1. COGNITIVE BEHAVIORAL THERAPY IN DISASTER: PSYCHOLOGICAL FIRST AID, RELAXATION, COPING SKILLS TRAINING AND DIRECT THERAPEUTIC EXPOSURE

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1. INTRODUCTION

Behavioral treatments for posttraumatic stress disorder (PTSD) have proven to be among the best researched and most efficacious of interventions used with a wide range of survivors of war, rape and sexual assault, criminal victimization, and motor vehicle accidents (Foa, Keane & Friedman, 2000; Follette, Ruzek & Abueg, 1999). With the advent of much needed research in the assessment and treatment of *acute stress disorder (ASD)*—the clinical predecessor disorder to PTSD in the first month post-trauma—the relevance and applicability of cognitive behavioral therapy (CBT) approaches in traumatic stress has grown even further. It is not surprising that clinicians, clinician-scientists, policymakers and public health officials have turned their attention to CBT conceptualizations and methods in addressing the complex and often overwhelming needs of people who survive disaster of all types, natural, man-made, including terrorist events. Empirical research has slowly but surely been ushered forward in the context of a number of recent catastrophes around the world: World Trade Center (WTC) and Pentagon Bombings of 9/11, the Oklahoma Bombing, the Madrid Bombing of 11/3, Hurricane Mitch, and the earthquakes of Armenia, El Salvador, and Turkey. As of this writing, perhaps one of the largest scale natural disasters in world history, the Indian Ocean earthquake and subsequent Asian Tsunami of December 2004, has devastated societies of 12 different countries and will undoubtedly presage another important body of disaster mental health intervention writing and research.

It must be acknowledged that a wide variety of techniques and theoretical paradigms have without doubt been used with positive effect in traumatized populations in disaster contexts. Pharmacological, interpersonal and general supportive counseling

approaches probably account for the largest proportion of non-behavioral strategies dealing with trauma-related emotional consequences of disaster. It further should be noted that the integration of methods across schools of thought has been successfully implemented in countless clinical contexts, including by the authors of this current guide to intervention. Supportive counseling and social work interventions have dominated the field of crisis intervention for decades. Probably the single most influential model of intervening in disaster beyond general crisis intervention has been the psychological debriefing (PD) model, best characterized by critical incident stress debriefing (CISD) and variants on the theme. Unfortunately, little if any solid empirical research has emerged to support the PD model (Litz, Gray, Bryant & Adler, 2002; Litz, 2003) and a handful well-controlled research studies as well as anecdotal evidence have recently suggested that PD as an early intervention may even be harmful (e.g., Bisson, Jenkins, Alexander & Bannister, 1997).

In the current chapter, we will review why CBT holds such great promise for ameliorating the suffering of disaster survivors. Recent discussions of risk and resilience research will be broached for their relevance to enhancing CBT interventions and attention will be given to cautions, contraindications and issues of informed consent in the provision of this kind of mental health service in catastrophic contexts. Finally, we capitalize upon developments in recent CBT research as well as further amplifying upon our direct experience using these techniques, by providing guidance to conducting intervention in three areas: 1) psychological first aid; 2) relaxation based and mindfulness interventions; 3) coping/problem solving skills training; and 4) direct therapeutic exposure.

2. WHY CBT IN DISASTER?

Cognitive-behavioral methods have grown in their relevance to the disaster trauma context in part because of a growing body of outcome studies to actually show their value in the early intervention of acute stress disorder in non-disaster trauma victims (Bryant & Harvey, 2000). Bryant and colleagues have been particularly influential in that not only are these studies well designed and executed but the conclusions are exactly what disaster mental health (DMH) providers hope for: brief CBT interventions have

been shown to reduce the rates of conversion from acute stress disorder (ASD) to full blown posttraumatic stress disorder (PTSD). These methods have already been formally prescribed in national and international expert consensus panels as part of an essential armamentarium during the secondary phase (i.e., after the acute impact period, usually 2 weeks post-event) of responding to disaster (National Institute for Mental Health, 2002; World Health Organization, 2005).

In addition to the persuasiveness of outcome research, CBT interventions are often articulated in writing, "manualized" to support research and subsequent efforts to replicate the findings. These step-by-step guides are highly accessible to clinicians of all orientations. A handful of authors have provided manualized CBT guides to PTSD (e.g., Foa & Rothbaum, 2001; Resick & Schnicke, 1993) and at least one book summarizes the full range of evidence-based interventions in PTSD (Schiraldi, 2000). Richard Bryant dedicates at one chapter in his book Acute Stress Disorder to elucidating the elements of the interventions they used in their studies (Bryant, 2002; pp. 87-134). Well articulated guides to CBT intervention specific to disaster are hard to find (Abueg, Drescher & Kubany, 1993 and Abueg, Woods, & Watson, 1999; Young, Ruzek & Ford, 1999). The second author of this chapter (BY) is the principal author of an operational guide to understanding and administering mental health services within the context of the initially chaotic maelstrom of nongovernmental organizations (NGOs), government agencies, hospitals, and other institutions providing relief and recovery. This guide (Young, Ford, Ruzek, Friedman, & Gusman, 1999) is strongly recommended to any new or seasoned practitioner who intends to offer services in these situations. It will provide a nice foundation for actually delivering some of the techniques reviewed herein.

Important Notes on Safety and Contraindications

Although CBT interventions have been used with success in severely ill psychiatric populations (e.g., skills training with schizophrenics), brain injured patients (e.g., cognitive rehabilitation techniques) and very young children less than 5 years old, the subject of this chapter is not intended for these populations in disaster contexts. It is hoped and expected that hospital or institutionally based services in the context of disaster will be available to these kinds of survivors; it is further hoped that researchers and clinicians alike are able to study and to share their attempts at assisting the

aforementioned vulnerable populations. It should also be stated that a small proportion of higher functioning survivors may exhibit acute reactive psychosis of short duration or severe suicidality including anorectic adaptations. For the safety of these individuals, good clinical judgment should prevail: hospitalization and pharmacotherapy may be the most sensible lines of intervention. With respect to the application of CBT with children, it is reassuring that virtually every one of these classes of CBT interventions has not only been attempted in the context of disaster but has met with positive outcomes (e.g., Stein, Jaycox, Kataoka, et al. 2003; Chemtob et al., 2002). Due to the length of the current chapter, however, we will limit our discussion to interventions with adults who exhibit trauma-related stress with at least some signs and symptoms of acute or post-traumatic stress disorder, and not excluding limited signs of common comorbidities such as alcohol or substance abuse or dependence, depression and panic disorder.

3. PSYCHOLOGICAL FIRST AID AND BASIC PSYCHOEDUCATION IN DISASTER

In the acute phase of the disaster, i.e., within two weeks of the impact in most instances, formal consensus (National Institute of Mental Health, 2002; World Health Organization, 2005) has confirmed what has long been intuitive, sensible, and circumspect: mental health caregiving should be consistent with the pressing basic needs for safety, relocation, reunification with loved ones, food, water, and healthcare (e.g., disease treatment and prevention) *and* consist of the least potentially harmful support. The field has begun to more consistently use the term *psychological first aid* to characterize these interventions. To many with disaster experience and those with practices aimed at workplace violence or assisting personnel in enforcement and emergency services after traumatic events, the recommendation will be recognized as a retreat from the typical one of psychological debriefing (PD). In contrast to the more probing, often emotional narrative elicitation of CISD methods, psychological first aid aims to comfort, to validate, to reassure and to educate in tolerable doses. In our experience, all of these aims are fully consistent with a behavioral psycho-educational model; not only does the intervention ameliorate suffering in the short-term but, as we have advocated in previous writings (see Abueg, Drescher & Kubany, 1992; Abueg,

Woods & Watson, 1996), it can be a critical foundation to identifying individuals at risk, to linking the survivor to other services, and to providing a sense of efficacy in not only accepting help but subsequently seeking help on their own.

Psycho-educational interventions have been pioneered by behavior therapists for the last three decades at least (cf. Goldstein & Foa, 1980) in a wide variety of individuals with clinical disorders ranging from anxiety and mood disorders, personality disorders and forensic populations, to developmental disorders and neuropsychological injury. These interventions involve informing the afflicted individual and her family of the onset and course of disorder, phenomenological aspects of experiencing specific symptoms related to the psychological disorder, and rudimentary means of managing symptoms which involves cognitive and behavioral methods. Often an important component of good psycho-education is helping the client to become aware of expected symptom course, to include worsening which might warrant face-to-face consultation with a professional.

Elements of psychological first aid should include as many of the following as are practicable and relevant, listed herein in order of importance. First, nutrition and health needs should be monitored; survivors need to know or be reminded of the fact that the traumatic shock and emotional numbing can lead to major disruptions in caring for oneself. Statements such as “It is not uncommon for survivors to forget to eat or to lose their appetite altogether, especially after such shock.” can be helpful. Close observation of feeding and drinking practices and access to health care, especially in contexts where resources are severely disrupted (i.e., relocation camps or emergency shelters) should be undertaken by DMH clinicians. Some survivors will fail to attend to injuries and will engage in irrational, and potential life-threatening behaviors, such as drinking untreated water in areas at risk for contamination.

Second, connecting the survivor with appropriate resources not only increases survivability and future return to normalcy but lays the groundwork for a touchstone theme of CBT work: increasing self-efficacy and perceived control. The welter of relief services can be dizzying to the providers of services themselves let alone the victim in dire need. “Do you know where your family is?” “Are you aware that you may be eligible for relocation grants from the government?” Assisting with family reunification services and escorting and navigating the survivor through paperwork are all examples of

psychological first aid. Biological and chemical terrorism present unique challenges to DMH providers: symptoms of physical illness may arise which are simply undiagnosable or not previously observed. In response to medically unexplained epidemic illnesses, the World Health Organization (2005) suggests "it may be preferable to avoid suggesting 'there is nothing wrong' or that the episode is purely psychogenic or sociogenic, because this invalidates people's experience, and one way for people to prove that something is wrong is to remain ill." (from WHO, 2005 citing Bartholomew & Wessely, 2002). Providing access to credible sources of information in general is a key element to helping the survivor manage their own and their family's needs.

Third, validation of the range of emotional responding can be provided by listing and describing possible symptoms. Good judgment will attempt to "scale" the depth or detail of this descriptive information for the audience. Grieving for the loss of loved ones or a home or possibly an entire community is quite understandable to most laypersons. What is startling, however, is the intensity of these reactions whether they be experienced personally or witnessed in others. "Crying can at times feel uncontrollable. Sometimes you may feel numb or as if you're in a dream or a movie."

The tripartite constellation of ASD/PTSD symptoms is usually enlightening to most survivors. In our experience, disaster victims are most often surprised and disturbed by reexperiencing symptoms and yet are relieved to recognize the naming of these elements as part of their own experience or that of loved ones. The following examples illustrate how these symptoms can be described.

> Posttraumatic stress often involves some symptoms that can fall into one of three categories: reexperiencing, avoidance, and excessive anxiety ("hyperarousal"). First, reexperiencing problems can affect you during the day or night. During waking hours, you might find yourself constantly thinking about the disaster, actually seeing or hearing sights and sounds of your trauma, or even feeling as if you are actually experiencing the trauma all over again. Things that remind you of your traumatic experience can also cause a great deal of anxiety or fear. Your sleep may be affected by nightmares of the event or of related upsetting subjects.
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> A second type of problem is avoidance: this involves trying to stay away from reminders of the trauma. This can occur only in your thoughts; that is, trying to keep yourself from thinking about what happened is one way to control one's feelings. Avoidance can affect your usual way of feeling: things that were once enjoyable or interesting may no longer be so. Sometimes it is difficult to feel anything at all, as if you're detached or numb. The most typical problem is

> wanting to stay away from actual places or situations that remind you of the worst parts of your experience. Often this is impractical or impossible because of how pervasive the disaster has been.
>
> Third and finally, excessive anxiety or hyperarousal is a common reaction to extreme stress. This is a sign of how your body and mind are attempting to adapt to a threat to your safety. Anxiety, tension and irritability may be the only feelings you are having. You might feel constantly on guard, as if you or your family are still unsafe. You may be sufficiently tense that your sleep is fitful or so light that is does not feel satisfying.

Adaptation versus Disorder. We have found it quite useful to share the distinction between what is normal adaptation, which involves grieving and the aforementioned traumatic stress symptoms in the short-term to problems of moderate or truly disabling severity. Providing a simple heuristic for considering additional professional assistance, can be worded as follows.

> Persistent thoughts, avoidance, or sleep problems, for example, which last more than two weeks or which interfere with everyday functioning may warrant further attention. Most individuals do find their problems subside in time. For the proportion of people who do not get better with the support of family, friends, or community, we know that talking with a counselor can provide relief and prevent these problems from becoming a full-blown disorder, a condition that is truly disabling. If you are unsure about how serious your problems are, please do consult a professional helper.

Concerns for the caretaking of children and "what to say" to the little ones is often of paramount concern for parents. Statements of reassurance, normalizing strong emotional reactions and informing survivors that most people do indeed experience many of these feelings can help; at the same time, survivors can be told "most people will experience a lessening or subsiding of these painful and intense emotions." Knowing the base rate needs of the survivor population can help tailor these educational messages; in the U.S. Embassy Bombings in Nairobi, for example, health providers were aware of the high percentage of pregnant women who were victimized by the blast and informational messages were thus aimed directly at their unique fears and medical needs post-trauma (Njenga, Nyamai, Woods, et al., 1999).

Fourth, survivors can be informed of what might put them at higher risk for future emotional problems and that brief help now may actually improve their functioning later.

This kind of information can take full advantage of our increasing knowledge of risk factors for further psychopathology (e.g., Norris, Friedman, Watson, Byrne, Diaz, & Kaniasty, 2002; Brewin, Andrews, & Valentine, 2000). The biggest predictors to later problems are extreme exposure to loss of life and resources, previous psychiatric symptoms or disorder, high levels of dissociation during or just after the trauma ("peritraumatic dissociation"), young children and middle age survivors (40-60 years old), and individuals with previously unresolved traumatic experiences (see Watson et al., 2001). Depersonalization, derealization, and amnesia during and immediately after trauma have been shown to predict to posttraumatic stress symptoms later (Marmar, 1997). One study showed that symptoms measured one week post-trauma predicted symptomatology 5 months later (Shalev et al., 1996). Specific instructions related to these risks often proves beneficial in victim help-seeking behavior: "If you feel like you've been in a state of not being yourself, numb or "in a fog" a good percentage of the time for the last two weeks or more, please consider talking to one of the mental health workers for further screening or assessment."

In disaster, these information based interventions can also be delivered via the media, through institutional and governmental means, via community based organizations, schools and corporations. The ideal context in our experience and in recent formal best practices recommendations has been to provide information in groups or in individual sessions. Systemic community interventions aimed at health behaviors have provided interesting models for change in behavior. Disaster related information continues to be the best way of preparing individuals and their families *before* a disaster: the goal explicitly involves the mitigation of the full impact of the devastation by preparedness plans and resource allocation (e.g., a worksite disaster plan, a phone tree network for information transmission, how to reach emergency service personnel) during the onslaught of a catastrophe and its aftermath. *After* the disaster impact, information provided to employees in the workplace, when the infrastructure remains functional, has proven to be an efficient method of information after disaster. The following anecdote is provided as a prototypical example of a behaviorally oriented psychological first-aid intervention conducted by a disaster mental health (DMH) worker who has been assigned

to a shelter set up to house forest fire victims whose homes have been destroyed several days earlier.

Seeing a middle-age woman sitting alone and gazing distantly on a cot, the worker approaches the woman.

DMH Worker: “Hi… I couldn’t help but notice you sitting here by yourself and feeling some concern. Are you all right? Can I get you something cool to drink?”

Woman: “I’m okay…who are you?”

DMH Worker: “My name is Bruce. I’m part of a small group of mental health professionals under the authority of the county who are checking in with people to see if or how we can provide some support given the amount of things people who have lost their home have to contend with. How long have you been here?”

Woman: “I arrived yesterday afternoon when I was blocked from returning home. Well, actually, there was no home left to return to I was told.”

DMH Worker: “I’m sorry. It must have been shocking to realize you couldn’t go home.”

Woman: “I’m still in a state of shock really.”

DMH Worker: “I’m not surprised.”

Woman: “It feels so unreal. Everything feels unreal. I just feel so cut off from things. I don’t want eat, I don’t want to be around people. I feel sick inside.”

DMH Worker: “I’m really sorry you’re going through this. Other people I have talked to over the last few days, have mentioned that it seems surreal, that it is hard to believe that it happened. When was the last time you ate?”

Woman: “I guess ate a little bit last night.”

DMH Worker: “So you didn’t eat breakfast or lunch today?”

Woman: “No.”

DMH Worker: “Are you getting any fluids in?”

Woman: “No.”

DMH Worker: “Would you drink some water if I brought it over to you?”

Woman: “Yah, I guess.”

DMH Worker brings woman a glass of water and a ready-made sandwich from the food area.

DMH Worker: “Here’s the water, and I would like to see you eat this sandwich. Even if you don’t feel hungry, it is important that you eat. Not eating or drinking is only going to make things more difficult.”

Woman: “You don’t get it, I don’t want to eat.”

DMH Worker: “Where would you like me to sit? (Takes a seat accordingly). How long did you live in your home?”

Woman: “10 years.”

DMH Worker: “That’s a long time. Did you have any friends who lost their homes?”

Woman: “No.”

DMH Worker: “Are you in touch with family, relatives, or friends who can help you?”

Woman: “I don’t have contact with my family.”

DMH Worker: “Really. You had a falling out recently or a long time ago?”

Woman: “It was a long time ago. I pretty much wasn’t close to anyone even when I was growing up.”

DMH Worker: “I want to respect your privacy, but it sounds like you live without friends or family in your life.”

Woman: “I need it that way.”

DMH Worker: “What do you mean?”

Woman: “I’m just not very comfortable around people and haven’t been for a long time. I don’t really trust people. I find most people irritating.

DMH Worker: “I have heard that from other people who were let down by someone they originally trusted or cared about. Not just let you down, but hurt very deeply.”

Woman: “The fact is my father was sexually abusive when I was a girl and when I tried to get help no one believed me. Remember, that was 30 years ago and I lived in a rural area. Kids get more help today, I think.”

DMH Worker: “Oh…..I’m sorry …it makes sense that you would be careful about who you trust. Your childhood was harder than I’ll ever know, you’ve kept apart from others as an adult, and now this fire. You must be at heart, a real survivor. Have you ever received any kind of professional help, for example, therapy for what you suffered through as a child and have carried as an adult?”

Woman: “No… I have mostly put it behind me, but losing my home to the fire , I’m more conscious of it…the feelings of insecurity…not having a place…it reminds me of when I was a girl when I also felt like I didn’t have a place.”

DMH Worker: “Yes, I can see how the two experiences are connected.
There is a growing movement of support for adult survivors of child abuse.

You’ve been quite resilient, but you deserve to be believed, to tell your story, to be heard and understood, especially by other women who were abused as children. The loss of your home and your possession is in itself enough to overwhelm anyone…but the additional stress of carrying a history of being abused, in my mind anyway, is too much for any one person to handle alone. I think it would be really helpful to you, to have someone help you through the relief process…help you find the right forms, the right places to go, help you navigate the system. Would you be willing to accept that kind of support?”

Woman: “Who would provide it?”

DMH Worker: “For the next two weeks, it would be members of the team I am on. I would gladly make calls to see if the Red Cross was offering more extended help.”

Woman: “I’m not sure about this. I feel okay with you but I’m not sure about having lots of people that I have to talk with who I don’t know.”

DMH Worker: “I can understand that…especially when you find yourself telling different people the same thing over and over. I want to assure you that the men and women who make-up our team are very professional and

> very caring. Would it make a difference to you if it were a man or woman?…would you prefer to have a woman who was supporting you?"
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> Woman: "I would, but if you're able to be part of the support I would welcome that."
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> DMH Worker: "Good. We can arrange for having a woman and myself work with you. We clearly need to attend to your more immediate needs, especially reminding you to eat and get fluids in, but at some point, making inquiries about support groups could possibly benefit you. But one step at a time. I'm hungry. Feel like eating a sandwich with me? Can I get you a little more to drink?"

The DMH worker uses an icebreaker to begin engagement and then provides the rationale for talking with the woman and others staying at the shelter. The woman quickly acknowledges the distress of learning about the loss of her home and the DMH worker normalizes her reactions of shock and disbelief. At each opportunity, the DMH worker looks to validate the woman's emotional experience.

The DMH worker learns that the woman is having difficulty eating and immediately looks to bring her food and drink. She doesn't appear to be showing any signs of dehydration or other ill effects and thus does not appear to require immediate medical attention. When the DMH worker encourages the woman to eat the sandwich, he meets resistance and a bit of annoyance, as the woman feels the DMH worker really does not understand the degree of her shock. The DMH worker lessens the perceived pressure by looking for ways to increase her sense of control: by asking her to direct him where to sit. He helps to refocus her attention by asking an easy question: "How long did you live in your home?"

The DMH worker explores the quality of the woman's support system and she spontaneously discloses that she was victim of childhood sexual abuse thirty years earlier. The DMH worker's response to this remarkable and telling disclosure is shaped by time constraints. In the United States, the acute NGO response usually involves teams intervening for two weeks at a time; any single interaction may typically last just a few minutes to a half hour at most. The DMH worker validates the woman's long suffering, reframes her suffering as resilience, validates her perceptiveness about her surfacing feelings of insecurity, validates her avoidance-based coping, while looking to help the

woman with her more immediate problem solving. The DMH worker offers follow-up, concrete support, and is willing to help secure ongoing support with an agency that will do just that. In addition, the DMH worker continues to look for ways to empower the woman and help her feel more secure by asking if she would prefer to have women to work with. When the woman expresses ambivalence about accepting help, the DMH worker validates the ambivalence, but becomes directive, moving ahead with the planning.

4. RELAXATION INTERVENTION FOR ANXIETY REDUCTION, MANAGEMENT AND AS A COPING SKILL

Relaxation training has become a foundational skill for CBT interventions and is attractive to the DMH provider for many reasons. One of the most noteworthy reasons for its widespread use in the clinical setting is its demonstrated efficacy in the treatment of anxiety disorders: PTSD, panic, generalized anxiety, and obsessive-compulsive disorder . The technique is easily acquired by clients. Moreover, clinicians, paraprofessionals and non-clinicians of all educational levels can be trained to provide relaxation training in disaster contexts of all types, particularly when disaster personnel, clinical and health providers are overburdened or unavailable, or psychiatrically or physically compromised themselves.

CBT practitioners will quickly recognize how more complex trauma-related interventions truly depend upon the client's ability to recognize the rise in tension in their bodies, including the visceral as well as cognitive correlates to that tension. Research in the treatment of panic disorder strongly indicates the power of increasing perceived coping through anxiety reduction—specifically using breathing and relaxation techniques—in the face of actual and anticipated fear stimuli (Barlow & Cerny, 1988). For direct therapeutic exposure, relaxation skills actually provide an additional measure of safety for extended exposure practice in the presence of a clinician, which can last as long as 20 or 30 minutes per exposure trial (see direct therapeutic exposure secion later in this chapter).

We have used the following scripts in virtually every disaster context in which we have served and with all kinds of individuals, young and old, laypersons and professionals. The guide below is subdivided into four sections: the subjective units of distress scale (SUDS) and checking in with your body; helping to determine appropriateness for intervention along with cautionary statements (relaxation induced anxiety, need to have eyes closed and the tendency to dissociate) ; progressive muscle relaxation and a breath holding and releasing intervention.

> Subjective Units of Distress (SUDS). For the following exercise, I would like you to notice any tension in your body. Whenever we feel anxious or tense, usually the body gives us clues to those kinds of feelings. Some people may feel their shoulders feeling tight or drawn upwards, their jaw might be clenched, their chest area tight. Others may feel the strain of a familiar pain in the lower back area, the temples or the forehead, or tightness in the feet. Other signs of anxiety can be found in the way you might be breathing: it may be shallow, as if you're not getting enough air or the breaths might feel too quick. Your thoughts might be darting about, and you might be having feelings and thoughts of unease, discomfort or worry. Whatever the feeling, I am just going to ask you to notice your overall state of body and mind. I would like you to think of a 1 to 10 scale, 1 being the most relaxed and carefree your body has ever felt and 10, the most tense or uptight your body has ever been. Noticing how your body and state of mind is right now, what number would you rate yourself? I refer to this scale as the subjective units of distress scale or SUDS and I will ask you for that rating intermittently as you learn this relaxation technique.

The following precautionary statements are useful in the disaster context because of common problem of distractibility, if not frank dissociative symptomatology. The idea of fixing the gaze and anchoring the body through orienting self-statements is directly borrowed from interventions with patients with dissociative disorders (e.g., Kluft, 1996).

> If you have ever had a negative experience with meditation, self-hypnosis or relaxation training, please let me know now. I will ask you to close your eyes if you feel comfortable doing so during the following 20-minute relaxation practice. Some people might find their thoughts racing or the images in their minds too disturbing when they close their eyes. If you think you have this problem, you can simply focus your gaze on a point on the floor. Remember not to worry if your mind begins to wander. This is common: simply bring your attention to the instructions; if some painful or bothersome thought intrudes, many people find that noticing their body in the chair or saying to oneself "It's ok I am sitting here and I can begin to be here and follow what's happening now."

The following statements provide an important dual purpose rationale for the survivor: that relaxation training is both a method of managing spikes in anxiety and tension—an anxiety management skill—and a general way of coping that can become ritualized and can have broad beneficial effects on one's overall coping and mental health. Please note that we have intentionally modified many of these techniques to incorporate language of acceptance and focus on the current moment, a welcome trend in recent CBT writings (cf. Hayes, 2002).

> Whenever you feel your body tensing up and are aware of it, you can begin to breathe more consciously and to use these techniques to deliberately release the tension. It can be done almost anytime and almost anywhere. If, when tense, you are able to do at least two or three major muscle groups (head, shoulders and chest or chest, arms and legs) and take a minimum of 10 minutes really focusing on tightening and releasing muscles while breathing, you will likely experience immediate benefit in terms of SUDS reductions. We also recommend that progressive muscle relaxation is a wonderful way of taking care of yourself. If you are able to do the full relaxation exercise—the 20-minute version—*everyday* as a routine way of feeling your body calm down, you will notice that relaxation becomes deeper, your general anxiety at other times may be less intense, and your overall sense of feeling in control of your emotions may improve. We have found that people become more adept at watching their bodies' tension level, and can almost condition themselves into remembering the relaxation feeling and almost instantaneously feel a decrease in tension.
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> To begin, I'd like you to focus on the muscles in your forehead and scalp. At the count of three, I'd like to tighten the muscles in your forehead, by knitting your eyebrow and wrinkling your forehead. It will be tight and tense but not painful, not 100% tight. One, two, three: tighten those muscles…good. Notice the muscle tension, where it is and how it feels. Now let it go. Loosen and smooth those muscles and feel the difference. Can you really feel that change? Remembering to breathe regularly throughout, I'd like to focus on the muscles around your eyes and cheeks. At the count of three, I'd like you to tightly close your eyes, as if not to let any light through. One, two, three: tighten the muscles around your eyes and cheeks. Good. Notice how your attention is drawn just to this area of your body. Now let all that tension around your eyes go. Really relax and notice the difference. It's easy to stay in the moment, watching your body change bit by bit, more and more relaxed. Remembering to breathe, I'd like you to draw your attention to the muscles in the jaw and neck. At the count of three, I'd like you to clench your jaw and feel the tension in your neck and the lower parts of your head. One, two, three: tighten those muscles. Good.
>
> {Repeat procedure for the following muscle groups: shoulders [draw your shoulders up toward your ears, then release]; arms [combine upper and lower

arms in tightening and releasing exercise]; hands [make a fist remembering that you don't want to overtighten, then release]; chest [tighten the ribcage and then release]; stomach area and lower back; thigh muscles; calves; and feet [tightening of feet can be divided into two parts: pointing toward the ceiling and release and pointing away from the body and release]}

Alternative or Addition to PMR: Breath Holding/Release and Focus

Some people like to have additional ways to relax through the day and research also supports at least a couple of different ways of doing it. This technique is called breath control, or the breath release technique. You may be able to do this more comfortably without feeling at all self-conscious, especially in public places. It involves inhaling deeply, imagining binding up any tension in your body, then holding it for a few moments, counting one, two, three, four. [Demonstrate for subject] Then slowly release the breath, really letting go of any tension gathered up from your body. Would you like to try? At the count of three, I'd like you to take a large breath. One, two, three, inhale. Imagine gathering up all the tension from your body. Good. Hold it one, two, three, four. Now release the air and tension in you body gently slowly, letting it leave your body.
Notice your body as it finds it natural breathing rhythm. [Repeat the procedure 6 or 7 times, interspersing the trials with a return to normal breathing and efficacy or acceptance statements such "Allow yourself to notice this moment of release and relief. This is the way that you are taking care of yourself right now. A natural way of being gentle and caring to yourself."

5. SELF-EFFICACY AND ACCEPTANCE/MINDFULNESS INTERVENTIONS

We have found great clinical utility in paying attention to the construct of self-efficacy and proximal goal setting, ideas from social learning theory championed by Albert Bandura (Bandura, 1971) and adaptations by others for intervention, most notably for trauma by Donald Meichenbaum (2002). By emphasizing small, readily observable accomplishments in disaster survivors, we have stumbled upon not only giving authentic praise for small self-care behaviors and cognitions but have discovered ways of helping victims make meaning of seemingly senseless, hopeless catastrophic contexts. For example, the idea of mental health help-seeking for most first-time disaster survivors is a new skill. Brief interactions with disaster mental health personnel may thus become critical turning points in how a person perceives the profession and whether or not they would follow up with seeking further contact. Self-efficacy inquiries are most fruitful if

they are targeted at imminent, highly specific behaviors. For example, “Do you feel confident you can take this next step of completing these government forms on your own?” not only shows sensitivity for an individual with low confidence but also shapes goal setting and problem solving.

Secondarily, and possibly of much greater importance, is demonstrating how awareness of the here-and-now and a deep and abiding acceptance of self and others, may provide a new way of construing oneself and one’s place in the world, especially in the context of a life threatening event. Instead of a traditional approach to cognitive therapy in which the goal is to challenge the irrational thought, the goal may be better conceptualized as a way of experiencing which is less attached to a particular outcome but rather a thoroughgoing attentiveness, respect and compassion for self and other. Sudden trauma and loss for many people can spontaneously provide an opening for a new and fresh way of construing the world. Some healthy cognitions which are often spontaneously described are #“The hurricane is really making me understand what is important.” “I realize that the victims of this disaster are just like me—no one is a stranger anymore.” “Life was always this fragile but that this was just a wakeup call.” “I feel so much compassion for people who have lost so much, and especially those who have lost so much more than me.”

Disaster trauma often impels survivors to constructive action. Although disaster professionals are attuned to problems of the “anarchy of altruism” and compassion fatigue, we have found that the aforementioned positive cognitions continue well beyond the initial months post-disaster. Since our impression is that these thoughts strongly correlate with prosocial behavior, acceptance of and giving of support, and a quicker rebounding into mental health, we consistently are on the lookout for these experiences or self-reports in victims. We strongly recommend that clinicians underscore this kind of awareness when it arises. Another way of reframing a loss of a family member or close friend or addressing survivor guilt, is asking the survivor to imagine how that person would have wanted them to proceed with their life. It is not uncommon for the survivor to quickly acknowledge how properly caring for oneself, living their life well, etc. is a way of *honoring* the deceased. Resisting the urge to self-medicate is another important lesson. Not using substances in the face of sadness, anger or anxiety permits a fuller

understanding of a person's full range of feelings precipitated by trauma. Being clear of unnecessary substances will allow the survivor to recognize their personal power and resilience and prevent the biological worsening of states of numbing, unreality, or substance-induced worsening of a true major depressive episode or PTSD.

Relaxation dovetails well with the practice of greater self-acceptance. It allows the clinician to remind the victim to "take it slow," "to not pressure yourself," that her adaptation will be unique and to respect "the natural pace of healing." We have noticed that survivors experience an urgency to improve, to "return to normal" and that gentle reminders that "recovery processes often take months and even years" can help. Not unlike rebuilding of a town's infrastructure, emotional recovery takes excavation, planning, time, and group effort. We often remind those individuals, often among the ranks of disaster or other helping professionals themselves, who are driven to hypomanic levels of activity of the principle of *stimulus control*. As was demonstrated by research after September 11th , beyond direct life threat, posttraumatic symptoms in adults and children could in part be predicted by hours of television watching of media accounts of the disaster. We recommend that survivors monitor the degree to which they expose themselves to the stories of suffering, especially visually graphic accounts carried on television.

6. SOCIAL PROBLEM SOLVING: CBT AS "BRIDGE" INTERVENTION IN THE PHILIPPINES AND THE CASE OF PAUL

Paul was a 26-year old Filipino triathlete and college graduate who had volunteered to work with International Red Cross efforts in the mountains of Mindanao in the Southern Philippines. He and his girlfriend had decided to "be of service" before the next step in his life plan: applying to medical school. One of the principal humanitarian tasks in that area of the country was to deliver food and medical supplies to insurgent rebels isolated in the mountains of Mindanao.

Paul was seated in the bench seat of a well-marked Red Cross pickup truck between the driver and his girlfriend, prepared to drive up a mountain on a typical day's delivery. The driver stopped in response to the wave and smile of a little girl holding a package. She presented the package through the window into the lap of Paul's girlfriend

and scurried away. The package exploded, brutally killing the girlfriend and seriously injuring Paul and the driver. Paul suffered third degree burns on more than 40% of his body, some facial disfigurement, and completely lost his sight in his right eye. I (FRA) was invited to speak at a conference held in Davao City, Mindanao and after my talk, was asked if I would be willing to see Paul. Red Cross staff were able to brief me regarding his problems: severe nightmares, uncontrollable crying and pain.

In a single 2-hour session, I chose to do the following, in response to the summary of his story and in light of the circumscribed time available: identify what the most painful, horrific aspects of the bombing were for him, educate him about the symptoms he was having and how long they might last, and explain the idea of therapeutic exposure through talking and releasing emotion in safe situations with a counselor, friends or loved ones. I decided beforehand that any direct exposure work with me would be conducted with caution if at all. However, helping him identify what was not being talked about seemed absolutely critical at the time. I viewed my contact with him and the Red Cross service staff as a "bridge" intervention, as a way to provide a link between his acceptance of mental health assistance and future treatment and self-help in my absence.

In the process of the meeting, I discovered a number of enlightening things about the resilience of this young man, many which dovetailed with his cultural identity. He was a devout Christian who had helped his girlfriend give up drugs, adopt the faith, and engage in a life of service together. As is common in Filipino culture, her family became his extended family and continued to be central to his emotional and social support after her death. He shared that he had been grieving her loss for the past five weeks with his own family, her family, his men friends and "with God." He appeared relieved with the knowledge that nightmares would be typical of anyone who suffered such a horrible trauma. I said "sometimes the bad dreams have information in them about things that seem impossible to talk about with anyone." I further established that he met with his male friends once a week, every week without fail. He reported that they were very supportive of him and that he would bring her photograph and that they cried with him over her. This naturally occurring "support group" was noteworthy for at least two reasons. First, Paul and his friends were able to express and share sad emotions in these groups, atypical for most North American men I was accustomed to working with.

Second, the very existence of these men's groups is indigenous to Filipino culture. They were not drinking, sport or activity buddies; their sole reason to see each other was to converse and to update each other about their respective lives.

The question followed naturally from these disclosures: Do you feel able to share the most awful aspects of the trauma with your men friends? It stood to reason that this group held the greatest promise for difficult disclosures. We talked about "hiya" or the shame of speaking of the brutality of how sad it was to lose her and worse, in such a violent way. He indicated that if he told the group that I encouraged him to share these feelings when he experienced them, that they would likely be supportive. When asked what he could remember of the episode, he said that all he could see in his memory was the flash of light and a burning sensation all over his body. He remembers moving away from the truck and then being taken to the hospital. He also remembered asking for his girlfriend but having the understanding that she was "gone, dead." "It still seems unreal. I can't believe it to this day." I reassured him that I did not want him to struggle to remember any more than what was he was able. This traumatic episode was exceptional because of the physical damage done to the young man, the violence of what an explosive device probably did to the woman's body, and the deep meaning and attachment the relationship had for this volunteer. I warned him to expect a number of things: that additional memories would likely emerge over time, that experiencing them of course would be quite painful and that his rehabilitation, the physical aspect of working on strengthening his body and recovering from the burns, would act as reminders of different aspects of the trauma. With respect to the memory of the girl, he acknowledged that he was thinking about her "almost all of the time." He was dividing his time between his own family, her family and the hospital; I reassured him that giving her memory time and honoring her life (i.e., remembering her goodness, her willingness to serve with him and her love for him, and her faith in God) was an important part of the healing that needed to happen.

I discovered that his physician referred him to a psychiatrist but he chose not to go and much preferred talking to the head of Red Cross, a social worker and clinician who was willing to follow up with him. I strongly supported his intention to continue seeing the director. I had indicated that I would like to speak with the director about what

we talked about and that I was encouraging Paul to share the “unspoken” memories with him as they arose in time over the next few weeks and months.

Finally, I provided a lengthier rationale for how direct or prolonged exposure works and the importance of staying connected to some type of therapy related to his trauma. I shared with him that the healing from his burns was a good metaphor for healing from the traumatic emotional wounds. Because of the severity of the wounds, he would heal best with professional help. Different parts of the wound heal at different rates and depend upon how severe that part of the traumatic insult was. For example, superficial burns would heal on their own with little intervention. Deep wounds, however, required debridement, or cleaning, a slow and often painful process which insures that there is no infection and that sufficient tissue is present for healing. Similarly, the most awful parts of the explosion would need time and attention; memories currently unavailable might appear at a later time or be remembered in response to other events. In terms of building a new way of living, without his girlfriend and with a different and partially disabled body, I suggested that scar tissue and successful skin grafts were akin to making new meaning of his life, perhaps in part to honor her life and his faith (surprisingly unshaken by the event). He told me that he wanted to still do what he could, even during his rehabilitation, at the Red Cross office in Davao City. His physical therapist said that he could do paperwork until he built up strength in his leg and arm in the next couple of months; the staff were worried about him and insisted that he not work at all. I said I would encourage that office to accept his offer to help in a limited way.

7. DIRECT THERAPEUTIC EXPOSURE GUIDELINES AND THE CASE OF TESS

Direct therapeutic exposure (DTE) can play a powerfully healing role in the treatment of disaster survivors, especially those who are already showing symptoms of acute stress disorder or, if after one month post-disaster, many of the symptoms of PTSD. Our work in this area is informed by theorists and clinicians who have articulated well the traumatic avoidance conditioning model of PTSD (Levis, 1980; Fairbank & Brown, 1986) and outcome research in DTE in war veterans(Boudewyns, Hyer; & Woods, 1990; Fairbank & Brown, 1987; Keane, Fairbank, Caddell, & Zimering, 1989) and victims of

sexual assault (a variant of DTE called prolonged exposure employed by Foa & Rothbaum, 2001) and a good deal of recent outcome research with other non-disaster PTSD sufferers (e.g., van Minnen, Arntz, Keijsers, 2002). Readers should be reminded of the lack of controlled outcome research with disaster survivors *per se* using these techniques. These descriptions of interventions are provided with the advisory that clinicians adopting such techniques ideally would have had some non-disaster experience using exposure with ASD or PTSD patients; at the very least, new practitioners will have close access to supervision from those with such experience.

1. INTRODUCTION TO EXPOSURE. Once it has been established that the survivor is a good candidate for direct therapeutic exposure, a rationale should be provided for the technique and an informed consent obtained. The wound and proper healing metaphor (see Case of Paul earlier in this chapter) can be used to describe the technique. The risk of worsening symptoms and feelings of upset and fear should be openly discussed. The person should be reassured, however, that clinician will also take measures to stop if he believes it best to discontinue. The benefits, by the same token, should be reviewed. Describe the steps involved and how many sessions you expect to need. *I will be asking you about the most upsetting parts of the trauma including if and when you thought your life was at risk. I will teach you a deep relaxation exercise which we will start and end with. The part of the exercise that is akin to the cleansing of the wound, or direct exposure, involves reexperiencing the scene, with my help, in as great detail as possible. For many minutes at a time, I will help you stay with those emotions, focusing on the fear or upset, while reminding you to keep breathing and still feeling like you can stop at any time. The aim, however, will be releasing the emotion: it may feel overwhelming or too much but you will be able to follow my instructions and slow it down if your body needs to do so.*

2. IMAGERY PROBE. Assess ability to do imagery, isolate two most upsetting memories, and elaborate upon the setting events (i.e., stimulus context), to include self-statements. Consider terminating the intervention if most upsetting memories are numerous, i.e., more than three, if they are substantially unrelated to the disaster trauma, or if they are indicative of complex and/or comorbid psychopathology (e.g., intractable guilt related to a severe longstanding depression).

At what point, if any, did you feel like you were going to die? Or, at what point did you observe someone's life at risk? What other memories or experiences of the trauma are most disturbing to you?

With your eyes closed or slightly open, concentrating on some point on the floor in front of you, I'd like you if you can actually see, hear or feel any of those sensations again. On a 1 to 7 scale, please rate how vivid or realistic the experience is right now, 7 being extremely vivid and ,1 you can't really see or hear your surroundings in your imagination. Individuals reporting a 1 or 2 can often respond to the following prompt: *If it's easier for you to simply look back at the memory, that is fine too. Tell me any additional details of the scene or situation you were exposed to. Can you recall what things were going on in your mind, what things you were saying to yourself?*

3. CUE DEVELOPMENT. Assess environmental cues to conditioned fear. *What was happening around you? Can you share what you were thinking and feeling?* Allow free-responding as much as possible to this question. Notice the peaks and valleys of fear and anxiety in the manifest content of the story. In addition, take note of any visible signs of anxiety during the telling of the story. *If you are able, I'd like you to think about any sights, sounds, physical position, smells or other bodily sensations (e.g., nausea, dizziness) that you haven't mentioned that you felt during the scariest aspects of the trauma.* Make note of any interoceptive cues, cognitive *("I thought that the wall was going to fall on me.")* and somatic *("I had a sinking feeling in my stomach that I could do nothing else.").*

4. TEACH THE SUDS SCALE AND ASK THE INDIVIDUAL TO RATE HER ANXIETY AFTER TELLING HER STORY.

5. RELAXATION TRAINING. Guide her through a full 20-minute progressive muscle relaxation (PMR) or breath holding and releasing exercise, paying close attention to any discomfort, distractibility, or unexpected emotionality. Brief interventions which can help address distractions or increases in arousal include asking the person to open her eyes, to fix her gaze, or to engage in breath following: *Focus on the inhale, slowly watch your breath; you can manage this. Focus on the exhale; slowly let the breath out. What you are doing now is one way of taking care of yourself. {*If visibly disturbed or upset*: Please let me know if you would like to slow down, take a break or stop for now.}*

6. ASSESS SUDS AND PROVIDE EFFICACY BUILDING COMMENTARY. After the PMR, ask the person to rate her anxiety again. If anxiety shows no decrease whatsoever or actually increases, consider stopping the intervention. Most individuals will report a moderate decline in arousal: praise them for this fact by using language which emphasizes increased control and coping: *What you have just demonstrated is how you can engage in a very specific exercise and reduce your level of tension. We will be building upon this skill while we explore the most painful parts of the trauma you have endured.*

7. EXPOSURE TRIAL #1. *Of the two most painful memories or experiences of the disaster, which would you prefer to work on right now? What is your current SUDS rating, from 1 extremely relaxed to 10, extremely distressed? I'd like you to*

imagine in your mind's eye the minutes or seconds prior to the scariest part of the experience that you have just chosen. What do you see or hear? I want you to notice how the anxiety or fear begins to grow. What else do you notice? [Clinician can augment the person's narrative with details obtained earlier, being careful not to introduce elements that have not been previously reported.] *What is your distress rating right now?* [SUDS should be markedly rising.] *You're doing very well. Remember to allow yourself to accept these feelings as they grow and breathe. Now I'd like you to let the experience unfold slowly as you get closer and closer to the scariest part of the experience.* [anxiety should be obviously rising. Clinician can restate elements that are most evocative.] *What is happening inside your body? You're doing fine. Now really allow yourself to see or feel or hear the absolute worst part. What is the most painful thing? Try not to to shut these feelings down. It is scary and uncomfortable but it's important to release those feelings. What is your rating now, from 1 to 10?* [Clinician continues with presentation of these cues, repeating them as necessary for a minimum of a few minutes. Look for a peaking of arousal that begins to subside.] Probe one final time with related interoceptive or environmental cues. If no further arousal occurs, exposure trial can be brought to a close. The length of time can vary widely: the modal scene duration ranges from just three or four minutes to eighteen or twenty.

8. POST-EXPOSURE SUDS PLUS FEEDBACK. Ask for a post-trial SUDS rating. Elicit feedback about what has just happened. In most successful responses to exposure, the subject will spontaneously report relief in response to having endured the exercise. Some people will report additional memories or details. Ask if the person noticed anything new about her memory or experience of her emotions related to the disaster trauma.

9. EXPOSURE TRIAL #2. Repeat the exact same scene, augmenting it with any details collected during the first exposure trial. Look for any increase of anxiety and allow the subject to "breathe through" those rises in arousal. Obtain a SUDS rating if possible at the peak of arousal. If the highest point of arousal is higher than during the first trial, consider conducting a third trial if time permits.

10. REPEAT STEP 7.

11. CONDUCT EXPOSURE TRIAL #3 if Subject Willing and Time Permits.

12. CLOSE SESSION WITH A FINAL RELAXATION PROCEDURE. Obtain final feedback regarding the experience of exposure and praise any comments endorsing subject's ability to release feelings, the fact that they are feeling better, or that it was painful but tolerable. Any attributions to the technique or to the therapist can usually be reframed comfortably as the subject's willingness to address her pain and how she is reclaiming a sense of balance and strength through her active involvement in the therapy. Instruct the client to watch traumatic stress related symptoms over the next few days, until the next scheduled session. Map out the

plan of contacts once again: *We will meet for {one,two} additional session{s}, spending our time together addressing these same difficult emotions or others that you feel we need to address.*

8. CASE OF TESS IN HURRICANE MARILYN

Tess was a 26-year old mother of a 4-year old girl and an active duty member of the National Guard in the Virgin Islands, located in the Caribbean Sea. She and her family survived Hurricane Marilyn, the second hurricane in 10 days, and the second time she was called to help with the consequences of a civilian disaster. Ten people died and 80% of the buildings on St. Thomas, the biggest of the islands, were destroyed. Tess was with her family, her mother and her baby, when Hurricane Marilyn hit. Despite the reinforcements installed since Luis, the roof of their house was torn off in a dramatic, creaking followed by roaring, ripping sound. The three waited for hours in the bathroom until the first major break in the storm. They were able to retreat to the local shelter, about a half mile away. The family continued to reside at the shelter along with almost 200 other survivors while Tess reported for daily duty, initially working at a warehouse, distributing cots and heaters, and then being assigned traffic duty to assist local law enforcement. Her supervisor referred her to the mental health team at the Coast Guard Armory (where I [FRA] happened to be based) when she admitted to losing her temper with an angry motorist, slamming her hand down on the hood of the car and threatening them by waving her baton.

In our first meeting, it was established that Tess had many of the symptoms of acute stress disorder from the combination of the two hurricanes, with nightmares, general sleep disturbance, ruminations about the safety of her mother and her baby, and survivor guilt. She had seen a counselor for a few months after the breakup of her marriage three years ago and reported that that was helpful; no other contacts with psychiatric services nor any history of mental disorder was reported. The most upsetting part of her reaction to the disaster is that she had become markedly more irritable (“like my ex-husband used to be”) with her family and the outburst with the motorist was just one example. She admitted to a mild dissociative reaction, briefly feeling “outside of my body watching us on the floor.”

Tess was taught the relaxation technique and the rationale for exposure therapy was given. We had determined that seeing her for 2 or 3 sessions would be easily accomplished, since we were based at the Armory where she was required to do a daily check-in. Those in leadership positions were also highly supportive of this work and had provided a nursing examination room for these therapy contacts. She readily identified the scariest element of the second hurricane experience, the loud ripping sounds of their metal reinforced roofing and the crashing down of debris outside of the bathroom where she and her loved ones were huddled. The most upsetting cognition at the time of impact was "There is absolutely nothing I can do—my baby is going to die and there is nothing I can do." During the very first exposure trial, she was able to endure a high level of arousal (SUDS=10) and cried deeply. She remembers gasping for breath and experienced that symptom to some degree also. She found the first trial of exposure relieving and spontaneously remembered how strong she felt during the first hurricane. She felt brave and in control getting the house in order and calming her family during the height of that storm.

The second exposure trial (first session) and during the second session's similar exposure episodes, additional thoughts and feeling emerged related to helplessness and anger. She said that she had never felt so helpless in her life, usually quite proud of her strength as a woman, being generally athletic all her life, and surviving well as a single mother. She cried in session as she did during that night of terror during Hurricane Marilyn. "I felt like I had no more to give. I was ashamed of looking afraid in front of my daughter." I replied to these comments with validation and reframing: "This is good that you can acknowledge all these normal human feelings. You are stronger because of it. By understanding all of these emotions, you will less likely be surprised by anger or irritation." Tess was a quick and avid student of mindfulness based relaxation which she practiced faithfully twice per day. She fully intended to make it a part of her life rituals, not unlike prayer used to be when growing up. Her nightmare frequency dropped immediately by the second session 4 days later, with only 1 night being so disturbed. Her anxiety and irritation were the most markedly affected. She reported a feeling of being released, looked forward to the next opportunity to do exposure. Three sessions were conducted with Tess over the course of 9 days, with approximately 3-4 exposure trials

conducted per session. Although she did not feel the need to do follow-up treatment at the local mental health clinic which was obtaining disaster related government funding for longer term services, contact names and telephone numbers were given to her as a safety measure. We concluded our last session with a relaxation induction with numerous coping self-statements supplied by the therapist and Tess herself. “I feel like a better mother having looked at these awful feelings and knowing that I can survive this too.” “My mother gave me the gift of her religion and I feel like I learned how not only how to be compassionate with others but how to be compassionate with my own fears.” “My anger and irritation are clues to something deeper.”

9. SUMMARY AND CONCLUSION

This chapter aimed to provide a guide to four types of CBT interventions for disaster survivors that have been either researched with acute stress disorder, recommended in consensus expert panels, or actually conducted in the context of disaster by the authors themselves. The first intervention, strongly recommended as a safer alternative to debriefing approaches in the early acute phase, was psychological first aid. An example of this intervention was provided to illustrate how to engage in these caretaking conversations with a psycho-educational emphasis. Second, relaxation interventions were described in detail with brief attention to developments in mindfulness and acceptance therapy. Third, social problem solving and coping skills approaches were discussed and illustrated by a brief intervention conducted in the Philippines. Fourth, direct therapeutic exposure in three sessions was described in detail and illustrated by a case conducted in St. Thomas of the United States Virgin Islands. We hope that readers of this intervention guide will become a part of the ever growing nexus of clinicians and researchers who attempt to not only serve those surviving disaster trauma, but return to tell the story in the form of published anecdote or controlled research.

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