), and Emotional Freedom Technique (EFT) (Swenson, 1999). The therapies include one or more of the following components: muscle testing, manipulation of the body's aura, seeking to identify by pressure points where the body stores the problem, tapping acupressure points in the ear, and/or tapping near the end points of energy meridians. The latter is a component of EFT and is purported to work within one tapping sequence. This stands in opposition to TFT, which may require 10–15 tapping sequences (Swenson, 1999).

TFT consists of a series of finger tapping movements at certain acupressure points. Within the series of tapping, the client may also perform some sensory activity such as repeating statements or counting (Swenson, 1999). Simultaneously, the client must be thinking of the particular traumatic event (Swenson, 1999). The protocol is repeated until the client's discomfort level is lowered (Swenson, 1999). The discomfort level is measured by a Subjective Units of Discomfort Scale (SUDS). That is, before engaging in the tapping movements, the client chooses a number from 0–10 to describe his or her distress level. As the session progresses, the clinician checks with the client to see if the discomfort is decreasing and continues the intervention until the SUDS level is at or near zero. Although many claims have been made about the miraculous results of TFT (Callahan, 1998; Edwards, 1997 [as cited in Swenson, 1999]), it, too, is still controversial. According to Swenson (1999, p. 63), "most of the claims for the efficacy of TFT are clinical . . . or even client testimonials. . . . [T]hey are not considered strong scientific evidence because they do not follow sound protocol for testing a claim."

Another brief intervention is Traumatic Incident Reduction (TIR) (Gerbode, 1989; Huber, 1997; Valentine, 1995, 1998, 2000a, 2000b; Valentine & Smith, 1998). TIR flows out of the Heightened Physiological State (HPS) theory and is designed to reduce the troublesome symptoms often experienced by survivors of traumatic events (Valentine & Smith, 1998). TIR is a client-respectful, therapist-directed, memory-based therapeutic intervention most similar to imaginal flooding. It is most similar to imaginal flooding in that the client is asked to "view" the incident repeatedly and engage in the incident until it is understood differently. Once clients realize something new regarding the incident, they often describe the incident as boring (Valentine & Smith, 1995).

TIR has been used primarily on verbal adults who are stable enough to focus on a troubling event for a sustained period of time. Traumatic events on which TIR has been used include natural disaster, violence of a noninterpersonal nature such as illness, death, and accidents, and interpersonal violence such as assault, verbal abuse, incest, and rape. Additionally, TIR has been used on both single incident events such as an accident, and on repeated incident events such as sexual abuse and domestic violence (Bisbey, 1994; Coughlin, 1995; Valentine, 1995). TIR is distinguished from other techniques by three features: (a) the length of session, (b) the absence of the therapist's interpretation, evaluation, or commentary, and (c) reliance on the client's choice regarding which prior traumatic event he or she wants to view.

Implications for Education and Practice

We wrote this article with the conviction that mental health professionals are being underutilized in times of crisis, especially calamitous crisis. The further we investigated this hypothesis, the more we became convinced that our impression was not mere speculation. And this conviction led to the proposal of the DCC model. We provided a theoretical and practical context for this model and provided examples of how mental health professionals can be involved in dif-

ferent stages of disasters. Finally, we provided examples of trauma treatment techniques and how they can be integrated into providing services during a disaster.

However, it was also apparent to us that disaster response should be taught early in public school settings similar to health promotion curricula. Prevention, versus reaction to a disaster, will not only facilitate the impact of psychotherapy but will likely diminish the multiple effects of the disaster itself. Such curricula can be written and presented by mental health professionals, especially those with experience in trauma and disaster. Another benefit from such exposure is that students who wish to help can be encouraged to learn CISD and to volunteer with the ARC. Such volunteerism, whether in disasters or in normal times, will provide the nation with a corps of volunteers who are trained in disaster response and will be likely to provide assistance in each of the four stages.

Mental health professionals, however, have their own challenge of linking with public health and other disaster response teams in planning and warning activities. Although mental health professionals may not believe that they have the requisite skills or background to assist in planning and warning activities, we believe that such fears will soon be seen as unfounded. Mental health providers, especially those with a background in human development and health promotion, have a vital role to play in creating and disseminating disaster response warnings to the general public.

One area in which most mental health professionals lack exposure is in brief trauma history taking protocols. This is problematic because such protocols are critical in effectively preparing clients for disaster and trauma treatments. Our experience with trauma history protocols suggests that they are essential in providing sensitive and effective treatment. We believe that the increased use of brief trauma protocols will enable trained disaster response teams to provide efficacious services.

The events of the WTC terrorist strikes have given most of us pause to reevaluate what we do and how we do it. It is fitting in our reevaluation that we try to answer what we can do differently with whom to better complement the services of our disaster response colleagues. We hope that this article is a beginning step in that direction.

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