Effective Brief Therapies

A Clinician's Guide

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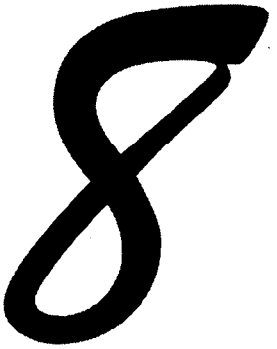

CHAPTER

Posttraumatic Stress Disorder

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Effective Brief Therapies: A Clinician's Guide
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CASE DESCRIPTION: THE CASE OF MR. G.

A 58 year-old African-American male, Mr. G. was the married father of three children who worked successfully for 28 years as a janitorial staff member for a railway system in the Northeastern United States. His three children were adults, professionally trained, and living on their own. Often working the late night shift, Mr. G. was confronted one night by a stranger who entered a train car that he was cleaning. Following a short conversational exchange, the young man left the car. About 20 minutes later, Mr. G. finished that car and was proceeding to break for his evening meal when the stranger appeared from a dark corner bearing a knife and demanding money. Mr. G. panicked, handed over his wallet, and attempted to run from his assailant. He was overtaken a few moments later, thrown to the ground, stabbed repeatedly, and left for dead. As he lay on the ground, Mr. G. felt his life ebbing away, and he thought he was going to die alone and in a cold dark place.

Some days later, Mr. G. awakened following extensive life-saving surgery. His physical recovery was slow and painful, and he required several subsequent surgical procedures to correct features of his wounds. Ten weeks later he attempted to return to his work site. He felt anxious and fearful, and approached his work with a sense of dread. During his first night, he felt panicky and was preoccupied with fears of another attack. He went home early in his shift and that night began to drink extensively in order to relax. He returned to work the next evening and could only stay a short time due to overwhelming feelings of anxiety. His disability grew over time, and he felt incapacitated and unable to work. This pattern continued, and he eventually decided he could no longer hold his job.

Approximately a year following the event, Mr. G's daughter sought psychological assistance for her father. The initial examination was conducted in his home, after several appointments were broken due to his inability to travel. On examination, it was clear that Mr. G. met criteria for diagnoses of posttraumatic stress disorder (PTSD), major depressive disorder, and alcohol abuse. He reported nightmares recapitulating the attack, a preoccupation with the assault and how it had affected every phase of his life, a lack of interest in anything and anyone, alienation from his wife and family, difficulties concentrating, avoidance of television and news media due to the presence of violence, unsuccessful efforts to avoid thoughts and images of the event, and disruption of his sleep and sexual functioning. Further, he reported being irritable and short-tempered with others, personality and behavioral features that emerged only after the attack and about which he felt tremendous guilt.

TREATMENT CONCEPTUALIZATION

An information processing framework, which grows out of Lang's (1979) bio-informational theory of emotion, has been widely used to understand the development of anxiety disorders. Lang's theory focuses on the role of fear in the development and maintenance of these disorders. He has suggested that emotions, including fear, are represented in memory in network form. These "fear networks" store memory representations of anxiety-provoking events. Fear networks contain three important elements: (1) information about the feared stimuli, or elements of the feared situation; (2) information about the person's response to the feared stimuli or feared situation; and (3) information about the meaning of the feared stimuli and the consequent response. In the case of Mr. G, the fear network that stores the representation of his assault includes information about the feared stimuli (young man, knife, robbery, threatening gestures and words, the workplace), the consequent response (I froze, I gave him my money, I panicked) and meaning elements (I'm going to die, I'll never see my wife again, I'm weak and helpless). Anxiety disorders develop when fear networks become pathological. While a nonpathological fear network consists of realistic connections between elements, a pathological fear network consists of erroneous connections that do not truly represent the state of the world or that overstate associations or probabilities. For example, in the case of Mr. G, a realistic association exists between the stimulus ("stranger holding a knife in a threatening manner") and the meaning element ("I'm in danger"). In reality, a threatening stranger wielding a large knife does indicate danger. However, Mr. G's fear network also contains several erroneous associations. For example, his pathological fear network consists of erroneous connections between the stimulus ("the place where I work") and the meaning element ("I'm in danger"). In reality, this part of the stimulus is not directly relevant to the dangerousness of the situation. Other pathological connections exist between stimulus elements (e.g., "young man" and "knife") and between response and meaning elements (e.g., "I panicked and ran," and "I'm weak and helpless"). The fear network can be activated by relevant stimulus, response, or meaning elements (or by a degraded match of one of the elements — e.g., seeing a man whose appearance is similar to that of the assailant). The fear network is more easily and frequently activated when it consists of many erroneous connections among stimulus, response, and meaning elements.

Expanding Lang's bio-informational theory of emotion specifically to the study of PTSD, Foa and Kozak (1986) have posited that the fear networks of traumatized individuals differ both quantitatively and qualita-

tively from the fear networks of individuals with other anxiety disorders. These authors suggest that for traumatized individuals the size of the fear network is larger (the network contains a greater number of erroneous connections), the network is more easily activated, and the affective and physiological response elements of the network are more intense. Most PTSD symptoms can be conceptualized as excessive response elements. Stimuli reminiscent of the traumatic experience activate the fear network and prompt states of high sympathetic arousal (e.g., increased heart rate, blood pressure, sweating, generalized muscle tension) and intense feelings of fear and anxiety. Fear-related behavioral acts like avoidance/escape behaviors and hypervigilance can also be conceptualized as excessive response elements. Reexperiencing symptoms can be understood by examining state-dependent memory effects. Specifically, the autonomic arousal that accompanies mood is related to how memories are stored. This primes retrieval of affective memory: when individuals are afraid, they are more likely to recall fear-associated memories.

These pathological fear networks, and the related behavioral, cognitive, and affective symptoms, disrupt normal emotional processing of the trauma, as well as disrupting mood, interpersonal relationships, and occupational functioning. Exposure-based treatments are designed to facilitate emotional processing of the traumatic experience, thereby reducing PTSD symptomatology. Processing the traumatic experience requires two conditions. First, the traumatized individual must have access to the emotional material. That is, they must respond in a way that is affectively similar to the way they responded during the feared situation. Second, while in this state, the individual must be exposed to corrective (nonfear) information. If both of these conditions are met, exposure-based treatments reduce PTSD symptoms in a number of different ways. First, these treatments decrease avoidance behaviors. Over time, the traumatized individual learns that escape and avoidance are not the only way to manage the negative affectivity associated with memories of the experience. After several exposure sessions, during which escape from aversive stimuli is prevented, the individual begins to habituate to the emotionally laden material. Memories of the experience diminish in their capacity to create distress. Finally, the pathological fear network is fundamentally altered. That is, connections between elements that should not be connected are modified and new connections and associations are made. Exposure treatments provide a corrective learning experience, allowing traumatized individuals to reinterpret the meaning of a negative situation. This more cognitive change is frequently a function of the patient's own efforts, but

occasionally it is the result of a synthesis created by the patient–therapist interactions.

ASSESSMENT

Mr. G. was assessed using multiple methods: a semistructured clinical interview to evaluate the presence and absence of axis I and II disorders, a structured clinical interview developed specifically to assess PTSD, self-report questionnaires for PTSD and comorbid conditions, a clinical interview with Mr. G's spouse, and a review of his medical records. In complicated cases in which the diagnosis is unclear, psychophysiological assessment and additional information from collateral sources may prove valuable. The use of multiple methods to assess PTSD has several benefits. Individuals may respond differently to different methods. For example, some individuals may disclose more distress on a self-report questionnaire, while others may feel more comfortable in the context of an interview and so provide more accurate information. The use of multiple methods increases the likelihood of capitalizing on the best method to obtain information from any given individual. In addition, each assessment method has strengths and weaknesses. Clinical interviews rely more heavily on clinician judgment than self-report measures (a disadvantage of clinical interviews) but allow more flexibility in follow-up and clarification (an advantage of clinical interviews). The use of multiple methods aids in balancing the relative strengths and weaknesses of each method.

A clinical interview in the context of an assessment for PTSD focuses on pretrauma functioning, information about the traumatic event(s), and posttraumatic functioning. Functioning prior to the trauma is critical in order to determine posttrauma changes in functioning. Areas of pretrauma functioning to assess include family composition and relationship with family members, family history of psychopathology/substance use, pretrauma stressors and their impacts (e.g., deaths, injuries, accidents, and abuse), and educational, occupational, relationship (i.e., peers and dating), legal, substance use, medical, and sexual histories.

When obtaining information about the client's trauma history, the clinician is advised to proceed slowly and create a safe interpersonal context for discussing sensitive material. A general framework for conducting a clinical history containing traumatic material would focus on the pretrauma period, the details of the traumatic event, and the impact that the event had on the individual across multiple domains of functioning. Specifically, assessment of the traumatic experience involves gathering

information about events immediately preceding the trauma, the traumatic event itself (i.e., Criterion A event in DSM-IV), the person's response to the event (what was seen, heard, and felt, as well as the cognitions, motor behavior, and physiological responses that accompanied the experience), a description of events immediately following the trauma (e.g., responses of self and others), and the meaning of the trauma for the survivor.

Assessment of posttrauma functioning includes information about presenting complaints and PTSD symptomatology, comorbid diagnoses (especially substance abuse, depression, panic disorder, borderline personality disorder, and antisocial personality disorder), additional stressors since the index trauma and subsequent coping behaviors, previous treatment history, sources of support and client strengths, lethality (risk to self as well as others), and changes in functioning following the trauma in a number of areas (e.g., occupational/educational/social, legal status, medical status, and sexual behavior). Assessment of pre- and posttrauma history may be significantly more difficult, and perhaps even arbitrary, for individuals with a history of multiple traumas. In these cases, a thorough trauma history and assessment of symptomatology and functioning throughout the life-span would prove useful.

Although structured assessment strategies (e.g., structured clinical interviews, self-report questionnaires) are extremely useful in the assessment of PTSD, a review of such strategies and their psychometric properties is beyond the scope of this chapter. Newman *et al.* (1997) provide a comprehensive review of these methods and their psychometric properties.

TREATMENT IMPLEMENTATION

A structured diagnostic assessment comprised the first phase of treatment. This consisted of a clinical history, a diagnostic interview, and psychological questionnaires accompanied by a meeting with his spouse. Treatment for Mr. G. began with a contract to restrict all alcohol use as a requirement for treatment. He and his wife agreed to notify the therapist in the event that drinking continued to be a problem. A period of psychoeducation about the impact of traumatic events and PTSD ensued. We emphasized the psychological, interpersonal, and biological effects of PTSD. Mr. G. was deeply impressed by the simple fact that other people had experienced these symptoms, that there was a name for the condition, and that there were treatments specifically available for PTSD.

He was then taught progressive muscle relaxation and diaphragmatic breathing. It took several sessions for him to master these skills, even with the use of daily homework sessions accompanied by an audiotape of the relaxation exercises. Following this, six sessions of imaginal desensitization containing key elements of the traumatic event were conducted. These sessions specified the details of the experience, the patient's real-time emotional and behavioral reactions to the event, and his thoughts about the experience and its aftermath.

The next phase of the treatment was *in-vivo* exposure whereby he and the therapist went to the railway yard, sat across from the station on a bench, and processed his emotional reactions to being at the scene of the traumatic event. As he described the experience and verbalized his reactions, he was initially overcome with anxiety and emotion, crying visibly. The second session showed marked improvement in his reactions and he proceeded to walk the therapist to the site of the assault. Successive sessions revealed that a different perspective on the event was developing and that he was coping and managing his fear, dread, and stress in fundamentally different ways. His cognitive appraisals of the assailant changed, as did his view of himself. No longer did he feel decimated as the victim of an uncaring criminal, but rather he felt that he was a survivor.

Concurrent Diagnoses and Treatment

PTSD, a condition that is highly comorbid with a number of diagnoses, has been strongly associated with disorders such as Substance-Related Disorders, Panic Disorder, Major Depressive Disorder, and Borderline Personality Disorder (see Keane & Kaloupek, 1997, for a review of the comorbidity in PTSD literature). Thus, treatment of PTSD will often involve decisions about the treatment of other axis I and II disorders. Specifically, clinicians must decide if the ancillary disorders are best treated concurrently or if treatment should proceed sequentially. For instance, in the case of Mr. G., substance abuse and depression coexisted with PTSD. Moreover, Mr. G. had panic symptoms that restricted him to his home at the beginning of treatment. Decisions about the interdependence of these conditions needed to be made. Did these disorders precede, follow, or develop concomitantly with the PTSD? The clinical history implied that they certainly developed after the traumatic incident, and it was likely that the PTSD preceded the development of these other conditions. We concluded that these disorders were secondary to the PTSD and decided to treat PTSD first.

A concurrent diagnosis of substance abuse raises a number of challenging issues in the treatment of PTSD. Because of the complex interaction that exists between these disorders, there is no clear consensus about how to proceed in treating PTSD and comorbid substance abuse. Because exposure therapy frequently results in temporarily increased urges to use substances, it can be argued that treatment for PTSD should not proceed until sobriety is firmly established. It is also the case, however, that substance use may follow directly from PTSD symptomatology as a means of coping (i.e., self-medication), and a decrease in substance use may not occur until the patient experiences a decrease in PTSD symptomatology.

Treatment planning with comorbid substance abuse and PTSD requires consideration of multiple factors. It is critical to assess the patient's level of motivation to stop using/maintaining sobriety as controversy exists about conducting exposure therapy with individuals who are actively using substances. It is important to understand the relationship between substance use and PTSD symptomatology, specifically whether substances are used to cope with PTSD symptomatology and whether PTSD symptomatology has triggered relapses for the patient. If one chooses to begin the clinical interventions with the treatment of PTSD, careful monitoring of any changes in alcohol and drug use is essential. Receiving this feedback on a session-by-session basis informs the clinician of the impact of treatment on this critical comorbid problem. Initiating treatment with a behavioral contract limiting the use of substances during treatment is strongly recommended. In addition, patients with longstanding substance abuse problems might well be encouraged to make frequent use of community resources (e.g., AA/NA) as part of treatment planning. It may also be necessary to establish a separate provider to treat substance abuse; this treatment might actually precede the PTSD treatment and be a condition for future work on the effects of traumatic experiences. Finally, if patients are deemed too "high risk" for exposure treatment due to relapse risk, it is recommended that nontrauma-focused treatments, such as stress management, anger management, and other current-focused coping methods, be provided to lay the groundwork for exposure-based treatment.

Panic disorder or panic attacks also occur concurrently with PTSD. When this is the case, exposure-based treatments may be augmented with muscle relaxation and breathing retraining, two essential skills in the treatment of panic attacks. When conducting exposure therapy with patients who have panic attacks, it is important to prepare the patient for the possibility that exposure exercises could lead to the occurrence of a panic attack. Preparing them for this possibility by instructing them in the use of

various coping strategies to utilize during a session will aid in prevention of panic attacks or in a reduction of the severity of in-session reactions. At the conclusion of exposure treatment, clinicians are encouraged to reassess panic symptomatology and make decisions about the need for additional treatment focused on panic symptoms. Some therapists actually incorporate components of panic control interoceptive training in order to prepare PTSD patients for the reactions attendant with the use of prolonged exposure. Efforts to improve the personal control that a patient feels during the exposure phase of treatment are welcome and will undoubtedly enhance the ability of the patient to emotionally process the traumatic experience.

Individuals with PTSD often report a number of depressive symptoms. In addition, there is some overlap in the criteria for PTSD and Major Depression, (e.g., anhedonia, concentration problems, and sleep disturbance). Treatment of PTSD may be effective in alleviating depressive cognitions and affect related to the trauma. Following successful PTSD treatment, however, it may be necessary to treat any remaining depressive features. Special attention to depressive symptoms may be fundamental to the maintenance of any treatment gains secondary to the PTSD treatment; cognitive–behavioral treatments, interpersonal psychotherapy, and psychopharmacological treatments all have considerable empirical support for improving depression.

Borderline Personality Disorder is also associated with PTSD, primarily because of the role of early childhood trauma in the development of both disorders. Clinical decisions about treating PTSD in the context of Borderline Personality Disorder involve careful assessment of current and past parasuicidal behavior. Exposure therapy may not be the best choice for some patients due to the risk of increased parasuicidal behavior. When treatment of parasuicidal behaviors are a priority, an approach such as Linehan's (1993) Dialectical Behavior Therapy might be considered, as it first targets reduction of parasuicidal behavior before processing of traumatic material.

In terms of our case example, Mr. G. met criteria for Alcohol Abuse and Major Depression, both of which developed following his assault. Treatment of his alcohol abuse was initiated by the use of a behavioral contract among the therapist, the patient, and his wife. A rationale for remaining sober was highlighted in the first sessions. In particular, Mr. G. was forewarned of the temptation to resume drinking as we attempted to help him master the memories of the traumatic event. Drinking was viewed as an escape or avoidance behavior that simply made his situation worse, as it did not permit appropriate emotional processing of the experience and his reactions to it. Further, drinking itself created new problems

for him emotionally, maritally, interpersonally, and physically. While he admitted the urge to resume drinking during the early parts of treatment, Mr. G recognized the problems associated with his heavy alcohol consumption and was compliant with the contract.

COMPLICATIONS AND TREATMENT IMPLICATIONS

Returning to the scene of a traumatic experience, whether *in vivo* or imaginally, is an intense and difficult experience for a patient with PTSD. Reexperiencing, avoidance/numbing, and hyperarousal, the defining symptoms of PTSD, engender behaviors that interfere with facing the trauma directly. The feelings of intense anxiety that often accompany exposure exercises make treatment difficult, and can increase the patient's level of distress, suicidal ideation, and maladaptive coping behaviors, such as substance abuse. Given the possibility that PTSD symptomatology and distress will get worse before they get better, it is important that the clinician ensure that the patient is relatively stable and safe prior to beginning exposure treatment. Second, a clear and convincing rationale with examples is key to educating the patient regarding the goals, objectives, and benefits of this treatment. Facing the trauma directly can be such a painful process for patients that it requires special effort on the part of the clinician to ensure treatment compliance and prevent dropout. The clinician must approach treatment flexibly, carefully monitoring what the patient can tolerate and at what pace to proceed. Titrating the dose of exposure and the patient's capacity to tolerate that exposure is one of the requisite skills for treating PTSD, as it is for treating many other anxiety-mediated conditions.

Many of the difficulties inherent in exposure treatment can be avoided by maintaining a collaborative therapeutic relationship and allowing the patient a sense of control over the process of treatment. Important psychoeducational groundwork is critical to the success of exposure treatment. For example, the clinician should provide the patient with a sound treatment rationale, particularly regarding the role of avoidance in maintaining PTSD symptomatology. In addition, predicting a brief symptom increase, and assuring the patient that this is an expected part of treatment, may help to decrease the patient's feelings of distress. Greater treatment compliance can be gained by beginning with imaginal exposure exercises, which are often perceived as less threatening by the patient, and then moving on to *in-vivo* exposure exercises. Validation and encouragement from the therapist during exposure exercises is also extremely important

(e.g., "I know that was really hard but you stuck with it; that's great"). The intense distress associated with exposure exercises can also be decreased by teaching the patient anxiety management skills, such as muscle relaxation and deep breathing techniques, prior to beginning exposure treatment. These skills will not only help to manage the patient's intense anxiety but will also provide the patient with an important coping strategy and a greater sense of control. While anxiolytic medication can also be prescribed to help control the symptoms of anxiety, such medications can interfere with exposure exercises. If these medications must be used, they should be avoided immediately before and after exposure exercises so that the medications do not disrupt the natural process of extinction to anxiety-provoking stimuli. Further, if a patient is prescribed a psychoactive medication, it is valuable for the clinician to assist the patient in making appropriate attributions for the success of behavioral exercises. Attributing success to the medications undermines the future progress of an individual, as the changes are ascribed to an external agent rather than to the individual.

Emotional numbing, which is often conceptualized as an extreme form of avoidance, can interfere with a patient's ability to access emotional reactions to the traumatic material, an important condition of the exposure exercise. Prior to beginning exposure, the clinician may wish to help those patients who are disconnected from their emotions learn to identify and label their emotional reactions. Emotional numbing may be particularly problematic during imaginal exposure exercises when patients have a greater ability to defend against the emotional material by distancing themselves from the memory. The intensity of the emotional experience can be increased by having the patient close his eyes, speak in the first-person present tense, and provide a great deal of sensory detail. In these cases, the clinician should query specifically for emotional content during the exposure exercise.

In addition to the difficulties related to the intensity of the treatment, the clinician often experiences logistical problems during exposure treatment. In some cases, such as that of a Vietnam combat veteran, it may be difficult or impossible to return to the scene of the trauma for an *in-vivo* exposure exercise. This treatment requires creativity in designing exposures as well as flexibility regarding session location and session length. The therapist must plan on allowing time for the patient's anxiety and fear to decrease before the session ends. While exposure therapy is almost always an intense experience for patients, it can also be a very intense experience for clinicians. The clinician may be reluctant to enter a treatment that generates such intense emotions and that requires repeatedly listening to stories that can be quite horrific. Appropriate supervision/con-

sultation and frequent debriefings are a necessity in helping clinicians to cope with their own reactions to trauma-related therapy.

Dealing with Managed Care and Accountability

We now live in an age of managed care. The managed care reality affects many (if not most) clinicians and holds significant implications for clinical practice. The virtue of the managed care environment is that it requires that patients be provided with treatment services that are known to be effective (i.e., empirically validated treatments). Additionally, this environment requires that patients not be kept in treatment longer than necessary. Therefore, it is important that clinicians be competent in brief or time-limited therapy and for them to engage in ongoing assessment of a patient's status. The demands of managed care also require that a specified treatment result in improvement for a particular patient within a reasonable period of time or the treatment must be changed. In the age of managed care, more than ever before, clinicians are required to demonstrate quality services that are also cost-effective. Clinicians must justify that their services are effective and that these services enhance clinical outcomes. A priority is placed on effective treatments that can be provided in an efficient manner with high levels of patient satisfaction.

Exposure-based treatments meet many of the demands of managed care. These treatments have been empirically validated and shown to be effective in reducing PTSD symptoms, as well as symptoms of many other psychological disorders (see Keane, 1998, for a review). The empirically validated nature of the treatment appeals to managed care companies and can aid clinicians in defending their treatment decisions. Additionally, the orientation of most exposure-based treatments is brief, symptom-focused, and designed to improve functioning. These treatments can be effective within the constraints of the time-limited therapy model required by managed care companies. Lange *et al.* (1988) reported that 63% of health maintenance organizations (HMOs) have a 20-visit maximum for outpatient mental health services. In most cases of noncomplicated PTSD, 20 visits should be sufficient to complete a program of exposure therapy. We believe that effective assessment and treatment of PTSD requires 12 sessions at a minimum. However, many patients will begin to exhibit improvements in symptomatology and functioning after a few exposure sessions, providing important data that clinicians can use to justify continued treatment, if necessary.

In addition to finding brief, effective models for behavior change, the demands of managed care programs require that clinicians be more accountable for their services than at any time in the past. While the requirements for time-limited treatment may generate pressure for a quick diagnosis, clinicians are encouraged to still complete a thorough assessment. Using well-validated measures for assessment and follow-up of PTSD symptomatology (see Newman *et al.*, 1997, for a thorough review) provides an opportunity to demonstrate that the patient has made broad-based progress in symptoms and functioning. Including measures that assess depressive symptomatology and substance use/abuse can also be beneficial, as these symptoms may also show improvement following exposure-based treatments for PTSD. Progress reports, generally required by HMOs, demand a well-considered treatment plan including operationalized goals that are concrete, specific, and focused on symptom improvement. Treatment goals for exposure-based treatments might highlight the ways in which PTSD symptomatology interferes with performance in multiple areas, including occupational and social functioning, and physical health status. In addition to these progress reports, session content needs to be well-documented, as some HMOs can and will demand treatment records to ensure that clinicians are following treatment guidelines. With regard to exposure treatment, session notes could include the patient's ongoing report of their "Subjective Units of Distress (SUDs) level" in response to exposure material or the use of a self-report measure of PTSD symptoms such as the PTSD Checklist in order to document improvement in level of distress within and across sessions.

OUTCOME AND FOLLOW-UP

Mr. G. improved on measures of PTSD, depression, and anxiety after treatment. The combination of anxiety management training with imaginal and *in-vivo* exposure resulted in improved functioning in his marriage and interpersonal relationships. Moreover, he kept his contract to not use alcohol throughout the intensive phases of treatment. At posttesting, he did not meet diagnostic criteria for PTSD, depression, or alcohol abuse. These changes were maintained over a 1-year period.

Vocationally, Mr. G was ready to return to work in some capacity. He was clear that he did not wish to return to the same shift and the same duties, as he felt these placed him at risk for another assault. There was a labor disagreement that ultimately led him to opt for retirement. Thus, he never did return to his usual work. Rather, he acquired numerous odd jobs

in his neighborhood that occupied his time and supplemented his income. This provided some job-related satisfaction.

His wife and children all felt that he had significantly recovered and that he was now able to contribute to the family in ways that he had not done since the assault. Mr. G himself felt much better about his ability to be with his family and friends and, most importantly, to be with his grandchildren. While he could not yet forgive his assailant for what he had done, Mr. G. accepted that violence is something that occurs in the lives of many people and that he needed to put this behind him and not allow it to govern the remainder of his life.

Dealing with Recidivism

For a significant minority of individuals, PTSD is best described as a chronic condition (see Keane *et al.*, in press, for a review of the literature on the course of PTSD). Even among those for whom it is a chronic condition, PTSD symptomatology often charts a dynamic course, waxing and waning over time. Both the potential chronicity of PTSD and the fluctuating symptom picture can make it difficult to clearly define recidivism and, similarly, to distinguish between remission and recovery. Symptom resurgence may be seen in reaction to anniversaries of the traumatic event or the occurrence of nontrauma-related stressors such as medical illness, death of a loved one, unemployment, and relationship losses. Controversy exists as to whether or not episodes of increased symptomatology represent new discrete episodes of PTSD or an end to a period of remission.

Given the possibility of symptom resurgence, we recommend that relapse prevention strategies be incorporated into the treatment of PTSD. When possible, clinicians should schedule booster sessions, particularly at the time of anniversaries of traumatic events. In addition, it may be helpful to educate patients about warning signs that treatment should be reestablished (e.g., periods of nightmares, increased urge to use substances, episodes of anger). Because PTSD symptoms often interact in a multiplicative fashion (e.g., increased flashbacks may lead to avoidant behavior), early treatment of new or increased symptomatology may prove beneficial in limiting the extent of a relapse.

The nature of a new treatment episode for PTSD will depend on the patient's presentation and reasons for reestablishing treatment. Has the patient experienced additional traumatic experiences that could benefit from exposure therapy? If additional exposure therapy is not warranted, the patient may require assistance in coping with day-to-day symptoms of

stress that may be exacerbating symptoms. Over time the symptom picture for PTSD tends to shift (i.e., reexperiencing symptoms become less dominant as emotional detachment and estrangement symptoms become more dominant; McFarlane & Yehuda, 1997), and effective intervention strategies will be those that can address the patient's dominant symptoms at any given time.

SUMMARY

Some estimate the prevalence of PTSD in the United States at 6% of males and 12% of females (Kessler *et al.*, 1995). Exposure to traumatic events is much higher: often estimated to be as high as 70% of the adult population (Norris, 1992). These findings place trauma and PTSD among the most frequent of psychological disorders, ranking behind substance abuse and depression. Thus, the development of methods to assess and treat PTSD is a high priority among those concerned with public health issues. Unfortunately, there are no reliable estimates of PTSD in developing countries, yet several authorities suggest that the prevalence of PTSD may well be higher in these countries due to the frequency of traumatic events and the absence of resources to buffer their effects (de Girolamo & McFarlane, 1997).

Treatment outcome studies for PTSD are beginning to appear regularly in the scientific literature (Keane, 1998). Generally, these studies examine the effects of anxiety management interventions, exposure therapy, cognitive therapy, and psychopharmacological treatments. More recently, combination therapies such as eye movement desensitization and reprocessing (EMDR) have been tested, with some positive results. It is clear from these studies that interventions that directly address the symptoms of the disorder yield positive outcomes. Moreover, these outcomes transcend the level of symptom improvement and include functional domains as well.

In the case of Mr. G., treatment included multiple phases. After a comprehensive assessment that utilized structured diagnostic interviews for assessing PTSD and other axis I and II disorders and psychological tests, treatment proceeded with a major psychoeducational intervention. This psychoeducation involved teaching Mr. G. about trauma and its impact on individuals, as well as its effects on work, marriage, and interpersonal relationships. Teaching specific anxiety management skills like breathing retraining and progressive muscle relaxation provided Mr. G with coping skills that he could use once the exposure treatments began.

Given the extent of his symptomatology, we found it reasonable to approach the exposure phase of treatment with Mr. G. by the initial use of imaginal techniques. While Mr. G. found this aspect of treatment difficult, it did prepare him for the even more trying phase of returning to the site of his victimization. With the successful completion of each phase, he did gain a sense of mastery and efficacy that communicated to him that he could indeed overcome the fears and frightening images of his assault. These changes were accompanied by improvements in his substance abuse, depression, and his marital and interpersonal relationships. Further, Mr. G. was himself satisfied with the course of treatment that he received.

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