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Assessment, Diagnosis, and Intervention

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The consequences of torture and other extreme interpersonal trauma show many similarities across groups of survivors. Thus, data about assessment and intervention approaches with other traumatized populations are potentially valuable for survivors of torture. However, determining with accuracy the generalizability of findings from one group to another is challenging. The differences in the physical, psychological, sociocultural, and economic variables, both within and between disparate groups, have significant implications for assessment approaches, diagnostic validity, and treatment interventions. Because of the scarcity of empirical data specifically on the assessment and treatment of torture survivors, little consensus exists about which assessment and intervention approaches are best to use.

Even the categorization of other survivors of trauma into discrete groups is not easy. For example, survivors of torture may be refugees, asylum-seekers, or

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immigrants. If so, they live outside their countries of origin and may differ from exiles returning to their home countries or survivors of long-term oppression in their own countries. They may have been persecuted for strongly held political beliefs or because of their ethnic or socioeconomic backgrounds. They differ in their cultural backgrounds and may cope in different ways (Morris & Silove, 1992). They may be veterans, former prisoners of war, or survivors of holocausts. They may have been physically or sexually assaulted. They may have witnessed homicide and mass violence or suffered through war. They may have family members, including children, who were tortured or traumatized. They are at higher risk for multiple traumas, as are other survivors discussed in this chapter. Despite these high levels of trauma exposure, some evidence suggests that survivors can recover in good health and lead meaningful and productive lives (Basoglu, Paker, Ozmen, Tasdemir, & Sahin, 1994).

A primary characteristic of torture is the deliberate and systematic infliction of physical or mental suffering. Government-sanctioned torture (United Nations, 1989) can occur for any reason, such as extracting a confession, but the actual purpose is to make the survivor serve as an example to his or her community, thereby weakening political opposition, consolidating political power, and deterring others from political activity. Torture that occurs in cults or in domestic situations may be perpetrated for entirely different reasons; but in general, torture is imposed for purposes of control and degradation.

Torture is different from trauma that occurs as a result of natural disasters because of the intensely personal nature of the assault. Rather than being caused by environmental forces, torture and other interpersonal forms of trauma are deliberately inflicted by one or more human beings whose identities may not necessarily be known to the survivor. Child abuse, whether sexual or physical, shares this intensely personal attribute and may be even more psychologically damaging because the perpetrator is often known to the survivor. Rape can cross these categories—it can be child abuse, violence against an adult, or a part of systematic state-sponsored torture (Swiss & Giller, 1993). In all cases of extreme interpersonal trauma, the objective is to demonstrate control of the perpetrators over the survivor.

Determining the most effective methods of assessment and treatment of the survivor of torture is difficult in the absence of fundamental information and data. The perspectives of clinicians, researchers, survivors, and human rights activists are all important. Clinicians have a wealth of experience from practice with treated populations; however, in general, it is not based on a scientific or theoretical foundation. Most knowledge that currently exists on the topics of the assessment and treatment of torture survivors is not validated by scientific methods, such as randomized, placebo-controlled clinical trials or through the use of sound psychometric methods. It is clear that the field of torture treatment is in an early stage, one that resembles the extent of knowledge in the rape treatment field, the posttraumatic stress disorder (PTSD) field, and related areas some 20 years ago.

The development of the torture treatment field is viewed from a variety of perspectives. Seasoned, experienced clinicians who work with torture survivors are

concerned that studying their patient populations with standard scientific rigor presents both ethical and logistical problems. Sensitive, capable researchers feel that the scientific method, appropriately applied, can provide answers to questions that are critically important to clinicians, policymakers, and advocates. Survivors of torture feel that researchers and clinicians often do not understand their suffering and may harm them further. Human rights activists have as their primary objective the prevention of the traumatic event entirely.

The complexity of this situation is the basis for a critically necessary dialogue among all concerned but also poses a serious challenge to progress in this field. It is valuable to note that these same issues were salient in other fields and that they have been overcome substantially in the past 20 years. Consequently, the focus of this chapter is a review of the current treatment for torture survivors, a discussion of a scientific framework for reviewing the existing assessment and intervention approaches for a variety of traumatized populations, and a presentation of proposed clinical guidelines with the inclusion of scientific evidence, when available, for particular approaches to assessment and intervention.

ASSESSMENT

Standardized psychological assessment measures are often used with survivors of trauma (a) in research studies; (b) in the screening of high-risk populations, such as refugees, for possible referral by public health, immigration, or education personnel; and (c) in the first part of the intervention strategy at a treatment facility. However, many survivors live in countries where health professionals and specialized services are scarce and where access to health care is limited. Friends, family, teachers, lawyers, community or religious leaders, and traditional healers may be their primary perceived sources of psychological help.

Under ideal circumstances, where health care resources are available and accessible, torture survivors may initially seek help from a general medical clinic, whether in the home country, in the refugee camp, or in countries of resettlement. Often, primary care clinicians may recognize depression in a patient, yet not realize the patient is a survivor of torture. Knowing that the patient is a member of a group at high risk for torture (e.g., refugees, asylum-seekers, or those involved in radical political activity in their own countries) will assist the primary care practitioner in providing optimal care. Having a history of experiencing torture may mean that presumably innocuous situations, such as a visit to the doctor, may precipitate reexperiencing symptoms in a torture survivor. Therefore, survivors may be reluctant to talk about their lives. Many times, torture survivors are fearful of being touched or examined. Merely sitting in a waiting room might remind the torture survivor of periods of enforced waiting. A doctor or nurse wearing a white coat may remind the survivor of other doctors who were responsible for assisting torturers. An electrocardiogram might remind the victim of electrical torture. Dental work may trigger recollections of dental extractions during torture. Referrals or consultations may be needed during treatment, as the situation

may require expertise in physical or psychological trauma, crosscultural issues, particular languages, or other social or legal needs of the survivor.

Whereas assessment in more specialized settings starts with the basics of any good evaluation, certain aspects of the evaluation process must be emphasized when assisting survivors of extreme interpersonal trauma. Survivors particularly need support from professionals who are well acquainted with the survivor's world. Lack of such knowledge is likely to lead to significant errors in assessment and evaluation. The establishment of rapport between the specialist and the survivor is crucial because the survivor needs to be an active participant in treatment. The trust of the survivor is needed in the assessment, diagnosis, and any subsequent intervention. No matter how uncommunicative or withdrawn the survivor may be, simply by being in the same room, he or she has offered the specialist the opportunity to build trust. First and foremost, however, the environment must be safe and feel safe to the survivor. If these conditions are not met, the survivor is unlikely to continue with any intervention.

Professionals who are expert in this area recognize that the assessment of torture survivors is extremely complicated. A major difficulty in conducting a diagnostic interview with a survivor of torture is that it can stimulate memory of traumatic events and activate or reactivate PTSD symptoms (Kinzie, 1989). Consequently, a preliminary treatment plan may need to be formulated at the initial interview. Systematic reevaluation of established patients may prove to be the most critical way of obtaining accurate information and data from torture survivors (Kinzie et al., 1990). Even among experts in the most trauma-sensitive programs, the following difficulties have been encountered:

- Patients may have multiple psychiatric disorders, including depression, anxiety reactions, substance abuse, schizophrenia, and PTSD. Accompanying these diagnoses there may be long-term personality changes, including paranoia and suspiciousness that result from exposure to torture and other forms of traumatic life experiences (Bensheim, 1960; Kluznik, Speed, Van Valkenberg, & Magraw, 1986; Ostwald & Bittner, 1968; Venzlaff, 1967).
- The symptoms of PTSD may appear and disappear over time, particularly the intrusive symptoms. These symptoms may not be present at the time of the interview, posing a diagnostic dilemma for any cross-sectional or one-time effort at assessment.
- The symptoms of avoidance, numbing, and amnesia may prevent the patient from reporting information about the trauma and other symptoms.
- The information may be so disturbing that it is difficult for the interviewer to reliably assess the patient or to gather objective data.
- The patient may decompensate, thus precluding and postponing a thorough clinical assessment.

In the interview process, most survivors recommend that the survivor be allowed to tell his or her story at a pace that is comfortable. Interviewers who are too aggressive may produce an exacerbation of reexperiencing symptoms. The interview should be interactive while the interviewer supports, probes, and questions

the patient. The interviewer needs to monitor both the patient's nonverbal and verbal communication, noting if questions are too painful or if the patient wants to explain or clarify further. Survivors may be reticent to tell their stories or, if they do, may seem paradoxically less upset than one would expect following horrible torture experiences. This flat effect could well be a function of dissociation from the cognitive aspects of the torture.

Any bond that may develop between the therapist and the patient begins during the initial interview; thus, therapy can begin at that time, often with a discussion of the reason and origin of the survivor's symptoms. Although the often-used statement, "These are normal responses to abnormal circumstances," can be helpful for the patient, it is not always true. Some individuals are more adversely affected and disabled by their experiences.

Ideally, assessment is done as part of treatment and is completed in settings in which psychopharmacological and psychological treatments are available. The assessment should include a thorough mental status examination, physical examination, and laboratory tests, in addition to a comprehensive psychological and neuropsychological examination. In addition, historical data are gathered including information about the patient's level of function in the periods preceding and following the traumatic experience. Preexisting psychiatric and physical conditions, personality maladjustment, and exposure to prior traumatic experiences (as victim or perpetrator) are part of a comprehensive assessment. Particularly important is a history of head trauma, with or without loss of consciousness, at any time in the survivor's past. For refugees and asylum-seekers, postmigration factors need to be explored to include the stressors of displacement, acculturation, and alterations in social support systems (Steel & Silove, in press) as distinct from the effects of torture and related traumatic events.

DIAGNOSES

The physical consequences of politically motivated or government-sanctioned torture have been well documented elsewhere (e.g., Rasmussen, 1990; Skylv, 1992). The neuropsychiatric symptoms are often difficult to diagnose correctly because of the multiplicity of symptoms and the frequency of comorbidity. The fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV; American Psychiatric Association, 1994) includes not only those who have experienced torture and other extreme trauma, but also those who have witnessed or been confronted with actual death or serious injury or have been threatened with death or serious injury, either to themselves or to someone else. As noted earlier in this chapter, PTSD is not the sole psychiatric diagnosis among survivors; in some samples, it may not even be the most common. Major depression is extremely common, often found concurrently with PTSD (Turner & Goest-Unsworth, 1990), but comorbidity with substance abuse and other anxiety disorders is also seen. In studies by Basoglu et al. (1994), the most common diagnosis among torture survivors was PTSD, whereas depression, anxiety, and substance abuse were less frequent diagnoses.

Whether the PTSD diagnosis is valid for torture survivors is a topic that has generated considerable controversy. Although survivors have suffered from a life-threatening event, they are often concerned about being labeled with diagnoses such as PTSD. Allodi (1991) defined two categories of torture treatment settings with a geographic designation: the "North" and the "South." Countries of final resettlement, such as the industrialized nations in the continents of Europe, North America, and Australia, fall into the "North" category, whereas totalitarian "Third World" countries where torture is practiced, as well as countries of initial refuge, are part of the "South" category of treatment settings. So-called "Northern" countries have developed diagnostic systems, for example, DSM-IV (American Psychiatric Association, 1994) and *International Classification of Diseases* (World Health Organization, 1992), based on the medical model (or syndrome approach) to diagnosis. Clinicians in the "Southern" countries argue against this approach, particularly the applicability of the PTSD diagnosis to survivors of torture and extreme trauma, claiming that it is a western ethnocentric concept (Chakraborty, 1991) or that PTSD-related symptoms are in fact normal responses following torture and do not warrant a psychiatric diagnosis.

One argument in favor of the universality of the PTSD approach is based on existing biologically based research indicating that many symptoms of posttraumatic stress have biological correlates. For example, neurobiological changes that can occur in survivors of posttraumatic stress are (a) hyperarousal and hyperreactivity of the sympathetic nervous system; (b) increased sensitivity and augmentation of the acoustic–startle eyeblink reflex; (c) a reducer pattern of auditory cortical event-related potentials; (d) abnormal noradrenergic, hypothalamic–pituitary–adrenocortical, and endogenous opioid systems; (e) possible differences in the volume of the hippocampus between PTSD and non-PTSD patients; and (f) abnormal sleep patterns (Friedman & Jaranson, 1994). Neurobiologically, the evidence in favor of a crosscultural posttraumatic stress syndrome is greatest for the hyperarousal cluster of symptoms, especially the startle response. Jablensky et al. (1994) asserted that because posttraumatic stress symptoms appear in many nonwestern survivors, the claim that the PTSD diagnosis is ethnocentric is unfounded.

The second argument that claims that because PTSD symptoms are commonly observed, they are therefore normal, can also be refuted with a public health analogy. The fact that posttraumatic stress may be statistically frequent in traumatic situations does not exclude it as a disorder or illness. Posttraumatic stress can be considered a pathogen not unlike, for example, the cholera bacterium, which causes illness in most members exposed to a contaminated water supply. Although most exposed become ill, this does not make cholera normal or, for that matter, untreatable. Likewise, PTSD is observed in many of those individuals exposed to torture or extreme trauma, yet it is a treatable disorder (Jaranson, 1998).

PTSD was never conceptualized as a diagnosis that would encompass the entire range of responses following torture (Friedman & Jaranson, 1994). Genefke and Vesti (1998) have proposed a broader construct, a "torture syndrome," that includes most of the PTSD symptoms but extends beyond this one diagnosis. The

torture syndrome has not yet been validated but is one promising direction for future research that will shed more light on the North–South discussions. In the meantime, much of the research on torture survivors that has been conducted with control or comparison groups has identified outcomes of PTSD and other psychiatric sequelae but has not provided support for a separate torture syndrome (Basoglu et al., 1994). For example, in Basoglu's controlled studies of nonrefugee survivors studying the effects of torture per se, 33% had lifetime PTSD. Furthermore, 18% had current PTSD after a mean of 5 years, suggesting a chronic course of illness (Westermeyer & Williams, 1998). These figures suggest that PTSD is extremely common after torture, although neither a universal nor "normal" response.

Other concepts have focused on the long-term effects on personality and worldview, including complex PTSD (Herman, 1993) and continuous traumatic stress response (Dowdall, 1992). Especially when torture is prolonged over many years or when the survivor is young when tortured, many fundamental personality changes can occur. Long-term sequelae often include somatization, comorbidity, dissociation, lability of affect, difficulty with relationships, inability to trust, changes in the way one looks at oneself or the world, and inappropriate risk taking.

On the basis of case reports from clinical experience, torture appears to be such an extreme stressor that it reduces many differences across cultures; the symptoms of PTSD appear in individuals from many different countries (Jaranson, 1993). However, this does not mean that cultural factors are insignificant. In fact, cultural differences have been identified as important factors in the diagnosis of PTSD (Marsella, Friedman, & Spain, 1993; Westermeyer, 1989). Cultural differences occur, but these differences are found predominantly in the way that the symptoms are expressed and in the ways in which the individual interprets what has happened or looks at the world (Friedman & Jaranson, 1994).

INTERVENTION ISSUES

Overview of Treatment

The study of the treatment of trauma has a long history. In 1919, Mott described both the hysterical symptoms and neurasthenic symptoms (which are very similar to the modern diagnosis of PTSD) experienced by trauma patients and concluded that the hysterical symptoms could be removed by suggestion or hypnosis. However, the neurasthenic symptoms, particularly nightmares, were extremely resistant to treatment. A great deal of psychoanalytic treatment, particularly between the World Wars and after the Holocaust, was devoted to treating victims of trauma, but the results were mixed and generally poor (De Wind, 1971). As PTSD emerged in the 1980s as a diagnostic category, it became increasingly clear that the symptoms of the disorder might respond differentially to treatment. One of the first studies of severely traumatized individuals with the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III; American Psychiatric Association, 1980) criteria for PTSD showed that 6 of the 12 Cambodian refugees

treated no longer had PTSD 1 year later, in large part because specific intrusive symptoms—nightmares and reexperiencing—had been reduced (Boehnlein, Kinzie, Rath, & Fleck, 1985).

Clinicians working with torture survivors often find themselves responding to many needs of survivors of torture, and they find that treatment is complicated, time consuming, and fraught with difficulties for a number of reasons.

- Severely traumatized individuals may have disorders that are persistent. Treatment protocols need to take this into account, with regularly scheduled reevaluation. Because symptoms appear and disappear over time, treatment plans should adjust to a changing pattern. For example, if hyperarousal symptoms should reemerge, then pharmacological or focused behavioral treatment may be needed.
- Symptoms such as chronic avoidance, numbing, personality changes, suspiciousness, paranoia, and substance abuse frequently complicate the clinical picture.
- Some patients are extremely sensitive to any new life stresses, and their symptoms may be exacerbated. However, some torture survivors show increased resiliency following treatment, even to subsequent realistic threats of arrest and torture (Basoglu & Aker, 1996).
- Few double-blind, well-controlled studies on treatment of PTSD in torture survivors have been conducted; those that have been completed are inconclusive and provide little data on which to base treatment. However, such randomized controlled trials of behavioral treatment of war veterans, rape survivors, and other groups have been done and provide excellent data from which treatment of torture survivors can be cautiously generalized. Recently, a randomized controlled trial of cognitive and behavioral treatment of PTSD showed that both treatments were effective in treating PTSD (Marks, Lovell, Noshirvani, Livanou, & Thrasher, 1998).
- The bond between therapist and patient develops over time. All treatment programs need to recognize and address the burden on the therapist that accompanies the sharing of traumatic experiences.

Many survivors feel that they bear the ultimate responsibility for their own recovery. Health professionals offer emotional support, therapeutic advice, pharmacological treatment, and other assistance. However, it must be clear to the survivor that the working relationship is collaborative and that the survivor is more than simply a passive participant in the treatment process. The survivor's role may vary based on psychotherapeutic approach. The role of the therapist is quite different when using psychodynamic, client-centered, or cognitive–behavioral approaches, but all therapies depend on the efforts of the patient to change. Insofar as virtually all treatments work through a focus on the traumatic experiences, it is important that survivors be informed of this early in treatment. A focus on the trauma may result in exacerbation of symptoms in the short term. If uninformed, the survivor may feel betrayed or controlled again, as if repeating the experience of torture, and the trust in the treating professional may be compromised. By

simply asking the patient for input, the therapist sends a message that the survivor's opinion is valued, that honesty exists in the therapeutic relationship, and that the therapist is not trying to control the survivor. Education about the psychology of torture and its effects must be discussed during assessment or early in the intervention. This information may alleviate the guilt of the survivor for having been tortured, or forced to torture others, and help the survivor understand that it was not his or her fault. Education may also include the larger effect of politically motivated torture as a crime against the individual, the family, the society, and all of humanity.

General Principles in Therapy with Traumatized Patients

Although no standard set of rules applies to all interventions, the following general principles are based on specific theoretical approaches that underlie the treatment of severely traumatized patients:

- Do no harm. Aggressive and insensitive treatments and evaluations can exacerbate patients' symptoms and contribute to severe complications (Solomon, Gerrity, & Muff, 1992).
- Conduct a functional analysis of the patient's primary problems and focus treatment on the individual patient's treatment needs, which may mean to reduce symptoms, limit disability, increase an understanding of PTSD, increase personal freedom, or some other need.
- Show respect to patients by allowing them to express their stories at their own rate. Do not encourage or press for catharsis and ventilation.
- Have a single person (primary care physician, therapist, or psychiatrist) take responsibility for coordinating the integration of the variety of treatments and services that may be needed.
- Use pharmacotherapy to help in the treatment of intrusive symptoms and impaired sleep, nightmares, hyperarousal, startle reaction, and irritability as needed. Antidepressants in combination with clonidine (Kinzie & Leung, 1989) have been shown to be helpful.
- Provide supportive therapy by maintaining regular and predictable meetings in which there is continuity, warmth, and modeling of positive and negative emotions (Kinzie et al., 1988; Kinzie, Sack, & Riley, 1994).
- Support the physical, social, and medical needs of patients, particularly the patients who are refugees. These needs may include medical, food, housing, and financial requirements.
- Recognize that cultural differences may exist in patients' needs to focus on the traumatic events. For example, Morris and Silove (1992) found that refugees from South America were more receptive to providing recollection of trauma, whereas this approach was not helpful for Indo-Chinese refugees. Similarly, patient involvement in political or public activities will vary based on individual choice, cultural factors, and stage of recovery.

- Explore the value of group therapy for socializing and supportive activities (Kinzie et al., 1988). For some patients, this experience can help reestablish a sense of family and preserve cultural values for refugees.
- Support the traditional religious beliefs of patients. These beliefs may provide an explanation or an acceptance of life or may be part of a search for existential meaning as part of a therapeutic goal.
- Understand that many patients need to maintain the therapeutic relationship with the clinician over an extended period and may require long-term rehabilitation and support.

The context in which survivors of torture seek help partially determines both their perceptions of the experience and the treatment intervention. Treatment of torture survivors can occur in their countries of origin, as well as in countries of initial or final resettlement. Allodi (1991) stated that torture in the "North" is viewed as resulting in the medical and psychological consequences of traumatic stress. In the "South," torture is viewed as part of the sociopolitical process, requiring preventive action and social change. The chosen philosophical stance can dictate the approach to treatment, and a survivor's perspective about these issues may be important in the development of a treatment goal.

One commonality of the two approaches is the goal of empowerment, or regaining a sense of control lost during torture. A medical–psychological treatment approach empowers the individual by validating his or her experiences, facilitating effective reprocessing of the experience, and encouraging active engagement in living. Empowerment within the larger society or community has the more explicit goals of reintegrating the individual into the political process as evidence of healing. An equally important goal is the documentation of the torture and extreme trauma to record the truth, provide the survivors with validation of their own experiences, and expose the perpetrators. Because the survivor and his or her own community have been affected, the survivor may be encouraged to participate in social action groups in the larger community. In some instances, this participation has been seen as part of treatment, although there have been no systematic evaluations of such approaches.

In the early stages of treatment, torture survivors need safety. Immediate needs are establishing trust, stabilizing physical illness, and reducing symptoms. Medications in the early stages may help psychotherapy to progress. Often, survivors initially find it easier to talk about their physical symptoms and their social needs than about their psychological symptoms. This may be particularly so in countries in transition, such as South Africa, where, despite disappearance of the initial threat of violence and trauma, high rates of crime and community violence may inhibit the restoration of a sense of safety.

In the later stages, as survivors begin new lives, they may have a different set of social needs. Physical limitations may have occurred as a result of the torture, and torture survivors may need to adjust to these changes, as well as psychologically deal with the torture experience so that they can shape their future. They may engage in tasks of adjustment such as learning about the sequelae of torture, mourning their losses, and engaging with their families once again.

Individual responses to different types of traumatic events vary, but certain standard treatment elements may be helpful to trauma survivors. Treatment for torture survivors ideally benefits from a multidisciplinary approach (Bøjholm & Vesti, 1992; Garcia-Peltoniemi & Jaranson, 1989; Ortmann, Genefke, Jakobsen, & Lunde, 1987) because the sequelae of torture are both acute and chronic and may include physical, psychological, cognitive, and sociopolitical problems. There is no consensus about the best treatment method, however, and treatment effectiveness studies are formed on a specific method or population and are therefore less generalizable across trauma groups.

The potential risk of secondary gain must be recognized when both documentation of evidence and treatment are combined as part of treatment services. With relatively few skilled professionals available to work with trauma survivors, these roles are often difficult to separate. A conflict may exist between providing treatment and providing evidence of need for social security disability, asylum, or workers' compensation applications.

In countries where torture is still practiced, treatment resources are usually limited. Concepts such as mental health may not be well understood or accepted, and there may be few available psychologists or psychiatrists. Ordinarily, primary care physicians or community health workers provide most of the local mental health services for victims. Treatment emphasizes a more community-based intervention approach and can be affected by safety and political issues (Parong, 1998; Parong, Protacio-Marcelino, Estrado-Claudio, Pagaduan-Lopez, & Cabildo, 1992).

The cost–benefit ratio in rehabilitation programs has also not been assessed. Because resources are scarce and the need is great, especially in developing countries, short-term treatments with demonstrated efficacy are more useful. Practical training programs are needed in the delivery of the best and most feasible psychological treatment methods for on-site health and mental health care workers.

SPECIFIC INTERVENTION STRATEGIES

Specific intervention strategies for veterans and prisoners of war; holocaust survivors; survivors of rape, sexual assault, physical assault, homicide, and mass violence; civilians in war; and children and families may be found in other chapters of this book. The rest of this chapter focuses on intervention strategies that have been used to help survivors of torture, existing evidence for the effectiveness of these strategies, and the techniques found to be most effective in survivors of other traumatic events.

Psychotherapy

The psychotherapy literature for survivors of torture was reviewed by Chester and Jaranson (1994). They noted that the primary treatment, at least in countries of final resettlement, has been psychotherapy, but that no controlled treatment–outcome studies of psychotherapy have been completed. Many authors have

described treatments that appear to be helpful for torture survivors. For example, Somnier and Genefke (1986) and Vesti and Kastrup (1992) provided an excellent overview of the "insight" therapy used by the Rehabilitation and Research Centre for Torture Victims (RCT) in Copenhagen. Varvin and Hauff (1998) described relational psychotherapy, while Drees (1989) presented basic guidelines for short-term treatment of depression in torture survivors. Cognitive–behavioral (Basoglu, 1992a, 1998) and insight-oriented approaches, such as psychodynamic therapy (Allodi, 1998; Bustos, 1992), are frequently used treatment methods with torture survivors. Other approaches described in the literature include supportive therapy, desensitization, family therapy, group therapy (Fischman & Ross, 1990), play therapy, psychosocial therapy, and giving testimony (Vesti & Kastrup, 1992).

A metaanalysis of controlled clinical trials of behavioral, cognitive, and psychodynamic treatment of combat veterans, crime victims, and the severely bereaved has shown that psychotherapeutic intervention reduces PTSD symptoms and that these effects persist after treatment is terminated (Sherman, 1998). The most compelling evidence for effective psychotherapeutic treatment of PTSD is in the area of cognitive–behavior therapy (Keane, Albano, & Blake, 1992). One caveat is that severely traumatized individuals may require longer-term treatment than the relatively short-term approach of behavior therapy. Some case studies suggest that behavioral treatment may be effective with torture survivors, but controlled treatment studies are needed to confirm its effectiveness with this population.

Certain common elements can be found among the various modalities of treatment that have been tried, but controlled studies are needed to identify the specific elements that are effective in these treatment approaches. Most treatments involve telling the trauma story, which might involve imaginal exposure and habituation to trauma memories with consequent cognitive change (Basoglu, 1992a). Common elements in various forms of psychotherapy, such as "insight therapy" (and concurrent physiotherapy used at the RCT), giving testimony, and cognitive–behavioral treatment have been discussed by Basoglu (1992a). Although retelling the trauma story for reframing and reworking is a central tenet in treatment (Mollica, 1988), treating torture survivors must be done in a safe setting, with the appropriate timing, and with acknowledgment of cultural variations in the expression and interpretation of these memories.

Many clinicians fear that the retelling of traumatic memories can be risky if catharsis and abreaction are part of this task, but this risk has not been confirmed by controlled studies. However, if there is no follow-up intervention, most clinicians believe that the retelling alone will likely cause more problems than it solves. Often a need exists for continuing care once the trauma is revealed.

Most psychotherapy approaches are typically not based on one consistent theory. Treatment outcome studies are necessary to determine the efficacy of an approach. Multidisciplinary rehabilitation approaches contain many interventions on different levels, and no analytical outcome evaluation has been carried out to identify the effective components of these rehabilitation programs. For example, the RCT rehabilitation model involves strong behavioral elements, such as exposure elements in a lengthy physiotherapy process and detailed medical

investigation. In addition, this model includes a focus on the trauma story during insight psychotherapy, which involves imaginal exposure.

PTSD is a chronic condition, and psychotherapy is a crucial component of a rehabilitation program. Medications may also be effective, but the literature has shown that relapse is common on discontinuation of medication for treatment of most anxiety disorders, including PTSD. Some case studies have shown that this situation may be true for PTSD in torture survivors (Basoglu, Marks, & Sengun, 1992). More recent research (Basoglu et al., 1994) has shown that severity of torture predicts PTSD but not depression, whereas lack of social support relates to depression but not to PTSD. This finding implies that treatment that mobilizes support may help with depression but may not have an effect on PTSD. Specific psychotherapy interventions with proven efficacy may be required to deal specifically with PTSD symptoms. It is important to deal with PTSD symptoms because survivors with severe PTSD may not be able to access and utilize social support (Keane et al., 1992). In a current review of PTSD treatment, Keane et al. (1992) reported that the psychological treatments also tend to have the greatest effect on the intrusive or positive symptoms, whereas the numbing and restricted affect remain relatively unchanged.

Pharmacotherapy

Smith, Cartaya, Mendoza, Lesser, and Lin (1998) reviewed the conceptual basis for pharmacotherapy and the literature supporting treatment with psychotherapeutic agents. In comprehensive reviews, Lin, Poland, and Nagasaki (1993), and Lin, Poland, and Anderson (1995) discussed the biological basis for ethnicity and its implications for pharmacotherapy. Given the high prevalence of torture-related disorders in refugees, an understanding of pharmacokinetics across ethnic and racial groupings is invaluable for the clinician.

Indications for drug treatment (Blank, 1995) are to (a) decrease overwhelming symptoms that require rapid reduction for the patient to function; (b) provide help if no psychotherapy is available or if psychotherapy is proceeding slowly; (c) facilitate psychotherapy by reducing hyperarousal, intrusions, numbing, and avoidance; (d) reduce comorbid symptoms, particularly panic and depression; and (e) improve impulse control, reducing rage and violence.

Jaranson (1991), in a review of pharmacotherapy for refugees, also stressed the importance of starting medication for highly symptomatic patients even if the initial evaluation and assessment are still in process. However, the clinician should assess concurrent use of traditional or folk medications, over-the-counter medications, or substances with abuse potential that may alter the effect of prescribed medications. Alternatives or supplements to medication, such as acupuncture, hypnosis, relaxation, massage, or medicinal teas, have also been used, although there is little scientific support for the efficacy of these treatments (Hiegel, 1994).

Psychotropic agents from virtually all the major psychopharmacologic categories have been used to treat survivors of extreme trauma. Some crosscultural research and clinical experience indicate that prescribing smaller doses of

psychotropic medications than recommended for Whites can effectively treat survivors who belong to non-White groups (Jaranson, 1991; Lin et al., 1995; Lin, Poland, & Nagasaki, 1993). Both pharmacokinetic (metabolic) and pharmacodynamic (brain receptor) differences have been demonstrated (Lin et al., 1993).

Aside from biological response differences, cultural factors and attitudes also affect medication compliance (Jaranson, 1991). For example, refugees and torture survivors may take medication only until symptoms begin to remit, rather than continuing for the full course of treatment. Consequently, they may take antidepressant medication for less time than required for maximum therapeutic effect. If psychotropic medications do work, survivors may tend to share them with family members or friends who suffer from similar symptoms (Jaranson, 1991), creating further complications for these people. In one study, medication compliance among Southeast Asian refugees was shown to be poor, based on antidepressant blood levels, even when the patients reported they were taking the medication as prescribed (Kroll et al., 1989). Kinzie (1985) demonstrated that poor compliance can be improved with patient education that includes information on how medication works, how long it will need to be taken, what can be expected, and what side effects are possible.

The results from randomized, controlled medication effectiveness trials show a moderate, but clinically meaningful, effect at posttreatment. A series of randomized trials was published between 1987 and 1991. These early investigations focused primarily on tricyclic antidepressants (TCAs) and monoamine oxidase inhibitors (MAOIs). Despite some very promising leads from these early trials, results were too inconsistent and modest to stimulate further research until selective serotonin reuptake inhibitors (SSRIs) became available in recent years.

TCAs, SSRIs, and clonidine have all been found useful for some symptoms of PTSD (Kinzie & Leung, 1989). TCAs are the most studied psychopharmacologic agents, but, because of their relative lack of potency, side effects, and failure to reduce avoidance or numbing symptoms, they have been replaced by SSRIs as first-line drugs in PTSD treatment. There have been three randomized clinical trials with TCAs involving 124 patients, as well as numerous case reports and open trials (Braun, Greenberg, Dasberg, & Lerer, 1990). Results have been mixed and generally modest in magnitude. In their analysis of 15 randomized trials, open trials, and case reports involving TCA treatment for PTSD, Southwick et al. (1994) found that 45% of patients showed moderate to good global improvement following treatment, whereas MAOIs produced global improvement in 82% of patients who received them. As with MAOIs, most improvement was due to reductions in reexperiencing rather than avoidance or numbing or arousal symptoms. A minimum of 8 weeks of treatment with either TCAs or MAOIs was necessary to achieve positive results.

MAOIs, such as phenelzine, produced excellent reduction of PTSD symptoms during an 8-week randomized clinical trial, in two open trials, and in several case reports. In other studies, it was reported to be less effective (VerEllen & van Kammen, 1990). Southwick et al. (1994) reviewed all published findings (randomized trials, open trials, and case reports) concerning MAOI (phenelzine)

treatment for PTSD. They found that MAOIs produced moderate to good global improvement in 82% of all patients, primarily because of reduction in reexperiencing symptoms such as intrusive recollections, traumatic nightmares, and PTSD flashbacks. Insomnia also improved. No improvement was found, however, in PTSD avoidance, numbing, hyperarousal, depression, anxiety, or panic symptoms. In summary, most published reports have shown that MAOIs effectively reduce some PTSD symptoms. In practice, however, most clinicians appear reluctant to prescribe these agents because of concerns about the risk of administering these drugs to patients who may ingest alcohol or certain illicit drugs or who may not adhere to necessary dietary restrictions.

SSRIs have revolutionized pharmacotherapy and are beginning to emerge as the first choice of clinicians treating PTSD patients. The SSRIs generally have fewer side effects and are less lethal if the suicidal patient takes an overdose. In the only published randomized clinical trial of an SSRI in PTSD, fluoxetine produced a marked reduction in overall PTSD symptoms, especially with respect to numbing and arousal symptoms (van der Kolk et al., 1994). In addition, a number of open trials and case reports have appeared concerning fluoxetine, sertraline, and fluvoxamine (Friedman, 1996). In general, investigators have been impressed by the capacity of SSRIs to reduce the numbing symptoms of PTSD, as other drugs tested thus far do not seem to have this property. However, most studies of SSRIs are inconclusive and have not been conducted specifically with torture survivors.

Trazodone and nefazodone are serotonergic antidepressants with both SSRI and serotonin blockade properties. They also exert alpha-adrenergic blockade and strong sedative effects. Recently, trazodone has received renewed attention because of its capacity to reverse the insomnia caused by SSRI agents, such as fluoxetine and sertraline. Nefazodone is closely related to trazodone with respect to mechanism of action, but it appears to have greater potency. Multisite trials with nefazodone and PTSD are currently in progress.

Although it is well established that adrenergic dysregulation is associated with chronic PTSD (Friedman & Southwick, 1995; Yehuda & McFarlane, 1997), no randomized clinical trials with either the beta-adrenergic antagonist, propranolol, or the alpha-2 agonist, clonidine, have been conducted, despite the fact that positive findings with both drugs were reported as early as 1984 (Kolb, Burris, & Griffiths, 1984). It should be noted that positive reports of open trials with both drugs continue to be published. In addition, preliminary success has been achieved with the adrenergic alpha-2 agonist, guanfacine, which has a longer half-life (18 to 22 hours) than clonidine.

Because of their proven anxiolytic potency, benzodiazepines have been prescribed widely for PTSD patients in some clinical settings. However, only four studies of benzodiazepine treatment for PTSD have been published. In a randomized clinical trial (Post, Weiss, & Smith, 1995) and two open label studies, alprazolam and clonazepam were no better than placebo in reducing core PTSD symptoms, although modest reductions in generalized anxiety were observed. Because the use of benzodiazepines in PTSD has questionable efficacy and poses problems of addiction, these drugs are generally prescribed with caution.

One theory has proposed that, following exposure to traumatic events, limbic nuclei become kindled or sensitized so that, henceforth, they exhibit excessive responsivity to less intense trauma-related stimuli (Friedman & Southwick, 1995). Based on this theoretical perspective, several open trials of anticonvulsant or antikindling agents have been conducted. In five studies, carbamazepine produced reductions in reexperiencing and arousal symptoms, whereas in three studies, valproate produced reductions in avoidance or numbing and arousal symptoms but not in reexperiencing symptoms (Glover, 1993).

Spurred by the hypothesis that emotional numbing in PTSD might result from excessive endogenous opioid activity, an open trial of the narcotic antagonist, nalmefene, was conducted (Friedman, 1991). Some Vietnam veterans with PTSD exhibited reduced numbing, whereas the other participants showed either no improvement or a worsening of anxiety, panic, and hyperarousal symptoms.

Before the empirical and conceptual advances of the past 15 years, PTSD patients were often considered by treating physicians to have psychotic disorders. Indeed, the intense agitation, hypervigilance (that sometimes appeared to be paranoid delusions), impulsivity, and dissociative states seemed to call for neuroleptic treatment. It now appears that most of these symptoms will respond to antiadrenergic or antidepressant drugs and that antipsychotic medications are usually prescribed for the rare PTSD patient who exhibits frank paranoid behavior, overwhelming anger, aggressivity, psychotic symptoms, fragmented ego boundaries, self-destructive behavior, and frequent flashback experiences marked by auditory or visual hallucinations of traumatic episodes (Friedman & Yehuda, 1995).

Most drugs tested in PTSD studies were developed as antidepressants and later shown to have efficacy against panic and other anxiety disorders. Given high comorbidity rates of PTSD and the symptomatic overlap of PTSD, major depression, panic disorder, and generalized anxiety disorder (Stout, Kilts, & Nemeroft, 1995), it is reasonable to have tested such drugs with PTSD. Yet PTSD appears to be distinctive in a number of ways. First, its symptoms seem to be more complex than affective or other anxiety disorders, and, second, its underlying pathophysiology appears to be qualitatively different. For example, abnormalities in the hypothalamic–pituitary–adrenocortical system are markedly different from those present in major depressive disorders despite similarities in clinical phenomenology. We have just begun to explore a variety of pharmacotherapeutic approaches for PTSD.

However, because long-term follow-up studies have not been conducted, no conclusions about medications having a lasting effect on PTSD can be drawn. In a review of 255 English-language reports, it was found that there were only 11 clinical trials that employed a randomized design (Solomon et al., 1992). From this review, the authors concluded that medications showed a modest, but clinically meaningful effect, and that more research was needed.

Other Medical Services

Primary care medicine (Chester & Holtan, 1992), nursing, and physiotherapy are important components in the care of torture survivors. Holtan (1998) described

the importance of the primary care physician and the psychiatrist working in close collaboration to more effectively coordinate care. However, in countries where torture is still practiced, mental health resources are usually limited.

Some of the most critical ways in which primary care physicians can help torture survivors include (a) detecting physical evidence of the torture, which is useful both for treatment and for support of asylum claims (Randall & Lutz, 1991); (b) reassuring the survivor that, when physical sequelae are not detected, he or she has been spared permanent physical damage from the torture; (c) preparing the survivor, through education and reassurance, that psychotropic medication and psychotherapy may be useful treatments; and (d) ruling out infectious and metabolic diseases that may masquerade as psychiatric disorders.

Nursing also has a role in the care of torture victims. Jacobsen and Vesti (1989) articulated the nurse's role to include (a) providing support for the survivor in difficult circumstances; (b) supporting victims in their attempts to recover and maintain their emotional and physical health; (c) educating and guiding survivors to acquire better lifestyles by improving their diet, exercising, and engaging in other health prevention activities; and (d) educating the survivor about the effects and side effects of prescribed medications.

Physiotherapy (Prip, Amris, & Marcussen, 1994; Prip, Tivold, & Holten, 1995) has been used in some centers for many years as an integral part of an interdisciplinary treatment team. An important benefit of physiotherapy includes, of course, modulation of acute and chronic pain. Physiotherapy sessions also provide numerous opportunities for exposure and habituation to reminders of the trauma, which may decrease the fear, anxiety, or distress associated with trauma cues (Basoglu, 1992b). Psychotherapeutic treatment appears to proceed more effectively when combined with physiotherapy, but the reasons for this perceived effect have not been established.

Social Services

Social service needs for most survivors are of primary importance. Social support and social validation are important aspects of general recovery from trauma (Janoff-Bulman, 1992). In resettlement countries, the refugee and asylum-seeker adjusting to a new society and culture often encounter additional stressful experiences with housing, finances, or asylum applications. Many clinicians believe the healing cannot proceed effectively unless the survivor has these social service needs met. In countries that still practice torture, social work is often not recognized as a discipline. Nonetheless, social service needs are usually great, and local health workers, primary medical care practitioners, and others will need to meet the social needs of the patient.

COMMUNITY APPROACHES

Government-sponsored torture affects the larger community and society, as well as the individual, and often community interventions are needed. In some parts of the world, family, community, and societal resources no longer exist.

Linking the individual to the new community by the use of language and employment training, art, music, and other programs has been a focus of this effort.

The use of scientific methods to evaluate community interventions is difficult and complex, and few scientific studies of community intervention have been attempted. In one review article, Scott and Dixon (1995) evaluated studies of the effects of a comprehensive treatment approach (assertive community treatment, or ACT) and a more narrowly focused case management approach on the use and costs of mental health services, as well as clinical and social outcomes for individuals with chronic mental illness. They concluded that ACT programs reduced hospital recidivism rates and that case management did so less consistently. The ACT programs also reduced psychiatric symptoms, improved social function, and promoted independent living.

Dixon and Lehman (1995) also reviewed the evidence for the efficacy and effectiveness of psychoeducational family interventions as part of the treatment of schizophrenics and found reduced rates of patient relapse and improved patient functioning and family well-being. In addition, multifamily groups for selected subgroups of patients were of superior benefit (McFarlane et al., 1995). In addition to psychoeducation, behavioral problem solving, family support, and crisis management were the most frequently used approaches. Dixon and Lehman (1995) recommend developing interventions for members of patients' broader support systems.

A Community Approach in South Africa

In South Africa, a Truth and Reconciliation Commission was established to promote healing in a country traumatized by years of oppression. Many survivors of torture and extreme trauma identified themselves and gave testimony, but others chose not to do so, usually because of a lack of trust in the system. For all survivors, the question for the community is how to support recovery both individually and collectively and, from a broader perspective, what kind of interventions would enhance the future functioning of the entire South African society.

Whereas individual recovery is the fundamental goal of the clinician, South Africa's circumstances also demanded social or national reconciliation. Reconciliation, a substantive healing process reflecting restoration rather than retribution, implies that all involved parties ultimately move toward friendship. Such an approach must accommodate both individual and group processes, should be context and culture sensitive, and should deal not only with victims but also with perpetrators and bystanders. This approach seeks improvement not only in the functioning of the individual but also in the functioning of the society, community, and nation.

The Three-Part Reconciliation Model

A clinically based intervention rooted in an understanding of traumatic stress may provide some support for the ongoing approach to reconciliation; a model

for reconciliation is proposed, based on related traumatic stress research. The three parts of the model are (a) acknowledgment, (b) apology, and (c) reparation.

Acknowledgment

Bearing witness, giving testimony, and creating memorials (e.g., in the form of literature, poetry, art, and sculpture) acknowledge that the traumatic event happened. The issue of memory is central for both victims and perpetrators of oppression. The entire debate over the veracity of recovered memories underscores the need for discovery of the "truth" and the importance of the acknowledgment of such truth to validate the experience of the survivor and his or her suffering. Agger and Jensen (1996) emphasized the significance of testimony as a part of therapy for survivors of state terrorism in Chile. It is the combination of both the telling of the story, in this case in a public forum, and the manner in which it is heard and understood that is part of the healing. Herman (1992) described how, in individual work, "this work of reconstruction actually transforms the traumatic memory so that it can be integrated into the survivor's life" (p. 174). Therefore, in the public forum, the survivors telling their stories and the nation acknowledging their veracity transform the private traumatic memory into public memory. This public memory can then be integrated into the historical memory of the nation.

Apology

Apology is an important step in the healing process. A sincere apology on the part of the specific perpetrator to the victim implies in-depth reflection on the violation, some understanding of the suffering, and a genuine sense of remorse. It not only serves to verify the traumatic experience and suffering of the victim, but it also directly addresses the relationship of the victim to the perpetrator. Acts of acknowledgment and apology by the perpetrator "rehumanize" the victim, allowing him or her to reestablish and confirm a cognitive schema regarding self and others. It is also the ultimate way that the survivor's suffering may be recognized. The act of apology, following acknowledgment, justifies the internal world of the victim and assists in the establishment of a sense of meaning (Blackwell, 1993; Casella & Motta, 1990). The victim then becomes empowered to accept or reject the apology. The power balance shifts, which is a significant step in emergence from the victim posture. In a sincere apology, perpetrators are remorseful for their acts and seek pardon for them; it is not possible to legislate an apology. When an apology is not made, when it is perceived to be inadequate, or when the victim is not yet ready to accept it, the seeking of justice has no psychological advantage (Lagos, 1988, 1994).

Reparation

Reparation, or repair of the damage, attempts to provide resources to those who have lost them. Reparations allow a survivor to feel that the oppression is over and that they have an equal chance of living a reasonable life. It is different

for each person and for each family. Each must determine what form the reparation will take. Reparation may involve efforts to rehabilitate.

Implications

This three-tiered model attempts to assertively move victims of oppression and violence to a new role of being survivors. Herman (1992) described how it is the compensation fantasy, fueled by "the desire for victory over the perpetrator that erases the humiliation of the trauma. When the compensation fantasy is explored in detail, it usually includes psychological components that mean more to the patient than any material gain. The compensation may represent an acknowledgment of harm, an apology, or a public humiliation of the perpetrator" (p. 190).

Herman suggests that this fantasy paradoxically keeps the survivor's fate and recovery tied to the whims of the perpetrator. These aspects of the compensation fantasy may also operate at the public level. Forgiveness is a complicated and individual process that may be arrived at in due course. For example, Eckhart (1988) warned that forgiving too easily may perpetuate the evil.

For the individual, questions exist as to whether offering testimony will have positive effects. Giving testimony on a single occasion may open up the therapeutic process, but it may require additional support from the community and perhaps even ongoing interventions. Interventions should be culturally appropriate, but they may include mass ceremonies, emphasizing rituals of importance for the entire nation (Agger & Jensen, 1996). Bystanders, who form an integral part of the past, present, and future of the country, may need to be involved. Attitudinal changes necessary for true reconciliation must be predicated on acknowledgment of all past roles in the society broadly. Forgiveness of the perpetrators by the survivors should be an outcome that is hoped for, but not expected at such an early stage in the process of reconciliation.

Assessment of the Truth Commission Model

Although there are no systematic studies of the effects of acknowledgment, apology, and reparation on the psychological functioning of individual torture survivors, the literature on issues potentially relevant to this model is extensive. For example, the psychology literature touches on related issues, including the effects of aggression on individuals, of helplessness in the face of aggression, of a sense of injustice and vengeance, and of issues related to retribution or monetary or symbolic compensation.

Some outcome studies of U.S. reconciliation programs for victims of other traumatized populations have been completed. Umbreit (1994) found that victims participating in a victim–offender reconciliation program were very satisfied, with more than 90% stating they were fairly treated and that the mediator and the restitution agreement were fair. In a large-scale evaluation of four victim–offender mediation programs, 79% of the victims and 87% of the offenders were satisfied with the mediation. Fear of revictimization by the same offender lessened and

offenders were more likely to pay the restitution agreed on. Victim impact panels require convicted alcohol-impaired offenders to listen to a panel of bereaved or injured victims describe the effect on their lives. In a survey on the effect of participation (Mercer, Lorden, & Lord, 1994), 82% of the victims claimed that the process aided their healing; they also reported a better sense of well-being and purpose in their lives, less anxiety, and less anger at the perpetrators. In addition, victims used less anxiolytic medication.

This model uses psychoanalytic concepts (Herman, 1992) as well as cognitive–behavioral techniques (Janoff-Bulman, 1992) and extrapolates them to the society. It is possible that interventions on the individual level may improve symptoms of depression, anxiety, and posttraumatic stress even if problems on the larger sociopolitical level are not adequately addressed. For example, good treatment results have been demonstrated in settings in which perpetrators of torture have virtually complete immunity from legal prosecution for their crimes (Basoglu et al., 1994). However, for long-term gains at the societal level, an approach such as that taken by the Truth and Reconciliation Commission may well bolster the effectiveness of treatments aimed at the individual.

RESEARCH RECOMMENDATIONS

Based on the current state of the field, the needs for future research include the following areas.

- A prospectively designed study of the symptoms of torture patients with PTSD is needed. Such a study would include the persistence of PTSD symptoms, of concentration and learning problems, of ability to work, and of health problems. Many studies have shown survivors to have increased vulnerability to stress. This vulnerability needs to be documented further. If such vulnerability is confirmed, it would have implications on treatment philosophy and disability evaluations.
- The effects of pharmacotherapy need to be studied.
  - General issues: Research designs need to consider and include psychological and social variables. Chronic symptoms may be slow to change, although one might expect that subjective distress would be the first to change, then symptoms, then functioning. A great deal of evidence suggests that psychopharmacology helps certain symptoms, particularly intrusive symptoms of sleep disturbance in PTSD, and research is needed to see if this is universally true among refugees in various cultures. Studies, especially among groups with chronic PTSD, should be carried out over a longer time period. Currently, 6 to 12 weeks is a typical time frame, while 6 to 12 months may be more appropriate. The effects to measure include not only PTSD symptoms but also demoralization, distress, functioning (work, education, family life, participation in psychological treatment),

interactions with psychotherapy, ability to gain control over violent impulses, reduction of hyperarousal, and changes in drug or alcohol use (Blank, 1995).

— Specific pharmacologic agents: Further research on adrenergic alpha-2 agonists (such as clonidine and guanfacine), on SSRIs and other serotonergic agents, and on anticonvulsants with antikindling or sensitization properties is needed. Efforts to develop psychopharmacologic agents specifically for PTSD should be a high priority. From this perspective, promising future directions might be to test drugs that antagonize the actions of corticotropin releasing factor, the substance that appears to play such a central role in the stress response (Krystal, Bennett, Bremner, Southwick, & Charney, 1995). Another promising direction for future research might be to design drugs that can reverse the dissociative symptoms associated with PTSD (Krystal et al., 1995).

- Comorbidity needs to be studied. Much of the American experience with veterans has concentrated on substance abuse problems, but there is great variability in the abuse of substances across traumatized populations. Research is needed to document the extent to which substance abuse is a problem among PTSD patients from different cultures.
- The value of insight therapy for torture survivors needs to be carefully studied. Many groups have emphasized psychodynamic insight, understanding, and reintegration for people of various cultures, whereas others have found this approach to treatment to be uniquely western and therefore unacceptable. The differential effects of different types of psychotherapy should be studied with particular emphasis on long-term follow-up studies, the value of groups, and the advantages of indigenous treatments. Most of the latter have also never been subjected to any systematic evaluation.
- Treatment programs should be carefully evaluated. Many treatment programs espouse an avoidance of discussing the traumatic events associated with torture. They take a more palliative approach to treating survivors. Others advocate a more directive, trauma-focused approach. The relative effectiveness of each should be studied, and the benefits and problems for refugees and trauma survivors of various cultures examined.
- Combination studies that address the relative contributions of psychological and psychopharmacologic treatments would address the needs of many clinicians actively treating torture survivors with PTSD and related disorders such as depression. Combination studies would make a valuable contribution to the clinical literature.

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