IRAQ WAR CLINICIAN GUIDE

2nd EDITION

Written and Compiled by

National Center for Post-Traumatic Stress Disorder

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I. Executive Summary

The medical, surgical, and psychiatric casualties of Operation Iraqi Freedom will receive care from a broad group of clinicians working in diverse clinical settings. Although most service members will initially be treated in military treatment facilities, many may find themselves returning to the United States with conditions that are treated in military facilities, VA Hospitals, civilian treatment centers, or all of these as they move through their recovery. As a result, some clinicians involved in treating casualties returning from Iraq may not have an understanding of the experiences of the military patient, the military system in which he or she serves, the military medical services available, or the potential impact of medical decisions on the service member's future military career. It is essential that all health care professionals—civilian or military—who care for casualties from Operation Iraqi Freedom have at least rudimentary and relevant military knowledge.

A variety of factors including personal and cultural characteristics, orientation toward coping with stressors and painful emotions, pre-deployment training, military-related experiences, and post-deployment environment will shape responses to Operation Iraqi Freedom. Furthermore, psychological responses to deployment experiences can be expected to change over time. The absence of immediate symptoms following exposure to a traumatic event is not necessarily predictive of a long-term positive adjustment. Depending on a variety of factors, veterans may appear to be functioning at a reasonable level immediately upon their return home particularly given their relief at having survived the war-zone and returned to family and friends. However, as life circumstances change, symptoms of distress may increase to a level worthy of clinical intervention.

Even among those veterans who will need psychological services post-deployment, acute stress disorder and posttraumatic stress disorder (PTSD) represent only two of a myriad of psychological presentations that are likely. Veterans of Operation Iraqi Freedom are likely to have been exposed to a wide variety of war-zone related stressors that can impact psychological functioning in a number of ways. It is important for clinicians to recognize that the skills and experience that they have developed in working with veterans with chronic PTSD will serve them well with service members returning from Iraq. Clinicians' experience in talking about trauma, educating patients and families about traumatic stress reactions, teaching skills of anxiety and anger management, facilitating mutual support among groups of veterans, and working with trauma-related guilt, will all be useful and applicable.

Chapter II provides an overview of several military-specific topics. First, a brief history of the evolution and change in the size and components of the military force is discussed, highlighting the challenges of a highly deployed force that relies on National Guard and Reserve members. Next, the various types and stages of military conflict are described, with a focus on the specific stressors that each of these stages might engender. This is followed by an explanation of the military medical services delivery system, including the different echelons of care of the military evacuation system. The subsequent section provides a review of psychiatric disorders that often present during military conflicts. Available psychiatric services are outlined next. Finally, a section on military decision-making processes focuses on important administrative and medical procedures that are used to facilitate the evaluation, treatment and management of military patients with medical and psychiatric conditions.

Chapter III provides information that is useful for addressing the following questions:

What are the features of the Iraq War that may significantly impact the quality of life, well-being, and mental health of returning veterans?

What are important areas of functioning to evaluate in returning veterans?

What might be beneficial for veterans of the Iraq War who request clinical services?

Chapter IV provides information about treatment of veterans recently evacuated due to combat or war stress who are brought to the VA for mental health care, and Iraq War veterans seeking mental health care at VA medical centers and Vet Centers. This chapter complements discussion of special topics (e.g., treatment of medical casualties, identification and management of PTSD in the primary care setting, issues in caring for veterans who have been sexually assaulted, traumatic bereavement) that are addressed in other sections of this *Guide*. The authors highlight some challenges for clinicians, discuss ways in which care of these veterans may differ from our usual contexts of care, and direct attention to particular methods and materials that may be relevant to the care of the veteran recently traumatized in war.

Chapters V-VII address medical issues. In **Chapter V**, the authors outline some considerations related to the integration of mental health care with physical care of recently evacuated veterans of Operation Iraqi Freedom. This kind of activity represents a challenge for VA mental health professionals. Although VA PTSD, behavioral medicine, and other mental health practitioners are familiar with delivery of traumatic stress assessment and treatment to help-seeking veterans with chronic PTSD or general health problems, they are less likely to have delivered such services to individuals who have been injured during very recent exposure to traumas of war. **Chapter VI** focuses on the unique psychological needs of the amputee patient. The authors describe the amputee population treated at Walter Reed Army Medical Center Psychiatry Consultation Liaison Service and the therapeutic practices that have appeared to be most successfully implemented there. **Chapter VII** provides information about PTSD for primary care providers, who may see an increased number of veterans or active duty military personnel returning from the war. There also may be increased contact with family members of active duty personnel, including family members who have lost a loved one in the war or family members of individuals missing in action or taken prisoner of war. In addition, there may be increased distress in veterans of other wars, conflicts, and peacekeeping missions.

Chapter VIII discusses how clinicians treating trauma patients are at risk for emotional reactions that, if left unattended, can lead to psychological stress, burnout, and reduction in clinical efficiency and effectiveness. The authors recommend a combination of approaches that serve to develop and sustain liaison relationships with all members of the treatment team.

Military sexual trauma refers to both sexual harassment and sexual assault that occurs in military settings. Both men and women can experience military sexual trauma and the perpetrator can be of the same or of the opposite gender. **Chapter IX** provides an overview of definitional issues and epidemiology and discusses the types of psychological responses that are associated with military sexual trauma. The authors also discuss screening, assessment, and treatment issues regarding sexual assault and harassment.

Chapter X focuses on grief reactions. Although research into the prevalence and intensity of grief symptoms in war veterans is limited, clinicians recognize the importance for veterans of grieving

the loss of comrades. The existence of a distinct and intense set of grief symptoms indicates the need for clinical attention to grief in the treatment plan.

Chapter XI proposes a simple process to screen individuals for substance abuse. The authors suggest that care providers employ the screen in the three phases of pre-deployment, in the combat zone, and upon evacuation. The data gained at each juncture will help the clinician's decision-making process in clarifying the contribution of substance use to a muddled clinical picture, taking appropriate treatment steps, forestalling some unnecessary evacuations, and prompting the best match between the individual's needs and the military mission.

The frequency of deployment of military service members has increased in the past ten years. **Chapter XII** addresses issues involving the families of military personnel. Clinicians need to be aware of these issues when working with families of deployed soldiers in order to identify those families that may need additional services.

Appendices provide a range of reference materials, including case studies, VA/DoD Practice Guidelines for PTSD, published articles, and handouts for patients and their family members.

Although focused specifically on veterans of the war in Iraq, the material presented in this *Guide* also applies to veterans of the war in Afghanistan or other recent warzone deployments.

Dedicated to the men and women who have served in
Operation Iraqi Freedom and Operation Enduring Freedom

II. Topics Specific to the Psychiatric Treatment of Military Personnel

COL Stephen J. Cozza, MC, USA, LTC David M. Benedek, MC, USA, LTC John C. Bradley, MC, USA, CAPT Thomas A. Grieger, MC, USN, COL Theodore S. Nam, MC, USA, and COL Douglas A. Waldrep, MC, USA

The medical, surgical, and psychiatric casualties of Operation Iraqi Freedom will receive care from a broad group of clinicians working in diverse clinical settings. Although most service members will initially be treated in military treatment facilities (MTFs), many may find themselves returning to the Continental United States (CONUS) with conditions that are treated in MTFs, VA Hospitals, civilian treatment centers, or all of these as they move through their recovery. As a result, some clinicians involved in treating casualties returning from Iraq may not have an understanding of the experiences of the military patient, the military system in which he or she serves, the military medical services available, or the potential impact of medical decisions on the service member's future military career. It is essential that all health care professionals—civilian or military—who care for casualties from Operation Iraqi Freedom have at least rudimentary and relevant military knowledge.

In this chapter, we provide an overview of several military-specific topics. First, a brief history of the evolution and change in the size and components of the military force is discussed, highlighting the challenges of a highly deployed force that relies on National Guard and Reserve members. Next, the various types and stages of military conflict are described, with a focus on the specific stressors that each of these stages might engender. This is followed by an explanation of the military medical services delivery system, including the different echelons of care of the military evacuation system. The subsequent section provides a review of psychiatric disorders that often present during military conflicts. Available psychiatric services are outlined next. Finally, a section on military decision-making processes focuses on important administrative and medical procedures that are used to facilitate the evaluation, treatment and management of military patients with medical and psychiatric conditions.

A Brief Description of The History and Current Structure of US Military Forces

The size and configuration of the US military force have changed continuously throughout history, reflecting the defense needs of the country. Early in US history, the concept of a standing army was less popular due to concerns about incurred costs and the fears of the impact of military power on the political process. The Second Continental Congress created the first regular active US fighting force on June 14, 1775 and named it the Continental Army. Its purpose was to supplement local militia in fighting the British during the American Revolution. Upon the conclusion of that war the Continental Army was disbanded. Militia forces returned to their homes as well, available for call up only during times when national or state security required.

By early in the 19th century the need for a Regular Army was clear as militia forces could not be routinely relied upon for rapid and professional response to national crises. Since that time, the end strength of the Army has varied, typically rising during periods of war and decreasing during peacetime. The size of the combined US Armed Forces reached an all time high of 8.3 million during World War II. Through the Vietnam War, military members were conscripted in order to achieve necessary force strength. In 1973 at the end of the Vietnam War, the all male draft that was initiated as a Selective Service Act of 1948 was terminated. Since that time the military has been comprised of an all-volunteer force. During the period of Operation Desert Storm, the US

Army totaled approximately 750,000 service members. This number decreased to its current number of just fewer than 500,000 personnel by the mid 1990s, its smallest size since the beginning of World War II.

Today the military has become a more diverse and complex population than ever in its history. Ethnic minorities make up significant portions of the Armed Forces, ranging from 24% in the Air Force to 40% in the Army (Source: Defense Department's Defense Link). Since the American Revolution, about 2,000,000 women have served in the military. Today, about 16% of the active US Armed Forces are women. In addition, over 50% of service members are married and about 11% of the marriages are to other service members. Although educational levels vary somewhat between branches of service, over 95% of the military has either a high school diploma or has passed the General Educational Development high school equivalency test. All four military branches have active, as well as reserve components. Additionally, the Air Force and the Army also have National Guard components. These components are discussed below. As outlined in the Constitution, the US Congress sets the end-strength for all services. These current totals are provided in Tables 1 and 2.

Table 1. Armed Service Strength as of December 31, 2003

	Army	Navy	Marine Corps	Air Force	**Total**
Total Officer	79,954	55,044	18,714	73,157	**226,869**
Total Enlisted	406,074	320,457	158,316	299,224	**1,184,071**
Cadets-Midshipmen	4,146	4,241	0	4,021	**12,408**
Total	**490,174**	**379,742**	**177,030**	**376,402**	**1,423,348**

Source: www.defenselink.mil

Table 2. Armed Forces: Active and Reserve by Service

	Army	Navy	Marine Corps	Air Force	Coast Guard	**Total**
Active	499,000	371,000	377,000	177,000	37,000	**1,461,000**
Reserve	577,000	182,000	153,000	40,000	7,800	**959,800**
Total	**1,070,000**	**553,000**	**465,000**	**217,000**	**44,800**	**2,355,800**

Source: www.defenselink.mil

National Guard and Reserve Components. The National Guard was formed from the earlier state militias. Congress officially designated the National Guard in 1916, establishing procedures for training and equipping these units to active duty military standards. In so doing, the Congress made these state defense National Guard units available in times of national crisis or war. In times other than Congressional or Presidential call-up, the National Guard falls under the Governor of the State to which it is assigned with the Adjutant General acting as the Commander. Neither active nor reserve component service members may serve within the National Guard. National Guard duties are under the auspices of the USC Title 32, working in state level jobs.

The Army Reserve contains four elements – the Selected Reserve, the Individual Ready Reserve (IRR), the Standby Reserve, and the Retired Reserve (See Figure 1). The Selected Reserve and the

IRR are referred to as the Ready Reserve. In total, there are more than one million Army Reserve soldiers. Of these, 211,577 belong to the Selected Reserve, 120,721 to the IRR, 725 to the Standby Reserve and 727,239 to the Retired Reserve (See Figure 1).

Figure 1. Total Army Reserve Force

<table>
<tr><td colspan="5">Total US Army Reserve
1,060,262
Enlisted: 796,744
Officers: 263,518</td></tr>
<tr><td colspan="4">Ready Reserve
332,298
Enlisted: 271,633
Officers: 39,794</td><td rowspan="3">Standby Reserve
725

Enlisted: 261
Officers: 464

Individual Ready Reserve</td><td rowspan="3">Retired Reserve
727,239

Enlisted: 524,850
Officers: 202,389</td></tr>
<tr><td colspan="3">Selected Reserve
211,577
Enlisted: 171,783
Officers: 39,794</td><td rowspan="2">IRR
120,721

Enlisted: 99,850
Officers: 20,871

Individual Ready Reserve</td></tr>
<tr><td>TPU
192,355
Enlisted: 160,704
Officers: 31,651

Troop Program Unit</td><td>AGR
13,391
Enlisted: 10,058
Officers: 3,883

Active Guard Reserve</td><td>IMA
5,291
Enlisted: 1,021
Officers: 4,270

Individual Mobilization Augmentee</td></tr>
</table>

Source: 31 Jan 04 RCCPDS Strength Summary Report, www4.army.mil/USAR/organization/force.php

Within the Selected Reserve, Active Guard Reserve (AGR) soldiers serve full-time on active duty in units and organizations that are either within the Army Reserve or that directly support it. AGR duties are under the auspices of the USC Title 10, working in federal level jobs. Also within the Selected Reserve, the Individual Mobilization Augmentees (IMAs) are assigned to high-level headquarters where they would serve if mobilized. Most IMA positions generally require two weeks of annual training.

IRR soldiers are primarily prior-service members with two or more years of Active Duty who may be called upon to replace service members in Active and Reserve units. IRR are neither assigned to a unit nor part of the IMA. The Retired Reserves are former Army National Guard, Reserve, and Active soldiers who remain part of the Army Reserve, but in a retired status.

As of February 18, 2004, 184,132 National Guardsmen and Reservists on active duty support the Global War on Terror and other missions in 120 countries. The Army National Guard and Reserve activation total 155,838, Naval Reserve 2,238, Air National Guard and Air Force Reserve, 19,820, Marine Corps Reserve, 5,614 and the Coast Guard Reserve, 1,162. The Army inclusive of the active, Guard, and Reserve as of February 6, 2004 has 368,000 service members overseas with approximately 215,000 of these on unaccompanied (no spouse or family) tours.

Global War on Terrorism (GWOT) and Operation Iraqi Freedom

Military members are currently deployed to the following places: Iraq and Kuwait, 120,000; United States for Operations Noble Eagle/Enduring Freedom, 20,000; Afghanistan, Pakistan, and Uzbekistan, 11,000; Ft. Polk, LA in preparation for duty in Iraq, 4,200; Kosovo and Macedonia, 2,000; Horn of Africa, 1,800; Bosnia, Croatia and Hungary, 1,500; Fort Leonard Wood, MO, retraining for temporary MP duty.

Operation Iraqi Freedom has representation from all military components. One hundred seventy-five thousand (175,000) men and women from all five of the active US Armed Forces (as well as the Coast Guard) and the seven armed forces reserves (Army Reserve, Army National Guard, Navy Reserve, Air Force Reserve, Air National Guard, Marine Corps Reserve, and Coast Guard Reserve) initially crossed into Iraq. In November 2003, The Vice Chief of Staff of the Army, General John M. Keane, identified a total force of 192,800 involved in Operation Iraqi Freedom: 133,000 Army, 550 Air Force, 1,550 Navy, 8,600 Marine, 12,400 Coalition, 2,400 Army Special Operations, and 34,000 Army Forces in Kuwait. He described the Army's rotation plan for the Iraqi theater with a 2nd cycle of 12-month rotation for the Operation Iraqi Freedom-2. It is unclear, at this time, what level of military staffing will be required for the future mission in Iraq.

As of February 27, 2004, official US casualties in Operation Iraqi Freedom total 501 deaths, 378 hostile and 169 non-hostile deaths. In this same period 2709 service members have been wounded in action and 417 have received wounds from non-hostile causes (Source: www.defenselink.mil).

With the recent decreasing size of the US Armed Forces and increased numbers of assigned missions (both war and operations other than war), the tempo of operations (OPTEMPO) for active and reserve members has increased in frequency and intensity. It is expected that more military members will deploy to unaccompanied overseas assignments repeatedly during their careers. As such, many of those deployed to Iraq in the current conflict may have been previously deployed and will likely deploy again. For active duty members who deploy with the units with whom they train and who leave families behind within established military communities (bases and posts), the impact of deployment may be less than for Guard and Reserve members. For those service members in the latter groups, deployment may result in loss of civilian employment, financial penalty, or separation from family who may be left far from any military base or resources. These military members may also be assigned or inserted into units in which they know no personnel, leading to added stress and preoccupation.

Types of Conflict and Associated Stresses

During missions such as Operation Iraqi Freedom there are multiple stages and types of conflict. Throughout an operation, these stages can overlap depending on the location and mission of assigned forces. Each form of conflict may contribute to different forms or expressions of stress. It is therefore valuable to determine precisely the nature and duration of exposures for returning troops.

Pre-deployment phase. During pre-deployment phase military members face uncertainty and worry. Deployment orders change routinely, sometimes with multiple revisions of deadlines and locations. Service members worry about the safety of themselves as well as their family members. They struggle to ensure that finances, healthcare, childcare, and pets all will be managed in their

absence. In the current climate, deploying service members may have additional concerns about terrorist activities in the United States during the period of deployment. Pre-deployment can be extremely stressful on single parents, reserve forces, and military members who have not previously deployed. It is often difficult during this phase to determine the difference between reasonable anxiety and an excessive reaction or the development or recurrence of psychiatric illness.

Deployment phase. The deployment phase carries many additional pressures. The stress of traditional, high-intensity warfare leads to fear and uncertainty. Operational plans change constantly; knowledge of enemy capabilities is unclear; equipment breaks down; and logistical supply lines are uncertain. Combatants face the threat of their own death or injury and also witness the death, wounding, and disfigurement of their companions, enemy forces, and civilians. During this heightened physiologic state, the high level of emotion, and the intensity of sensory exposure may lead to heightened levels of arousal, attempts to avoid emotion, and intrusive recollections of events. The novelty of the situation may also contribute to symptoms of dissociation. The severity and duration of symptoms will vary among individuals. This phase of combat is highly conducive to acute stress disorder and posttraumatic stress disorder in military members.

Types of conflict. *Low intensity combat* is typical during peacemaking and peacekeeping missions. Fear of death or injury is less imminent, but chronically present. Some troops may intermittently encounter the exposures found in high intensity combat. The majority will experience chronic strain of deployment: family separation, heat, cold, harsh living conditions, extremely long duty hours with little respite, minimal communication with the outside world, and boredom. These strains can result in the development of adjustment disorders, mood disorders, anxiety disorders, and exacerbations of personality disorders. Some members with predisposing factors may develop psychotic disorders. Depending on the availability of substances of abuse, abuse or dependence disorders may develop, recur, or worsen (Jones, 1995a).

Terrorist activities and guerilla warfare tactics, such as car bombings, remotely detonated explosives, and mortar attacks lead to chronic strain and anxiety. Psychologically this can contribute to service members questioning their purpose, as well as negative attributions about the importance and need for the sacrifices encountered. Coupled with other exposures, exposure during this phase may exacerbate illness or delay recovery. Many of the veterans from prior wars have focused on their discontent associated with sacrifice and loss in a mission viewed as unpopular and unsuccessful.

In a highly armed nation such as Iraq, US troops cannot be certain whether an innocent appearing civilian may be carrying a firearm, an explosive, or a remote detonation device. Rules of engagement are altered regularly by command in response to political and tactical requirements. When an individual or a vehicle challenges a roadblock or security checkpoint, a delay in the use of force may result in friendly forces injuries. A premature response may result in the unnecessary death of civilians. Such conditions create chronic strain, particularly when split second decisions may undergo retrospective analyses to determine their appropriateness (Jones, 1995b).

Friendly fire events are among the most tragic. In the current military environment of high technology communication, command, and control, there is a much lower risk of such occurrences. When they take place it is usually when there are failures of communication between allied forces. To date, no major events have occurred during this campaign, but have occurred

during Operation Enduring Freedom, the war in Afghanistan. Similar to terrorist and guerilla acts, friendly fire incidents (either by those responsible for or those who experienced the act) also lead to negative attributions about purpose of mission and specifically about the failure of leadership in preventing such outcomes. Friendly fire incidents can be more difficult for service members to cognitively reconstruct, leading to less opportunity for integration and potential greater traumatic impact.

Clinical assessment must not assume that the experiences of all service members coming out of Iraq are identical. As illustrated above, exposure to military conflict can be of a variety of types and intensities. A careful assessment should ensure that there is a complete understanding of all pre-deployment and deployment happenings. As a military patient may be reluctant to share details of his or her experiences early on with an unfamiliar provider, a thoughtful and detailed accounting of experiences will likely require the time to develop a trusting therapeutic relationship. As is clear from the information presented above, a service member's emotional response to wartime exposures is determined by the specific experiences, but equally important is the context in which these experiences are encountered and the meanings they hold.

Military Medical Evacuation and Service Delivery

It is important to understand the echelons of medical care and evacuation when treating the combat veteran to understand the early interventions available and the limitations of far-forward treatments. Medical care is provided through the continuum of up to five echelons of care. Combat Stress Control doctrine promotes the "PIES" principle in the management of battle fatigue casualties: *Proximity* of treatment close to the front; *Immediacy* of treatment; *Expectancy* of Return to Duty (RTD); and *Simplicity* of intervention. Those who do not respond to early interventions are evacuated to the next echelon based on the capabilities and evacuation policy established by the Command Surgeon.

Echelons of care. *Echelon I* care is the treatment provided by the medical assets organic to the combat unit. Veterans who experience combat trauma will likely be attended by members of their own battalion. A veteran who has sustained a physical "Battle Injury" will receive first aid by his or her buddy and the unit medic. Initial care will focus on maintaining an airway, controlling bleeding, and preventing shock with intravenous fluids and field dressing. The veteran will be transported by air or ground ambulance to the Battalion Aid Station to be stabilized for further evacuation.

Echelon II care is provided at the brigade and division level. Emergency medical treatment, including resuscitation, is continued and the patient is stabilized for further transport. This level includes the farthest forward Combat Stress Control (CSC) elements available to address combat stress issues. Resources in the Division Support Area include the Division Mental Health Section (DMHS), consisting of a Psychiatrist, Psychologist, Social Worker and enlisted Behavioral Science Specialists; and a CSC Detachment with additional providers, nurses, and enlisted staff. The DMHS role is to provide command-consultation, preventive services, treatment and screening while the CSC augments treatment and screening and provides and holding capacity for respite and reconstitution. Brief supportive therapy and pharmacologic intervention are doctrinally available at this level. In practice, these treatments are variably present depending upon geographic, personnel, and logistical limitations.

Echelon III care is provided at the forward deployed Combat Support Hospitals (CSH) located in the Corps Support Area. These hospitals are staffed and equipped to provide resuscitation, initial wound surgery, and post-operative treatment. Inpatient and outpatient psychiatric care is available in the CSH, but the extent of available medical and psychiatric staffing may vary depending upon the organization of each CSH. As this is the first echelon of care where a fully staffed pharmacy exists, antipsychotic, anxiolytic and antidepressant medications are usually obtainable. Patients are treated at this level to the extent they can be managed within the guidelines of the theater aero medical evacuation policy. Recent policy in Iraq has been that patients who are not expected to respond to treatment and return to duty within seven days are to be evacuated out of theater. Psychiatrists at the CSHs in Iraq and Kuwait report that more than 90 percent of service members are treated and returned to duty.

Echelon IV consists of hospitals staffed and equipped for general and specialized medical and surgical care as well as reconditioning and rehabilitation for return to duty (RTD). These facilities are generally located outside the combat zone. Iraq veterans are evacuated to Landstuhl Regional Medical Center in Germany or US Naval Hospital, Rota Spain. Service members evacuated to this echelon are rarely returned to duty.

Echelon V is the definitive medical care provided in continental US Military and Veterans Affairs Medical Centers. Experience shows that the RTD rate for troops evacuated to the CONUS with disorders ranging from adjustment disorders, depression, anxiety, acute stress disorder (ASD) and posttraumatic stress disorder (PTSD) is extremely low. Aggressive treatment of symptoms seeks to induce remission with the goal of retaining the military member in the military through stabilization at the unit's rear detachment, a demobilization station, or the medical center. Military patients whose symptoms cannot be resolved must be considered for referral to a Medical Evaluation Board (discussed later in this chapter).

Medical evacuation. At each echelon, the veteran is evaluated for ability to RTD. The mobility of units on the modern battlefield and the need for service members to be able to sustain the extraordinary demands of high OPTEMPO diminish the likelihood of returning someone to his or her unit. Commanders require military members to perform at full capacity; as such they are frequently reticent to re-integrate a combat stress casualty to the unit. This preference often is balanced by a commander's need to maintain sufficient manpower for combat readiness. As insomnia is the most common initial complaint of a military member referred to mental health providers, commanders will often allow a time-limited medication trial to determine if the individual will rapidly respond and be available for missions. Contemporary battlefield realities, however, create an environment in which the validity and feasibility of the PIES concept must be seriously rethought.

Reports from psychiatrists deployed to Iraq suggest that when a psychiatrically distressed service member is able to stay with his or her unit and is afforded modified duty for a limited time PIES remains effective. With each level of evacuation, the military patient becomes more removed from the unit. Experience demonstrates that once evacuated from the CSH a soldier is unlikely to be returned to combat. Combat stress casualties often begin to experience relief of some acute symptoms when removed from the combat trauma. This relief is a potent re-enforcer, serving to make the soldier apprehensive about his or her ability to tolerate re-exposure. This confluence of factors creates powerful forces in the direction of evacuation and diminishes the likelihood of returning the military member to combat duty.

Military patients processed through the evacuation system will have various modalities of treatment, ranging from supportive measures to fairly intensive treatment. It will vary in accordance with the patient, the diagnosis, disposition, and the availability of treatment at the various locations. By the time the patient has arrived in CONUS he or she will have had several screens and some level of specialized care throughout the evacuation and disposition process.

Psychiatric Disorders Seen during Wartime

The destructive force of war creates an atmosphere of chaos and compels service members to face the terror of unexpected injury, loss, and death. The combat environment (austere living conditions, heavy physical demands, sleep deprivation, periods of intense violence followed by unpredictable periods of relative inactivity, separation from loved ones, etc.) is itself a psychological stressor that may precipitate a wide range of emotional distress and/or psychiatric disorders. Psychological injury may occur as a consequence of physical injury, disruption of the environment, fear, rage, or helplessness produced by combat, or a combination of these factors.

The psychiatric differential diagnosis for military patients at war is quite broad. The clinical picture will vary over the course of a war depending on individual characteristics (e.g., personality traits, coping skills, prior illness) available social supports, and the amount of time that has passed between clinical presentation and the precipitating event(s). Thus, it is useful to consider the range of emotional responses in the context of the multi-phasic traumatic stress response (Table 3):

- an *immediate phase* characterized by strong emotions, disbelief, numbness, fear, and confusion accompanied symptoms of autonomic arousal and anxiety;
- a *delayed phase* characterized by persistence of autonomic arousal, intrusive recollections, somatic symptoms, and combinations of anger, mourning, apathy, and social withdrawal, then finally;
- a *chronic phase* including continued intrusive symptoms and arousal for some, disappointment or resentment or sadness for others, and for the majority a re-focus on new challenges and the rebuilding of lives (Benedek et al., 2001; Ursano et al., 1994).

Within this three-phase framework of traumatic response, symptoms noted in the *immediate phase* of combat generally reflect either predictable "normal" individual response to extreme stressors (e.g., psychic distress *not* meeting threshold criteria for DSM-IV-TR psychiatric disorders; "battle fatigue" or "combat stress" in military parlance), exacerbations of pre-existing conditions, or the neuropsychiatric effects insults. These insults might include exposure to trauma, the central nervous system (CNS) effects (e.g., delirium) of chemical, biological (Franz et al., 1997; DiGiovanni, 1999), or other naturally occurring infectious agents, head or internal injury from missiles, blast effects, or other projectiles. ASD or adjustment disorders may manifest themselves in the immediacy of combat and, as with other forms of trauma or disaster, exacerbations of substance abuse, depression, or pre-existing PTSD (Schlenger et al., 2002; Shuster et al., 2001; Vlahov et al., 2002) may also occur. As personality disorders are, by definition, pervasive patterns of maladaptive response to stress, the stress of war can certainly precipitate exacerbations of previously sub-clinical personality disorders or maladaptive traits.

In the *delayed phase* following intense operational stressors, PTSD, Substance Abuse, and Somatization Disorder (or Multiple Unexplained Physical Symptoms) may be observed, and persistent anger, irritability or sadness may signal Major Depressive Disorder or other mood

disorders. Symptoms of bereavement or traumatic grief may also occur as service members reflect on the loss of brothers-in-arms. Troops provide significant support to one another during war, so such losses may have as much emotional impact as the loss of a close relative and may be accompanied by feelings of guilt—particularly if the lost service member was a "battle buddy." While a "fight or flight" instinct may pre-empt self-injurious behavior during the height of battle, anxiety symptoms, social withdrawal, and depressed mood may occur during the *delayed phase* and increase the risk for self-injury or suicide during this phase. To the extent that the military member received psychological support from comrades before and during battle, medical evacuation (due to physical injury or neuropsychiatric symptoms) may disrupt the support of the service member compounding the risk of self-injury.

During the *chronic phase* some service members will experience persistent PTSD symptoms or the more subtle secondary effect of exposure to chemical or biological agents (or their antidotes). These secondary effects include depression, personality changes, or cognitive dysfunction (DiGiovanni, 1999). Dysthymic disorder, mixed sub-syndromal depression/anxiety or sub-clinical PTSD may evolve and substance use disorders may become more firmly entrenched. For some military patients with PTSD, the pervasive distrust, the irritability, and the sense of foreshortened future may have more debilitating effects on social and occupational function than intrusive symptoms. Indeed the avoidance of reminders of the trauma (a symptom of PTSD) may result in affected individuals declining exposure-based therapy, or any treatment whatsoever, thus compounding not only the impact of war-related pathology but any pre-existent illness as well.

Table 3. Psychiatric Disorders and War over the course of the Multi-Phasic Traumatic Stress Response

Phase	Description	Diagnostic Considerations
Immediate	During or immediately after traumatic event(s): Strong emotions, disbelief, numbness, fear, confusion, anxiety, autonomic arousal	Battle Fatigue, Delirium (from toxic exposures, head injury), Acute Stress Disorder, Adjustment Disorders, Brief Psychotic Disorder, exacerbation of Substance Abuse, Personality disorders or traits, or premorbid mood, anxiety, or thought disorders
Delayed	Approximately one week after trauma or in the aftermath of combat: Intrusive thoughts, autonomic arousal (startle, insomnia, nightmares, irritability), somatic symptoms, grief/mourning, apathy, social withdrawal	PTSD, Substance Abuse, Somatoform disorders, Depression, other mood and anxiety disorder, Bereavement
Chronic	Months to years after: Disappointment or resentment, sadness, persistent intrusive symptoms, re-focus on new life events	PTSD, Chronic effects of toxic exposure, Dysthymic Disorder, other mood disorders, Substance Abuse Disorders, Emotional Recovery – perspective

In summary, no single psychiatric diagnosis characterizes the service member's response to war. For many, the training, comradery, unity of purpose, individual coping skills, and mutual support provided by comrades may protect against the development of severe psychiatric disorders as a consequence of war. However, even individuals that do not develop symptoms meeting criteria for *DSM-IV* disorders may react with transient changes in mood, affect, cognition, or combinations of these and somatic symptoms typically termed "battle fatigue." They may require psychological support at one point or intermittently during a campaign as result of their individual response to

particular events or their operational environment. For others, ASD or the neuropsychiatric sequelae of head trauma or exposure to toxic agents may occur. Major depressive disorder and other affective disorders, bereavement, substance abuse disorders, and somatoform disorders may also occur over time (see Table 3). Although PTSD may not be the most common emotional response to war, symptoms such as dissociation and avoidance of reminders of trauma (which may be adaptive; or may occur as associated features of other war-related illnesses) may impede treatment efforts of PTSD or other syndromes. Given the wide range of potential disorders or symptoms of distress that may evolve over time, the difficulty in distinguishing acute adaptive responses from psychopathology, and our inability to predict who may be most severely affected over time initial interventions should be aimed at insuring safety to self and others and developing mechanisms to monitor symptoms over time and encourage access to care.

Psychiatric Care in the Military Treatment System

After first being air evacuated (AE) from the theater of war to Landstuhl Regional Medical Center in Germany, Operation Iraqi Freedom patients may be sent to one of four stateside medical center regions. These include Walter Reed Army Medical Center (WRAMC), Washington DC, Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA, Madigan Army Medical Center Fort Lewis, WA, and Brooke Army Medical Center, Fort Sam Houston Texas. With some exceptions, this process is the same for Army, Navy, and Air Force personnel being air-evacuated from the war zone.

Patients who are AE but only require routine outpatient care are sent to the medical center closest to the site from which they were initially mobilized. On arrival at the medical center, patients are triaged to ensure that outpatient care is, in fact, appropriate. They are then processed through the region's Deployment Health Clinical Center (DHCC) for further medical screening, and referred for treatment near their mobilization sites. While at the demobilization site, they continue to receive treatment and are evaluated for appropriate disposition. Veterans who require more intensive services are assigned to the medical center's Medical Holding Company and treated there. Veterans that do not meet medical fitness standards are referred to a Medical Evaluation Board (MEB). Those that are determined unsuitable either because of pre-existing condition or personality disorder are administratively separated. Those that are fit for duty with minor limitations are retained at the demobilization site for the remainder of their current term of service (reserve component) or released to their home duty station (active component). A veteran requiring routine outpatient care usually remains at each echelon level hospital for 7-10 days until reaching his or her final destination. Due to time constraints, treatment is generally focused on acute symptom relief and supportive therapy. Case management serves to identify appropriate resources to provide definitive treatments, when required.

Treatment availability varies from one site to the next. If a treatment modality is required and it is not offered at the final destination consideration is given to the potential benefit of keeping a patient at the medical center for a longer period. More often than not, the military patient wishes to return home and does not want to delay the process any more than is necessary. In these cases, psychoeducation focuses on the early identification of symptoms and the importance of self-referral for rapid mental health intervention. (Typical service member and family responses are discussed in *Chapter 12*.)

Any military patients requiring a MEB or who may require intensive outpatient care or inpatient care are air-evacuated to a medical center. While programs vary with respect to available services, the process at WRAMC serves as an example of treatment practices at the medical center level. WRAMC offers several levels of mental health treatment. Upon arrival the on-call psychiatrist screens all air-evacuated patients for acute symptoms that might necessitate hospitalization. Any patient air-evacuated as an inpatient is admitted to the hospital and is continued in inpatient care until clinical safety is determined. During the course of the inpatient admission a comprehensive assessment is performed and treatment initiated.

Army personnel requiring a medical evaluation board remain at Walter Reed and are assigned to the Medical Holding Company. Air Force and Navy personnel undergoing a MEB may be followed in the WRAMC Continuity Service within the partial hospitalization program until stabilized and ready for further disposition. Navy personnel undergoing a MEB are usually assigned to a medical holding unit near their home of record. Air Force personnel undergoing a medical evaluation board typically are returned to their unit. Inpatients with more severe illnesses and who are refractory to treatment may be discharged directly from the service to a VA inpatient ward near their home.

Outpatient follow-up is variable at all locations. Most if not all locations will have some form of treatment available. The WRAMC mental health services are presented as a model of the process most mental health patients may experience in one form or another.

The WRAMC Continuity Service offers several levels of care to include intensive outpatient services (defined as patients who require more than once weekly therapy) and partial hospitalization (defined as daily treatment of at least 3 hours each day). Partial hospitalization serves as a step-down unit for inpatients transitioning to outpatient care or a step-up unit for outpatients who need more care than can be given in a routine outpatient setting. Treatment modalities include group, individual, medication management, family and couples therapies as well as command consultations. Services are geared towards the needs of the patient. Daily war zone stress related groups and individual therapies are available. Continuity Service also provides ongoing mental health treatment and case management for patients assigned to the Medical Holding Company to ensure effective psychiatric monitoring through the MEB process.

All Army mental health outpatients, whether they arrive as outpatients or are subsequently discharged from the inpatient service, are case managed by the Continuity Service until they leave WRAMC. This ensures continuity of care and provides a resource that the patient can use during the time spent at WRAMC. Those identified as primary mental health patients are monitored by the Continuity Service even if they are getting treatment on a different clinical service at WRAMC.

The Behavioral Health Service is an outpatient treatment resource for “routine” ambulatory care, acute assessments, and liaison with military patients’ units in the region. Treatments offered include individual and group therapies and medication management. Patient referrals come from the air-evacuation system, local units, and other medical specialties. The patient completes a comprehensive work-up and an appropriate treatment plan is generated. Like the Inpatient and Continuity Service this can include return to duty, administrative separations or referral to a MEB.

Psychiatry Consultation and Liaison Service (PCLS) screens all hospitalized Wounded In Action (WIA) service members and most Non-Battle Injury (NBI). Disease Non-Battle Injury (DNBI) patients are also regularly evaluated by PCLS when requested through routine consultation. A

mental health screening is performed on every patient admitted from the war zone and consists of a diagnostic interview, and psycho-education about Combat Stress, ASD and PTSD. Service members needing further psychiatric care are referred for treatment with PCLS, Continuity Services, or Behavioral Health as needed.

Patients requiring administrative separation or a medical evaluation board may be delayed in separation from the service for several months. The types of treatments available throughout the DoD vary depending upon location and available resources. The patients may receive therapy from any of the modalities discussed above and may be involved in various treatment modalities while awaiting their final separation.

Military Medical and Administrative Decision Making

Military Mental Health Officers are charged with the responsibility to evaluate service members at several points in the deployment process to ensure that these service members are psychiatrically fit to fulfill mission requirements. As the Medical Corps mission is to "Conserve the Fighting Strength" of the deploying forces, clinicians must carefully weigh medical decisions that keep service members from deploying. The impact of deploying military members with psychiatric conditions to combat also needs to be weighed. Psychiatrically vulnerable individuals who are deployed to a theater of operations create serious distractions for their commanders and their units. An individual who becomes unfit during a deployment will require special attention and resources. If evacuation is required, a replacement will not be forthcoming. Therefore, one must use common sense to screen out individuals who are ill or are likely become ill. As anxiety is a normal response prior to deployment, normal fear and apprehension should not be pathologized. Clinicians must always maintain a keen eye for potential malingerers, as well.

Soldier Readiness Processing (SRP) & pre-deployment screening. The DoD has developed extensive screening as part of the Pre-Deployment Health Assessment performed for all service members regardless of service or active/reserve status. All soldiers should receive SRP screening annually by their command to identify the presence of conditions that may make them unfit for deployment. This screening typically includes review of any medical "profiles" or limitations to duty determined by physicians, or due to dental status, HIV status, or other administrative reasons. Unfortunately, this screening is often not completed appropriately for National Guard and Reserve soldiers. Without routine SRP screening, soldiers with unfitting conditions are not recognized until they are called to Active Duty for deployment, creating serious concerns for unit readiness.

All soldiers, whether active, guard, or reserve, when notified for deployment, are processed through one of several mobilization (MOB) sites. An SRP screening is performed with the addition of a DOD-mandated Pre-Deployment Health Assessment (DD Form 2795) to gather baseline health information and screen for potentially unfitting conditions. This assessment screens for general medical and psychiatric conditions and is a source for comparison if the soldier develops any health concerns related to the deployment. With this in mind, soldiers may have a tendency to under-report any symptomatology or evidence of pre-existing conditions for various reasons to include a desire to deploy without limitations, fear of being charged with fraudulent enlistment for concealing a prior psychiatric treatment, concern about future disability claims, or other fears about the stigma associated with psychiatric conditions. When under-reporting exists, vulnerable soldiers are deployed with an increased risk of developing combat stress-related symptoms to include ASD and PTSD. Additionally, even when the soldier discloses a psychiatric history during

pre-deployment screening, commanders may determine that the soldier will deploy because of unit readiness requirements, despite the recommendations of the medical staff.

All screening forms are reviewed and soldiers are referred for more specific examinations when indicated. Soldiers with preexisting psychiatric conditions (e.g., psychotic, mood, or anxiety disorders), current symptoms of illness, substance use disorders, or personality disorders are evaluated to determine if these problems are unfitting or may predispose to combat stress-related illness. If an unfitting condition exists, the soldier is immediately demobilized and a recommendation is made for administrative separation for the condition that existed prior to service.

Pre-deployment screening for psychopathology has certain drawbacks. There are no accepted screening standards to inform how to exclude vulnerable individuals. Additionally, the risk factors for combat stress reactions, apart from a history of prior trauma, are unclear. When the threshold is set to eliminate vulnerable soldiers, one might ask who will pass muster to deploy. If screening is too permissive, high rates of combat stress symptoms can be expected. Pre-deployment level of social and occupational functioning, regardless of diagnosis, is an important indicator of functional capacity on the battlefield. Nevertheless, the function of the pre-deployment screening serves to identify most soldiers who are evidencing present or past psychopathology that could likely interfere with their functioning. Anecdotally, military psychiatrists serving in Iraq note that a soldier's level of pre-deployment social and occupational functioning often is the best predictor of outcome, regardless of diagnosis.

Mental health support during deployment – self- vs. command-referral. Once deployed, soldiers may access mental health services to continue previous treatment or to initiate treatment for new symptoms. Service members may self-refer at any time. They may present directly to Division Mental Health, or Psychiatric Services at the supporting Combat Stress Control Detachment or Combat Support Hospital. Military members often struggle with ambivalence about accessing mental health services. Additionally, in a war zone where Commanders must have constant updated accountability for their troops, and where travel is often limited to military convoys, it is difficult for military patients to access mental health services unnoticed. Despite frequent command-level briefings about combat stress and suicide prevention, the stigma of mental illness prevails. Service members also are concerned about the perceived limitations to their career if they access mental health. Frequently, they fear loss of opportunity for promotion, loss of security clearance, or elimination from the service. This ambivalence can lead to unnecessary suffering.

Equally problematic are service members who actively seek mental health care as a means of avoiding duty. Suspicions require close consultation with commanders to ensure proper diagnosis and disposition. Although successful return to duty may be the most adaptive disposition for such individuals, it must also be recognized that many are at increased risk of harm to self or others if acting out behaviors escalate. If the tactical environment does not allow the commander to commit the necessary resources to ensure short-term safety, evacuation from the combat zone with a recommendation for administrative discharge may be necessary.

When military commanders identify a military member who is at-risk or symptomatic, they may "Command-Direct" the individual for a mental health evaluation in accordance with DOD Directive 6490.1. These evaluations lack confidentiality as the results are uniformly released to the commander. As with self-referrals, the mental health officer may recommend treatment of the condition with retention in the military, limitations to duty, or evacuation from the combat zone.

The service member may also receive a recommendation for an administrative discharge, or referral to a Medical Evaluation Board. The disposition is determined by the nature and severity of symptoms, as well as the treatment resources available in theater. Combat psychiatrists work with commanders to encourage return to duty and provide treatment while remaining at duty. Currently deployed psychiatrists report good success in treating ASD, PTSD, and depressive disorders with SSRIs and short-term benzodiazepines. Only those military patients with psychotic symptoms, bipolar disorders and suicide risk are evacuated to a higher echelon of care.

Demobilization—post-deployment screening. When service members return from deployment, regardless of whether due to normal troop rotation, medical evacuation, or for administrative reasons, they receive a comprehensive screening evaluation for presence of medical and psychiatric illness. This DOD-mandated Post-Deployment Health Assessment (DD Form 2796) is performed either at the demobilization (DEMOB) site, or if a patient has been medically evacuated, at the Military Medical Center. This screening includes questions about depression, PTSD, and substance abuse. Individuals who screen positive are referred within 72 hours for a definitive mental health evaluation.

Service members with identified disorders are offered treatment and are evaluated for appropriate disposition. In the absence of non-psychiatric conditions, aggressive treatment continues with the goal of retaining the individual and returning him or her to full duty. Service members are given an adequate trial of treatment before a decision is made to refer to the disability system through a MEB unless other conditions mandate referral to MEB.

Medical Evaluation Board. If a service member requires evacuation from the combat zone for combat stress symptoms, the psychiatrist must decide whether the symptoms are due to a psychiatric condition, situational problem, or personality disorder. The psychiatrist must also determine the prognosis and likelihood of response to treatment. Generally, in the absence of a personality disorder or other confounding variables, aggressive treatment of combat stress reactions is indicated. If the symptoms cannot be stabilized within a reasonable amount of time, then referral to a MEB is indicated for disability retirement.

In deciding whether and when to initiate a MEB, the treating psychiatrist must consider the military patient's length of service, previous history, current symptoms, prognosis, as well as the time remaining on active duty for activated reservists. Junior ranking military members in their first enlistment with no prior deployment experience are likely to be referred to MEB. More seasoned military members are more likely to be monitored for up to one year with some duty limitations in an effort to retain them. Reservists who are nearing the end of their term of activation are likely to be allowed to be released from active duty (REFRAD) and referred for continued care and monitoring.

A service member may require referral to a MEB by virtue of his or her other medical conditions. When this is the case, a psychiatric addendum is performed to establish a service-connected condition, and to identify if the condition meets or does not meet medical retention standards.

One has to remain cognizant of the individual who may be attempting to manipulate the disability system in his or her favor by exaggerating symptoms, or seeking disability for conditions that are not medically unfitting. The psychiatrist must be mindful of all motivating factors and the potential for the influence of a disability seeking culture.

Administrative discharges. When the emotional condition is obscured or confounded by the presence of a personality disorder, primary substance abuse problem, or other situational issues, an administrative separation is indicated instead of a referral to MEB. Conditions such as unstable family situations, chronic suicide threats, substance abuse disorders, acting-out behaviors and malingering are best managed with an expeditious administrative discharge to minimize the negative effects these behaviors may have on the unit or rear-detachment. The Commander may punish service members who malinger with Uniformed Code of Military Justice (UCMJ) actions prior to discharge.

While the service member is pending separation from the service, treatment and monitoring by mental health is often beneficial.

Limits of medical authority. It is important to be aware of the limitations physicians have when treating the military patient. The military physician's role is to treat the patient, determine if the patient is medically fit to fight, and make recommendations to the patient's commander about appropriate disposition. The only area where the physician has full authority is when a condition is life threatening, requires hospitalization, or does not meet retention standards and referral to MEB is indicated. In all other situations, the physician is a consultant to the system and can make recommendations only. Recommendations may include: Return to Duty (RTD) without any limitations, RTD with some limitations or changes in environment, or administrative recommendations about rehabilitative or compassionate transfers, or discharge from the service.

Commanders have ultimate authority and bear ultimate responsibility for acting on recommendations. They may decide to attempt to rehabilitate a service member in his or her command despite recommendations for administrative discharge. A commander who chooses to ignore medical recommendations must review this decision with his or her higher commander. If the restrictions placed on a military member cannot be accommodated either by the nature of the mission or the individual's military occupational specialty (MOS), the commander may request a "Fitness for Duty Board" from the supporting hospital. If the service member is found fit with some limitations that constrain his or her duty performance, the commander may request evaluation by a MOS Medical Retention Board (MMRB). The MMRB can return the soldier to duty, change the soldier's MOS, or refer the soldier to the disability system.

Ethics of military psychiatry. Military mental health officers must struggle with the ethical issues and duties to the individual and the military. They should always be the "honest broker" in caring for military patients and making tough decisions about treatment, referral to the disability system, administrative discharges, and limitations to duty. They must balance the mission requirements with the best interest of the patient and attempt to make the recommendation that will afford the service member the best outcome and opportunity for retention. Additionally, military mental health providers have got to recognize when the demands of service cannot afford the luxury of a prolonged rehabilitative period. They are also obligated to serve the interests of the service by remaining alert to secondary gain and malingering.

Military clinicians must understand that combat is one of life's most significant traumatic events. They have to allow some vulnerable individuals to deploy and must recognize that some will become symptomatic. Ultimately, military mental health providers are required to remain empathic to the military patient as well as the needs of the service by providing compassionate treatment for combat veterans and referring service members who cannot be rehabilitated quickly to the disability system.

Conclusions

Clinicians involved in the treatment of casualties returning from Operation Iraqi Freedom require an understanding of the military system in which these service members work and receive their medical care. Unlike prior conflicts, casualties from this war will likely receive treatment services in a variety of settings by providers from non-military professional backgrounds.

Diversity within the military populations suggests that evacuated military patients are likely to come from different areas of the country and vary in terms of ethnic and cultural heritage. There is an increasing number of women as well. Patients' military experience may vary considerably depending upon the military component (e.g. active, reserve or National Guard) to which these service members are assigned. They may have been exposed to a variety of different combat stressors, depending upon their site of duty, the nature of conflict to which they have been exposed, and the roles in which they have served. The literature is clear that certain psychiatric conditions, including acute stress disorders and PTSD, are not uncommon responses to individuals exposed to combat. Clinicians must be aware of other psychiatric and organic disorders that might also contribute to their presentation, however.

The military system is designed to minimize psychiatric disorders on the battlefield through predeployment screening and by providing mental health services in the combat setting. When evacuation is required, service members may be treated within several echelons of care that are established. Additionally, military regulation guides the appropriate evaluation of psychiatrically ill military patients. Service members with behavioral or emotional disorders may require discharge from service through the Medical Evaluation Board (MEB) process or through command determined administrative separation.

All of these factors can contribute to the clinical condition of an evacuated soldier, airman, or sailor. An appreciation of these complex issues will serve the clinician well in evaluating and treating service members psychiatrically evacuated from theater.

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III. The Returning Veteran of the Iraq War: Background Issues and Assessment Guidelines

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It is safe to assume that all soldiers are impacted by their experiences in war. For many, surviving the challenges of war can be rewarding, maturing, and growth-promoting (e.g., greater self-efficacy, enhanced identity and sense of purposefulness, pride, camaraderie, etc.). The demands, stressors, and conflicts of participation in war can also be traumatizing, spiritually and morally devastating, and transformative in potentially damaging ways, the impact of which can be manifest across the lifespan.

This section of the *Iraq War Clinician Guide* provides information that is useful for addressing the following questions:

What are the features of the Iraq War that may significantly impact the quality of life, well-being, and mental health of returning veterans?

What are important areas of functioning to evaluate in returning veterans?

What might be beneficial for veterans of the Iraq War who request clinical services?

The material below provides an initial schematic so that clinicians in the Department of Veterans Affairs (VA) can begin to appreciate the experience of soldiers returning from the Iraq War. It is offered as a starting place rather than a definitive roadmap. Needless to say, each veteran will have a highly individualized and personal account of what happened, to them and what he or she experienced or witnessed, in Operation Iraqi Freedom. Each veteran will also reveal a unique set of social, psychological, and psychiatric issues and problems. At the end of the day, the most important initial needs of returning veterans are to be heard, understood, validated, and comforted in a way that matches their personal style. Every war is unique in ways that cannot be anticipated. There is much to be learned by listening carefully and intently.

The Form and Course of Adaptation to War-Zone Stressors

The psychological, social, and psychiatric toll of war can be immediate, acute, and chronic. These time intervals reflect periods of adaptation to severe war-zone stressors that are framed by different individual, contextual, and cultural features (and unique additional demands), which are important to appreciate whenever a veteran of war presents clinically.

The immediate interval refers to psychological reactions and functional impairment that occur in the war-zone during battle or while exposed to other severe stressors during the war. The immediate response to severe stressors in the war-zone has had many different labels over many centuries (e.g., combat fatigue); the label *combat stress reaction* is used most often currently. However, this is somewhat a misnomer. As we discuss below, direct combat exposure is not the only source of severe stress in a war-zone such as Iraq. The term *war-zone stress reaction* carries more meaning and is less stigmatizing to soldiers who have difficulties as a result of experiences

other than direct life-threat from combat. Generally, we also want to underscore to clinicians that being fired upon is only one of the many different severe stressors of the war-zone.

In the war-zone, soldiers are taxed physically and emotionally in ways that are unprecedented for them. Although soldiers are trained and prepared through physical conditioning, practice, and various methods of building crucial unit cohesion and buddy-based support, inevitably, war-zone experiences create demands and tax soldiers and unit morale in shocking ways. In addition, the pure physical demands of war-zone activities should not be underestimated, especially the behavioral and emotional effects of circulating norepinephrine, epinephrine and cortisol (stress hormones), which sustain the body's alarm reaction (jitteriness, hypervigilance, sleep disruption, appetite suppression, etc.). In battle, soldiers are taxed purposely so that they can retain their fighting edge. In addition, alertness, hypervigilance, narrowed attention span, and so forth, are features that have obvious survival value. Enlisted soldiers, non-commissioned officers, and officers are trained to identify the signs of normal "battle fatigue" as well as the signs of severe war-zone stress reactions that may incapacitate military personnel. However, the boundary line between "normal" and "pathological" response to the extreme demands of battle is fuzzy at best.

Officers routinely use post-battle "debriefing" to allow soldiers to vent and share their emotional reactions. The theory is that this will enhance morale and cohesion and reduce "battle fatigue." Even if soldiers manifest clear and unequivocal signs of severe war-zone stress reactions that affect their capacity to carry out their responsibilities, attempts are made to restore the soldier to duty as quickly as possible by providing rest, nourishment, and opportunities to share their experiences, as close to their units as possible. The guiding principal is known as Proximity - Immediacy - Expectancy - Simplicity ("PIES"). Early intervention is provided close to a soldier's unit, as soon as possible. Soldiers are told that their experience is normal and they can expect to return to their unit shortly. They are also provided simple interventions to counteract "fatigue" (e.g., "three hots and a cot"). The point here is that soldiers who experience severe war-zone stress reactions likely will have received some sort of special care. On the other hand, it is without question stigmatizing for soldiers to share fear and doubt and to reveal signs of reduced capacity. This is especially true in the modern, all volunteer, military with many soldiers looking to advance their careers. Thus, it is entirely possible that some veterans who present at VA Medical Centers will have suffered silently and may still feel a great need not to not show vulnerability because of shame.

It should be noted that a very small percentage of soldiers actually become what are known as *combat fatigue casualties*. Research on Israeli soldiers has revealed that severe war-zone stress reactions are characterized by variability between soldiers and lability of presentation within soldiers. The formal features of severe incapacitating war-zone stress reactions are restlessness, psychomotor deficiencies, withdrawal, increased sympathetic nervous system activity, stuttering, confusion, nausea, vomiting, and severe suspiciousness and distrust. However, because soldiers will vary considerably in the form and course of their decompensation as a result of exposure to extreme stress, military personnel are prone to use a functional definition of combat fatigue casualty. For commanders, the defining feature is that the soldier ceases to function militarily as a combatant, and acts in a manner that endangers himself or herself and his or her fellow soldiers. If this kind of severe response occurs, soldiers may be evacuated from the battle area. Finally, clinicians should keep in mind that most combatants are young and that it is during the late teens and early twenties is a time when vulnerable individuals with family histories of psychopathology (or other diatheses) are at greatest risk for psychological decompensation prompted caused by the

stress of war. As a result, a very small number of veterans of the Iraq War may present with stress-induced severe mental illness.

For soldiers who may be in a war-zone for protracted periods of time, with ongoing risks and hazards, the acute adaptation interval spans the period from the point at which the soldier is objectively safe and free from exposure to severe stressors to approximately one month after return to the US, which corresponds to the one-month interval during which Acute Stress Disorder (ASD) may be diagnosed according to *DSM-IV*. This distinction is made so that a period of adaptation can be identified that allows clinicians to discern how a soldier is doing psychologically when they he or she gets a chance to recover naturally and receive rest and respite from severe stressors. Otherwise, diagnostic labels used to identify transient distress or impairment may be unnecessarily pathologizing and stigmatizing and inappropriate because they are confounded by ongoing exposure to war-zone demands and ongoing *immediate* stress reactions. Typically, in the acute phase, soldiers are in their garrison (in the US or overseas) or serving a security or infrastructure-building role after hostilities have ceased.

The symptoms of ASD include three dissociative symptoms (Cluster B), one reexperiencing symptom (Cluster C), marked avoidance (Cluster D), marked anxiety or increased arousal (Cluster E), and evidence of significant distress or impairment (Cluster F). The diagnosis of ASD requires that the individual has experienced at least three of the following: (a) a subjective sense of numbing or detachment, (b) reduced awareness of one's surroundings, (c) derealization, (d) depersonalization, or (e) dissociative amnesia. The disturbance must last for a minimum of two days and a maximum of four weeks (Cluster G), after which time a diagnosis of posttraumatic stress disorder (PTSD) should be considered (see below).

Research has shown that that there is little empirical justification for the requirement of three dissociation symptoms. Accordingly, experts in the field advocate for consistency between the diagnostic criteria for ASD and PTSD because many individuals fail to meet diagnostic criteria for ASD but ultimately meet criteria for PTSD despite the fact that their symptoms remain unchanged.

Unfortunately, there have been insufficient longitudinal studies of adaptation to severe war-zone stressors. On the other hand, there is a wealth of research on the temporal course of post-traumatic reactions in a variety of other traumatic contexts (e.g., sexual assault, motor vehicle accidents). These studies have revealed that the normative response to trauma is to experience a range of ASD symptoms initially with the majority of these reactions remitting in the following months. Generalizing from this literature, it is safe to assume that although acute stress reactions are very common after exposure to severe trauma in war, the majority of soldiers who initially display distress will naturally adapt and recover normal functioning during in the following months. Thus, it is particularly important not to not be unduly pathologizing about initial distress or even the presence of ASD.

The chronic phase of adjustment to war is well known to VA clinicians; it is the burden of war manifested across the life-span. It is important to note that psychosocial adaptation to war, over time, is not linear and continuous. For example, most soldiers are not debilitated in the immediate impact phase, but they are nevertheless at risk for chronic mental health problems implicated by experiences during battle. Also, although ASD is an excellent predictor of chronic PTSD, it is not a necessary precondition for chronic impairment - there is sufficient evidence to support the notion of delayed PTSD. Furthermore, the majority of people who develop PTSD did not meet the full diagnostic criteria for ASD beforehand. It is also important to appreciate that psychosocial and

psychiatric disturbance implicated by war-zone exposure waxes and wanes across the life-span (e.g., relative to life-demands, exposure to critical reminders of war experiences, etc.).

Posttraumatic stress disorder is one of many different ways a veteran can manifest chronic post-war adjustment difficulties. Veterans are also at risk for depression, substance abuse, aggressive behavior problems, and the spectrum of severe mental illnesses precipitated by the stress of war. Generally, the psychological risks from exposure to trauma are proportional to the magnitude or severity of exposure and the degree of life-threat *and perceived life-threat*. The latter is particularly pertinent to the war in Iraq, where the possibility of exposure to chemical or biological threats is a genuine concern. Exposure to chemical or biological toxins can be obscure, yet severely alarming before, during, and after battle.

A number of individual vulnerabilities have been shown to moderate risk for PTSD. For example, history of psychiatric problems (in particular, depression), poor coping resources or capacities, and past history of trauma and mistreatment increases risk for posttraumatic pathology. Individuals who show particularly intense and frequent symptoms of ASD (particularly, severe hyperarousal) in the weeks following trauma are particularly at risk for chronic PTSD. In addition, the quality and breadth of supports in both the military and civilian recovery contexts (in the military and outside the military) and beyond (e.g., in the home) can impact risk for PTSD. People who need intervention most are the ones that are isolated and cannot get the respite from work, family, and social demands that they may need (or who have additional family or financial stressors and burdens), have few secure and reliable outlets for unburdening their experiences, and receive little or no validation, in the weeks, months, and years following exposure to war trauma.

Most VA clinicians will interact with veterans of the new Iraq War during the chronic phase of adjustment. Nevertheless, early assessment of PTSD and other comorbid conditions implicated from exposure to the Iraq War is crucial and providing effective treatment as soon as possible is critical. Although technically chronic with respect to *time since hostilities ceased,* soldiers' mental health status will be relatively new with respect to their extra-war roles and social context. For example, a soldier might be newly reunited with family and friends, which may tax coping resources and produce shame and lead to withdrawal. In this context, interventions provided as early as possible will still provide secondary prevention of very chronic maladaptive behavior and adaptation.

On the other hand, it is important to appreciate that many things may have happened to a veteran with steady difficulties through the immediate and acute phases that color the person's clinical presentation. For example, a soldier may have been provided multiple interventions in the war-zone and in the acute phase, such as *critical incident stress debriefing* (CISD), or pastoral counseling, or formal psychiatric care. It is important to assess and appreciate the course of care provided and not to not assume that the veteran is first now presenting with problems. It could be that some veterans experienced their attempts to get help and guidance or respite as personal failure and they may have been stigmatized, ostracized, or subtly punished for doing so.

What Kinds of War-Zone Stressors Did Soldiers in the Iraq War Confront?

It is important to appreciate the various types of demands, stressors, and potentially traumatizing events that veterans of the Iraq War may have experienced. This will serve to facilitate communication between clinician and patient and enhance understanding and empathy. Although

there may be one or two specific traumatic events burned into the consciousness of returning soldiers that plague them psychologically, traumatic events need to be seen in the context of the totality of roles and experiences in the war-zone. In addition, research has shown convincingly that while exposure to trauma is a prerequisite for the development of significantly impairing PTSD, it is necessary but not sufficient. For veterans, there are a host of causes of chronic PTSD. In terms of war-zone experiences, perceived threat, low-magnitude stressors, exposure to suffering civilians suffering, and exposure to death and destruction, have each been found to contribute to risk for chronic PTSD. It should also be emphasized that the trauma of war is colored by a variety of emotional experiences, not just horror, terror, and fear. Candidate emotions are sadness about losses, or frustration about bearing witnessing to suffering, guilt about personal actions or inactions, and anger or rage about any number facets of the war (e.g., command decisions, the behavior of the enemy).

We describe below the types of stressful war-zone experiences that veterans of the first Persian Gulf War reported as well as the psychological issues and problems that may arise as a result. We assume that many of these categories or themes will apply to returnees from the War with Iraq.

Preparedness. Some veterans may report anger about perceiving that they were not sufficiently prepared or trained for what they experienced in the war. They may believe that they did not have equipment and supplies they needed or that they were insufficiently trained to perform necessary procedures and tasks using equipment and supplies. Some soldiers may feel that they were ill prepared for what to expect in terms of their role in the deployment and what it would be like in the region (e.g., the desert). Some veterans may have felt that they did not sufficiently know what to do in case of a nuclear, biological, or chemical attack. Clinically, veterans who report feeling angry about these issues may have felt relatively more *helplessness* and *unpredictability* in the war-zone, factors which that have been shown to increase risk for PTSD.

Combat exposure. It appears that the new Iraq War entails more stereotypical exposure to warfare experiences such as firing a weapon, being fired on (by enemy or potential friendly fire), witnessing injury and death, and going on special missions and patrols that involve such experiences, than the ground war offensive of the Persian Gulf War, which lasted three days. Clinicians who have extensive experience treating veterans of other wars, particularly Vietnam, Korea, and WWII should be aware of the bias this may bring to bear when evaluating the significance or impact of experiences in modern warfare. Namely, clinicians need to be careful not to minimize reports of light or minimal exposure to combat. They should bear in mind that in civilian life, for example, a person could suffer from chronic PTSD as a result of a single, isolated life-threat experience (such as a physical assault or motor vehicle accident).

Aftermath of battle. Veterans of the new Iraq War will no doubt report exposure to the consequences of combat, including observing or handling the remains of civilians, enemy soldiers, US and allied personnel, or animals, dealing with prisoners of war, and observing other consequences of combat such as devastated communities and homeless refugees. Veterans may have been involved in removing dead bodies after battle. They may have seen homes or villages destroyed or they may have been exposed to the sight, sound, or smell of dying men and women. These experiences may be intensely demoralizing for some. It also is likely that memories of the aftermath of war (e.g., civilians dead or suffering) are particularly disturbing and salient.

Perceived threat. Veterans may report acute terror and panic and sustained anticipatory anxiety about *potential exposure* to circumstances of combat, including nuclear (e.g., via the use of

depleted uranium in certain bombs), biological, or chemical agents, missiles (e.g., SCUD attacks), and friendly fire incidents. Research has shown that perceptions of life-threat are powerful predictors of post-war mental health outcomes.

Difficult living and working environment. These low-magnitude stressors are events or circumstances representing repeated or day-to-day irritations and pressures related to life in the war zone. These personal discomforts or deprivations may include the lack of desirable food, lack of privacy, poor living arrangements, uncomfortable climate, cultural difficulties, boredom, inadequate equipment, and long workdays. These conditions are obviously non-traumatizing but they tax available coping resources, which may contribute to post-traumatic outcomes.

Concerns about life and family disruptions. Soldiers may worry or ruminate about how their deployment might negatively affect other important life-domains. For National Guard and Reserve troops, this might include career-related concerns (e.g., losing a job or missing out on a promotion). For all soldiers, there may be family-related concerns (e.g., damaging relationships with spouse or children or missing significant events such as birthdays, weddings, and deaths). The replacement of the draft with an all-volunteer military force and the broadening inclusion of women in a wide variety of positions (increasing their potential exposure to combat) significantly change the face of this new generation of veterans. Single parent and dual-career couples are increasingly common in the military, which highlights the importance developing a strong working relationship between the clinician, the veteran and his or her family. As is the case with difficult living and working conditions, concerns about life and family disruptions can tax coping resources and affect performance in the war-zone.

Sexual or gender harassment. Some soldiers may experience unwanted sexual touching or verbal conduct of a sexual nature from other unit members, commanding officers, or civilians in the war zone that creates a hostile working environment. Alternatively, exposure to harassment that is non-sexual may occur on the basis of gender, minority, or other social status. This kind of harassment may be used to enforce traditional roles, or in response to the violation of these roles. Categories of harassment include indirect resistance to authority, deliberate sabotage, indirect threats, constant scrutiny, and gossip and rumors directed toward individuals. In peacetime, these types of experiences are devastating for victims and create helplessness, powerlessness, rage, and great stress. In the war-zone, they are of no less impact.

Ethnocultural stressors. Minority soldiers may in some cases be subject to various stressors related to their ethnicity (e.g., racist remarks). Some service members who may appear to be of Arab background may experience added racial prejudice/stigmatization, such as threatening comments or accusations directed to their similarity in appearance to the enemy. Also, some Americans actually of Arab descent may experience conflict between their American identity and identity related to their heritage. Such individuals may have encountered pejorative statements about Arabs and Islam as well as devaluation of the significance of loss of life among the enemy.

Perceived radiological, biological, and chemical weapons exposure. Some veterans of the Iraq War will report personal exposures to an array of radiological, nuclear, biological, and chemical agents that the veteran believes he/she encountered while serving in the war-zone. Given the extensive general knowledge of Persian Gulf War Illnesses among soldiers (and the public), there is no doubt that veterans of the new Iraq War will experience concerns about potential unknown low-level exposure that may affect their health chronically. For some, these perceptions may

produce a hypervigilant internal focus of attention on subtle bodily reactions and sensations, which may lead to a variety of somatic complaints.

Assessment

New veterans of the war with Iraq will present initially in a myriad of different ways. Some may be very frail, labile, emotional, and needing to share their story. The modal presentation is likely to be defended, formal, respectful, laconic, and cautious (as if they were talking to an officer). Generally, it is safe to assume that it will be difficult for new veterans of the Iraq War to share their thoughts and feelings about what happened during the war and the toll those experiences have taken on their mental health. It is important not to press any survivor of trauma too soon or too intensely and respect the person's need not to feel vulnerable and exposed. Clinical contacts should proceed from triage (e.g., suicidality/homicidality, acute medical problems, and severe family problems may require *immediate* attention), screening, formal assessment, to case formulation / treatment planning, with an emphasis on prioritizing targets for intervention. In all contacts, the clinician should meet the veteran where he or she is with respect to immediate needs, communication style, and emotional state. Also, the clinician should provide the veteran a plan for how the interactions may proceed over time and how they might be useful. The goal in each interaction is to make sure the veteran feels heard, understood, respected, and cared for.

Comprehensive assessment will inform case formulation and treatment planning. There are many potentially important variables to assess when working with a veteran of the Iraq War:

- Work functioning
- Interpersonal functioning
- Recreation and self-care
- Physical functioning
- Psychological symptoms
- Past distress and coping
- Previous traumatic events
- Deployment-related experiences

Often, when working with individuals who have been exposed to potentially traumatic experiences, there is pressure to begin with an assessment of traumatic exposure and to encourage the veteran to immediately talk about his or her experiences. However, our recommendation is that it is most useful to begin the assessment process by focusing on current psychosocial functioning and the immediate needs of the veteran and to assess trauma exposure, as necessary, later in the assessment process. While we discuss assessment of trauma history more fully below, it is important to note here that the best rule of thumb is to follow the patient's lead in approaching a discussion of trauma exposure. Clinicians should verbally and non-verbally convey to their patients a sense of safety, security and openness to hearing about painful experiences. However, it is also equally important that clinicians do not urge their patients to talk about traumatic experiences before they are ready to do so.

Work functioning. Work-related difficulties can have a significant impact on self-efficacy, self-worth and financial stability and thus deserve immediate attention, assessment, and referral. They are likely to be a major focus among veterans of the Iraq War. Part-time military employees or reservists (who make up a significant proportion of the military presence in Iraq) face unique employment challenges post-deployment. Employers vary significantly in the amount of emotional and financial support they offer their reservist employees. Some veterans will inevitably have to confront the advancement of their co-workers while their own civilian career has stalled during their military service. While some supportive employers supplement reservist's reduced military

salaries for longer than required, the majority does not, leaving many returning soldiers in dire financial situations.

Employment issues can be a factor even among reservists who work for supportive employers. Often, the challenges inherent in military duty can impact a soldier's satisfaction with his or her civilian position. Thus, some returning veterans may benefit from a re-assessment of vocational interest and aptitude.

Clinicians will also encounter veterans who have voluntarily and/or involuntarily ended their military service following their deployment to Iraq. Issues related to this separation may include the full-range of emotional responses including relief, anger, sadness, confusion and despair. Veterans in this position might benefit from employment related assessment and rehabilitation services including an exploration of career interests and aptitudes, counseling in resume building and job interviewing, vocational retraining, and emotional processing of psychological difficulties impeding work success and satisfaction.

***Interpersonal functioning*.** Another important area of assessment involves interpersonal functioning. Veterans of the Iraq war hold a number of interpersonal roles including son/daughter, husband/wife/partner, parent, and friend and all of these roles may be affected by the psychological consequences of their military service. A number of factors can affect interpersonal functioning including the quality of the relationship pre-deployment, the level of contact between the veteran and his or her social network during deployment, and the expectations and reality of the homecoming experience.

The military offers some support mechanisms for the families of soldiers, which are aimed at shoring up these supportive relationships and smoothing the soldier's readjustment upon return from Iraq. It can be useful to assess the extent to which a veteran and his or her family has used these services and how much they did or did not benefit from such services. It is important to note that these services do not always extend to non-married partners (of the same or different gender), sometimes leading to a more difficult and challenging homecoming experience.

As with all areas of post-deployment adjustment, veterans may experience changes in their interpersonal functioning over time. It is not uncommon for families to first experience a "honeymoon" phase of reconnection marked by euphoria, excitement, and relief. However, a period of discomfort, role confusion, and renegotiating of relationship and roles can follow this initial phase. Thus, repeated assessment of interpersonal functioning over time can ensure that any relational difficulties that threaten the well-being of the veteran are detected and addressed.

Depending on specific personal characteristics of the veteran, certain interpersonal challenges may be more or less relevant to assessment and treatment. For instance, younger veterans, particularly those who live with their family of origin, may have a particularly difficult time returning to their role as adult children. The process of serving active duty in a war-zone is a maturing one, and younger veterans may feel as if they have made a significant transition to adulthood that may conflict with parental expectations and demands over time.

Veterans who are parents may feel somewhat displaced by the caretaker who played a primary role in their child's life during deployment. Depending on their age, the children of veterans may exhibit a wide range of regressive and/or challenging behaviors that may surprise and tax their returning parent. This normal, expected adjustment can become problematic and prolonged if the

veteran is struggling with his or her own psychological distress post-deployment. Thus, early (and repeated) assessment and early family oriented intervention may be indicated.

Finally, homecoming and subsequent interpersonal functioning can be compounded if the veteran was physically wounded during deployment. Younger families may be particularly less prepared to deal with the added stress of recovery, rehabilitation and/or adjustment to a chronic physical disability.

Recreation and self-care. Participation in recreational activities and engaging in good self-care are foundational aspects of positive psychological functioning. However, they are often overlooked in the assessment process. Some veterans who appear to be functioning well in other domains may be attending less to these areas of their lives, particularly if they are attempting to appear "stoic" and to keep busy in order to control any painful thoughts, feelings or images they may be struggling with. Thus, a brief assessment of engagement in and enjoyment of recreational and self-care activities may provide some important information about how well the veteran is coping post-deployment.

Physical functioning. Early assessment of the physical well being of veterans is critical. Sleep, appetite, energy level, and concentration can be impaired in the post-deployment phase as a result of exposure to potentially traumatizing experiences, the development of any of a number of physical disease processes and/or the sheer fatigue associated with military duty. Clinicians are again charged with the complex task of balancing the normalization of transient symptoms with the careful assessment of symptoms that could indicate more significant psychological or physical impairment. Consistent with good clinical practices, it is important to ensure that a veteran complaining of these and other somatic/psychological symptoms be referred for a complete physical examination to investigate any potential underlying physical pathology and to provide adequate interdisciplinary treatment planning.

Psychological symptoms. Once the clinician gains an overall sense of the veteran's level of psychosocial functioning, a broader assessment of psychological symptoms, and responses to those symptoms that may be impairing can be useful. However, this process can also be difficult and confusing since a wide range of emotional and cognitive responses to deployment and post-deployment stressors including increased fear and anxiety, sadness and grief, anger or rage, guilt, shame and disgust, ruminations and intrusive thoughts about past experiences, and worries and fears about future functioning may be expected. Often a good clinical interview can elicit some information about the most salient symptoms for a particular veteran, which can be supplemented with more structured assessment using diagnostic interviews and/or questionnaires.

Again, clinicians must use their judgment in responding to transient normal responses to potentially traumatizing events versus symptoms that may reflect the development and/or exacerbation of a psychological disorder. Sometimes assessing both psychological responses and responses to those responses can help determine whether or not some form of treatment is indicated. For instance, veterans may appropriately respond to the presence of painful thoughts and feelings by crying, talking with others about their experiences, and engaging in other potentially valued activities such as spending time with friends and family. However, others may attempts to suppress, diminish or avoid their internal experiences of pain by using alcohol and/or drugs, disordered eating, self-injurious behaviors (such as cutting), dissociation and behavioral avoidance of external reminders or triggers of trauma-related stimuli.

Given that a full-range of psychological responses may be seen, and given that multiple symptoms (and comorbid disorders) may be present, one challenge to the clinician during the assessment process is to prioritize targets of potential treatment. A few general rules of thumb can be helpful:

- First, one must immediately attend to symptoms that may require emergency intervention such as significant suicidal or homicidal ideation, hopelessness, self-injurious behavior and/or acute psychotic symptoms.
- Second, it is useful to address symptoms that are most disruptive to the veteran (which should be evidenced by a careful assessment of psychosocial functioning).
- Finally, the best way to develop a treatment plan for a veteran with diverse complaints is to develop a case formulation to functionally explain the potential relationship between the symptoms in order to develop a comprehensive treatment plan. Substance abuse, disordered eating, and avoidance of trauma-related cues may all represent attempts to avoid thoughts, feelings and images of trauma-related experiences. Thus, developing an intervention that focuses on avoidance behavior per se, rather than on specific and diverse symptoms of avoidance, may be a more effective treatment strategy.

Past distress and coping. In determining the extent of treatment needed for a particular presenting problem, an assessment of the history of the problem and the veteran's previous responses to similar stressful experiences is useful. A general sense of pre-deployment work and interpersonal functioning, along with any significant psychological history can place current distress in context. A diathesis-stress model suggests that veterans with a history of mental health difficulties can be at increased risk for psychological problems following a stressful event such as deployment to a war-zone, although this relationship is not absolute.

Another area worth assessing, that can provide a wealth of pertinent information, is the veteran's general orientation toward coping with difficult life events and its potential relationship to current painful thoughts, emotions and bodily sensations. Many veterans will enter into their military experience with a flexible and adaptive array of coping skills that they can easily bring to bear on their current symptoms. In other cases, veterans may have successfully used coping strategies in the past that are no longer useful in the face of the current magnitude of their symptoms. Coping styles can be assessed with one of a number of self-report measures. However, through a sensitive clinical interview, one can also get a general sense of how often the veteran generally uses common coping styles such as stoicism, social support, suppression and avoidance, and active problem solving.

Previous traumatic events. While there is evidence in the literature for a relationship between repeated lifetime exposure to traumatic events and compromised post-event functioning, this relationship may be less evident among veterans who are seen in the months following their return from Iraq. However, there may still be important clinical information to be gained from assessing a veteran's lifetime experience with such traumatic events such as childhood and adult sexual and physical abuse, domestic violence, involvement in motor vehicle or industrial accidents, and experience with natural disasters, as well as their immediate and long-term adjustment following those experiences.

Deployment-related experiences. Obviously, the assessment of potentially traumatizing events that occurred during deployment will be an important precursor to treatment for many veterans of the Iraq War, particularly for those who struggle with symptoms of reexperiencing, avoidance/

numbing, dissociation, and/or increased arousal. VA clinicians are highly skilled in many of the clinical subtleties involved in this assessment such as the importance of providing a safe and nonjudgmental environment, allowing the veteran to set the pace and tone of the assessment, and understanding the myriad of issues that involve the disclosure of traumatic experiences such as shame, guilt, confusion, and the need by some soldiers to appear resilient and unaffected by their experiences. However, unique deployment stressors accompany involvement in each contemporary military action that may be important to assess. Thus, clinicians need to balance their use of current exposure assessment methods with openness to hearing and learning from each new veterans personal experience.

Section 1 of the Deployment Risk and Resiliency Inventory, developed by Daniel and Lynda King and colleagues at the National Center for PTSD, can provide an excellent starting point for the assessment of deployment related stressors and buffers. Items on this measure were derived from focus groups with Persian Gulf veterans and they provide useful information about some of the newer stressors associated with contemporary deployments.

The inventory is provided in *Appendix D*. Section 1 describes 9 domains of war-zone stressors that Iraq veterans may have experienced: preparedness, combat exposure, aftermath of battle, perceived threat, difficult living and working environment, concerns about life and family disruptions, ethnocultural stressors, perceived radiological, biological and chemical weapons exposure. A careful assessment of each of these domains can be useful both as a starting point for assessing any potential ASD and/or PTSD and more generally to establish a sense of the potential risk and resiliency factors that may bear on the veteran's current and future functioning.

Summary and Final Remarks

Individuals join the military for a variety of reasons, from noble to mundane. Regardless, over time, soldiers develop a belief system (schema) about themselves, their role in the military, the military culture, etc. War can be traumatizing not only because of specific terrorizing or grotesque war-zone experiences but also due to dashed or painfully shattered expectations and beliefs about perceived coping capacities, military identity, and so forth. As a result, soldiers who present for care in VA Medical Centers may be disillusioned in one way or another. The clinician's job is to gain an appreciation of the veteran's prior schema about their role in the military (and society) and the trouble the person is having assimilating (incorporating) war-zone experiences into that existing belief system. Typically, in traumatized veterans, assimilation is impossible because of the contradictory nature of painful war-zone events. The resulting conflict is unsettling and disturbing. Any form of early intervention or treatment for chronic PTSD entails providing experiences and new knowledge so that accommodation of a new set of ideas about the self and the future can occur.

A variety of factors including personal and cultural characteristics, orientation toward coping with stressors and painful emotions, pre-deployment training, military-related experiences, and post-deployment environment will shape responses to the Iraq War. Further, psychological responses to deployment experiences can be expected to change over time. While mental health professionals within the VA are among the most experienced and accomplished in assessing and treating chronic combat-related PTSD, veterans of the Iraq war can be expected to present unique clinical challenges.

The absence of immediate symptoms following exposure to a traumatic event is not necessarily predictive of a long-term positive adjustment. Depending on a variety of factors, veterans may appear to be functioning at a reasonable level immediately upon their return home particularly given their relief at having survived the war-zone and returned to family and friends. However, as life circumstances change, symptoms of distress may increase to a level worthy of clinical intervention.

Even among those veterans who will need psychological services post-deployment, ASD and PTSD represent only two of a myriad of psychological presentations that are likely. Veterans of the Iraq war are likely to have been exposed to a wide variety of war-zone related stressors that can impact psychological functioning in a number of ways.

The psychological assessment of veterans returning from Iraq is likely to be complicated and clinically challenging. We must enter into the assessment process informed about the possible stressors and difficulties that may be associated with service in Iraq and open to suspending any preconceived notions about how any given individual might react to their personal experience during war. It will be important for us to broadly assess functioning over a variety of domains, to provide referrals for acute needs, and to provide some normalizing, psychoeducational information to veterans and their families in an attempt to facilitate existing support networks and naturally occurring healing processes. Repeated assessment over time will best serve our veterans who may experience changing needs over the months and years following their wartime exposure.

IV. Treatment of the Returning Iraq War Veteran

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In this section of the *Iraq War Clinician Guide*, we discuss treatment of veterans recently evacuated due to combat or war stress who are brought to the VA for mental health care, and Iraq War veterans seeking mental health care at VA medical centers and Vet Centers. This section complements discussion of special topics (e.g., treatment of medical casualties, identification and management of PTSD in the primary care setting, issues in caring for veterans who have been sexually assaulted, traumatic bereavement) that are addressed in other sections of this *Guide*.

It is important that VA and Vet Center clinicians recognize that the skills and experience that they have developed in working with veterans with chronic PTSD will serve them well with those returning from the Iraq War. Their experience in talking about trauma, educating patients and families about traumatic stress reactions, teaching skills of anxiety and anger management, facilitating mutual support among groups of veterans, and working with trauma-related guilt, will all be useful and applicable. Here, we highlight some challenges for clinicians, discuss ways in which care of these veterans may differ from our usual contexts of care, and direct attention to particular methods and materials that may be relevant to the care of the veteran recently traumatized in war.

The Helping Context: Active Duty vs. Veterans Seeking Health Care

There are a variety of differences between the contexts of care for active duty military personnel and veterans normally being served in VA that may affect the way practitioners go about their business. First, many Iraq War patients will not be seeking mental health treatment. Some will have been evacuated for mental health or medical reasons and brought to VA, perhaps reluctant to acknowledge their emotional distress and almost certainly reluctant to consider themselves as having a mental health disorder (e.g., PTSD). Second, emphasis on diagnosis as an organizing principle of mental health care is common in VA. Patients are given *DSM-IV* diagnoses, and diagnoses drive treatment. This approach may be contrasted with that of frontline psychiatry, in which pathologization of combat stress reactions is strenuously avoided. The strong assumption is that most soldiers will recover, and that their responses represent a severe reaction to the traumatic stress of war rather than a mental illness or disorder. According to this thinking, the "labeling" process may be counterproductive in the context of early care for Iraq War veterans. As Koshes (1996) noted, "labeling a person with an illness can reinforce the "sick" role and delay or prevent the soldier's return to the unit or to a useful role in military or civilian life" (p. 401).

Patients themselves may have a number of incentives to minimize their distress: to hasten discharge, to accelerate a return to the family, to avoid compromising their military career or retirement. Fears about possible impact on career prospects are based in reality; indeed, some will be judged medically unfit to return to duty. Veterans may be concerned that a diagnosis of PTSD, or even Acute Stress Disorder, in their medical record may harm their chances of future promotion, lead to a decision to not be retained, or affect type of discharge received. Some may think that the information obtained if they receive mental health treatment will be shared with their unit commanders, as is sometimes the case in the military.

To avoid legitimate concerns about possible pathologization of common traumatic stress reactions, clinicians may wish to consider avoiding, where possible, the assignment of diagnostic labels such as ASD or PTSD, and instead focus on assessing and documenting symptoms and behaviors. Diagnoses of acute or adjustment disorders may apply if symptoms warrant labeling. Concerns about confidentiality must be acknowledged and steps taken to create the conditions in which patients will feel able to talk openly about their experiences, which may include difficulties with commanders, misgivings about military operations or policies, or possible moral concerns about having participated in the war. It will be helpful for clinicians to know who will be privy to information obtained in an assessment. The role of the assessment and who will have access to what information should be discussed with concerned patients.

Active duty service members may have the option to remain on active duty or to return to the war zone. Some evidence suggests that returning to work with one's cohort group during wartime can facilitate improvement of symptoms. Although their wishes may or may not be granted, service members often have strong feelings about wanting or not wanting to return to war. For recently activated National Guard and Reservists, issues may be somewhat different (Dunning, 1996). Many in this population never planned to go to war and so may be faced with obstacles to picking up the life they "left." Whether active duty, National Guard, or Reservist, listening to and acknowledging their concerns will help empower them and inform treatment planning.

Iraq War patients entering residential mental health care will have come to the VA through a process different from that experienced by "traditional" patients. If they have been evacuated from the war zone, they will have been rapidly moved through several levels of medical triage and treatment, and treated by a variety of health care providers (Scurfield & Tice, 1991). Many will have received some mental health care in the war zone (e.g., stress debriefing) that will have been judged unsuccessful. Some veterans will perceive their need for continuing care as a sign of personal failure. Understanding their path to the VA will help the building of a relationship and the design of care.

More generally, the returning soldier is in a state of transition from war zone to home, and clinicians must seek to understand the expectations and consequences of returning home for the veteran. Is the veteran returning to an established place in society, to an economically deprived community, to a supportive spouse or cohesive military unit, to a large impersonal city, to unemployment, to financial stress, to an American public thankful for his or her sacrifice? Whatever the circumstances, things are unlikely to be as they were:

> The deployment of the family member creates a painful void within the family system that is eventually filled (or denied) so that life can go on…The family assumes that their experiences at home and the soldier's activities on the battlefield will be easily assimilated by each other at the time of reunion and that the pre-war roles will be resumed. The fact that new roles and responsibilities may not be given up quickly upon homecoming is not anticipated (Yerkes & Holloway, 1996, p. 31).

Learning from Vietnam Veterans with Chronic PTSD

From the perspective of work with Vietnam veterans whose lives have been greatly disrupted by their disorder, the chance to work with combat veterans soon after their war experiences represents a real opportunity to prevent the development of a disastrous life course. We have the

opportunity to directly focus on traumatic stress reactions and PTSD symptom reduction (e.g., by helping veterans process their traumatic experiences, by prescribing medications) and thereby reduce the degree to which PTSD, depression, alcohol/substance misuse, or other psychological problems interfere with quality of life. We also have the opportunity to intervene directly in key areas of life functioning, to reduce the harm associated with continuing post-traumatic stress symptoms and depression if those prove resistant to treatment. The latter may possibly be accomplished via interventions focused on actively supporting family functioning in order to minimize family problems, reducing social alienation and isolation, supporting workplace functioning, and preventing use of alcohol and drugs as self-medication (a different focus than addressing chronic alcohol or drug problems).

Prevent family breakdown. At time of return to civilian life, soldiers can face a variety of challenges in re-entering their families, and the contrast between the fantasies and realities of homecoming (Yerkes & Holloway, 1996) can be distressing. Families themselves have been stressed and experienced problems as a result of the deployment (Norwood, Fullerton, & Hagen, 1996; Jensen & Shaw, 1996). Partners have made role adjustments while the soldier was away, and these need to be renegotiated, especially given the possible irritability and tension of the veteran (Kirkland, 1995). The possibility exists that mental health providers can reduce long term family problems by helping veterans and their families anticipate and prepare for family challenges, involving families in treatment, providing skills training for patients (and where possible, their families) in family-relevant skills (e.g., communication, anger management, conflict resolution, parenting), providing short-term support for family members, and linking families together for mutual support.

Prevent social withdrawal and isolation. PTSD also interferes with social functioning. Here the challenge is to help the veteran avoid withdrawal from others by supporting re-entry into existing relationships with friends, work colleagues, and relatives, or where appropriate, assisting in development of new social relationships. The latter may be especially relevant with individuals who leave military service and transition back into civilian life. Social functioning should be routinely discussed with patients and made a target for intervention. Skills training focusing on the concrete management of specific difficult social situations may be very helpful. Also, as indicated below, clinicians should try to connect veterans with other veterans in order to facilitate the development of social networks.

Prevent problems with employment. Associated with chronic combat-related PTSD have been high rates of job turnover and general difficulty in maintaining employment, often attributed by veterans themselves to anger and irritability, difficulties with authority, PTSD symptoms, and substance abuse. Steady employment, however, is likely to be one predictor of better long term functioning, as it can reduce financial stresses, provide a source of meaningful activity and self-esteem, and give opportunities for companionship and friendship. In some cases, clinicians can provide valuable help by supporting the military or civilian work functioning of veterans, by teaching skills of maintaining or, in the case of those leaving the military, finding of employment, or facilitating job-related support groups.

Prevent alcohol and drug abuse. The comorbidity of PTSD with alcohol and drug problems in veterans is well established (Ruzek, 2003). Substance abuse adds to the problems caused by PTSD and interferes with key roles and relationships, impairs coping, and impairs entry into and ongoing participation in treatment. PTSD providers are aware of the need to routinely screen and assess for

alcohol and drug use, and are knowledgeable about alcohol and drug (especially 12-Step) treatment. Many are learning, as well, about the potential usefulness of integrated PTSD-substance abuse treatment, and the availability of manualized treatments for this dual disorder. "Seeking Safety," a structured group protocol for trauma-relevant coping skills training (Najavits, 2002), is seeing increased use in VA and should be considered as a treatment option for Iraq War veterans who have substance use disorders along with problematic traumatic stress responses. In addition, for many newly returning Iraq War veterans, it will be important to supplement traditional abstinence-oriented treatments with attention to milder alcohol problems, and in particular to initiate preventive interventions to reduce drinking or prevent acceleration of alcohol consumption as a response to PTSD symptoms (Bien, Miller, & Tonigan, 1993). For *all* returning veterans, it will be useful to provide education about safe drinking practices and the relationship between traumatic stress reactions and substance abuse.

General Considerations in Care

Connect with the returning veteran. As with all mental health counseling, the relationship between veteran and helper will be the starting point for care. Forming a working alliance with some returnees may be challenging, however, because most newly-returned veterans may be, as Litz (this Guide) notes, "defended, formal, respectful, laconic, and cautious" and reluctant to work with the mental health professional. Especially in the context of recent exposure to war, validation (Kirkland, 1995) of the veteran's experiences and concerns will be crucial. Discussion of "war zone", not "combat," stress may be warranted because some traumatic stressors (e.g., body handling, sexual assault) may not involve war fighting as such. Thought needs to be given to making the male-centric hospital system hospitable for women, especially for women who have experienced sexual assault in the war zone (see Special Topic VI, this Guide), for whom simply walking onto the grounds of a VA hospital with the ubiquitous presence of men may create feelings of vulnerability and anxiety.

Practitioners should work from a patient-centered perspective, and take care to find out the current concerns of the patient (e.g., fear of returning to the war zone, concerns about having been evacuated and what this means, worries about reactions of unit, fear of career ramifications, concern about reactions of family, concerns about returning to active duty). One advantage of such an orientation is that it will assist with the development of a helping relationship.

Connect veterans with each other. In treatment of chronic PTSD, veterans often report that perhaps their most valued experience was the opportunity to connect in friendship and support with other vets. This is unlikely to be different for returning Iraq War veterans, who may benefit greatly from connection both with each other and with veterans of other conflicts. Fortunately, this is a strength of VA and Vet Center clinicians, who routinely and skillfully bring veterans together.

Offer practical help with specific problems. Returning veterans are likely to feel overwhelmed with problems, related to workplace, family and friends, finances, physical health, and so on. These problems will be drawing much of their attention away from the tasks of therapy, and may create a climate of continuing stress that interferes with resolution of symptoms. The presence of continuing negative consequences of war deployment may help maintain post-traumatic stress reactions. Rather than treating these issues as distractions from the task at hand, clinicians can provide a valuable service by helping veterans identify, prioritize, and execute action steps to address their specific problems.

Attend to broad needs of the person. Wolfe, Keane, and Young (1996) put forward several suggestions for clinicians serving Persian Gulf War veterans that are also important in the context of the Iraq War. They recommended attention to the broad range of traumatic experience (e.g., as discussed in Chapter III). They similarly recommended broad clinical attention to the impact of both pre-military and post-military stressors on adjustment. For example, history of trauma places those exposed to trauma in the war zone at risk for development of PTSD, and in some cases war experiences will activate emotions experienced during earlier events. Finally, recognition and referral for assessment of the broad range of physical health concerns and complaints that may be reported by returning veterans is important. Mental health providers must remember that increased health symptom reporting is unlikely to be exclusively psychogenic in origin (Proctor et al., 1998).

Methods of Care: Overview

Management of acute stress reactions and problems faced by recently returned veterans are highlighted below. Methods of care for the Iraq War veteran with PTSD will be similar to those provided to veterans with chronic PTSD.

Education about post-traumatic stress reactions. Education is a key component of care for the veteran returning from war experience and is intended to improve understanding and recognition of symptoms, reduce fear and shame about symptoms, and, generally, "normalize" his or her experience. It should also provide the veteran with a clear understanding of how recovery is thought to take place, what will happen in treatment, and, as appropriate, the role of medication. With such understanding, stress reactions may seem more predictable and fears about long-term effects can be reduced. Education in the context of relatively recent traumatization (weeks or months) should include the conception that many symptoms are the result of psychobiological reactions to extreme stress and that, with time, these reactions, in most cases, will diminish. Reactions should be interpreted as responses to overwhelming stress rather than as personal weakness or inadequacy. In fact, some recent research (e.g., Steil & Ehlers, 2000) suggests that survivors' own responses to their stress symptoms will in part determine the degree of distress associated with those symptoms and whether they will remit. Whether, for example, post-trauma intrusions cause distress may depend in part on their meaning for the person (e.g., "I'm going crazy").

Training in coping skills. Returning veterans experiencing recurrent intrusive thoughts and images, anxiety and panic in response to trauma cues, and feelings of guilt or intense anger are likely to feel relatively powerless to control their emotions and thoughts. This helpless feeling is in itself a trauma reminder. Because loss of control is so central to trauma and its attendant emotions, interventions that restore self-efficacy are especially useful.

Coping skills training is a core element in the repertoire of many VA and Vet Center mental health providers. Some skills that may be effective in treating Iraq War veterans include: anxiety management (breathing retraining and relaxation), emotional "grounding," anger management, and communication. However, the days, weeks, and months following return home may pose specific situational challenges; therefore, a careful assessment of the veteran's current experience must guide selection of skills. For example, training in communication skills might focus on the problem experienced by a veteran in expressing positive feelings towards a partner (often associated with emotional numbing); anger management could help the veteran better respond to others in the immediate environment who do not support the war.

Whereas education helps survivors understand their experience and know what to do about it, coping skills training should focus on helping them know *how* to do the things that will support recovery. It relies on a cycle of instruction that includes education, demonstration, rehearsal with feedback and coaching, and repeated practice. It includes regular between-session task assignments with diary self-monitoring and real-world practice of skills. It is this repeated practice and real world experience that begins to empower the veteran to better manage his or her challenges (see Najavits, 2002, for a useful manual of trauma-related coping skills).

Exposure therapy. Exposure therapy is among the best-supported treatments for PTSD (Foa et al., 2000). It is designed to help veterans effectively confront their trauma-related emotions and painful memories, and can be distinguished from simple discussion of traumatic experience in that it emphasizes *repeated* verbalization of traumatic memories (see Foa & Rothbaum, 1998, for a detailed exposition of the treatment). Patients are exposed to their own individualized fear stimuli repetitively, until fear responses are consistently diminished. Often, in-session exposure is supplemented by therapist-assigned and monitored self-exposure to the memories or situations associated with traumatization. In most treatment settings, exposure is delivered as part of a more comprehensive "package" treatment; it is usually combined with traumatic stress education, coping skills training, and, especially, cognitive restructuring (see below). Exposure therapy can help correct faulty perceptions of danger, improve perceived self-control of memories and accompanying negative emotions, and strengthen adaptive coping responses under conditions of distress.

Cognitive restructuring. Cognitive therapy or restructuring, one of the best-validated PTSD treatments (Foa et al., 2000), is designed to help the patient review and challenge distressing trauma-related beliefs. It focuses on educating participants about the relationships between thoughts and emotions, exploring common negative thoughts held by trauma survivors, identifying personal negative beliefs, developing alternative interpretations or judgments, and practicing new thinking. This is a systematic approach that goes well beyond simple discussion of beliefs to include individual assessment, self-monitoring of thoughts, homework assignments, and real-world practice. In particular, it may be a most helpful approach to a range of emotions other than fear – guilt, shame, anger, depression – that may trouble veterans. For example, anger may be fueled by negative beliefs (e.g., about perceived lack of preparation or training for war experiences, about harm done to their civilian career, about perceived lack of support from civilians). Cognitive therapy may also be helpful in helping veterans cope with distressing changed perceptions of personal identity that may be associated with participation in war or loss of wartime identity upon return (Yerkes & Holloway, 1996).

A useful resource is the Cognitive Processing Therapy manual developed by Resick and Schnicke (1993), which incorporates extensive cognitive restructuring and limited exposure. Although designed for application to rape-related PTSD, the methods can be easily adapted for use with veterans. Kubany's (1998) work on trauma-related guilt may be helpful in addressing veterans' concerns about harming or causing death to civilians.

Family counseling. Mental health professionals within VA and Vet Centers have a long tradition of working with family members of veterans with PTSD. This same work, including family education, weekend family workshops, couples counseling, family therapy, parenting classes, or training in conflict resolution, will be very important with Iraq War veterans. Some issues in family work are discussed in more detail below.

Early Interventions for ASD or PTSD

If Iraq War veterans arrive at VA Medical Centers very soon (i.e., within several days or several weeks) following their trauma exposure, it is possible to use an early intervention to try to prevent development of PTSD. Although cognitive-behavioral early interventions have only been developed recently and have not yet been tried with war-related ASD, they should be considered as a treatment option for some returning veterans, given their impact with other traumas and consistency with what is known about treatment of more chronic PTSD. In civilian populations, several randomized controlled trials have demonstrated that brief (i.e., 4-5 session) individually-administered cognitive-behavioral treatment, delivered around two weeks after a trauma, can prevent PTSD in some survivors of motor vehicle accidents, industrial accidents, and assault (Bryant et al., 1998, 1999) who meet criteria for ASD.

This treatment is comprised of education, breathing training/relaxation, imaginal and *in vivo* exposure, and cognitive restructuring. The exposure and cognitive restructuring elements of the treatment are thought to be most helpful. A recent unpublished trial conducted by the same team compared cognitive therapy and exposure in early treatment of those with ASD, with results indicating that both treatments were effective with fewer patients dropping out of cognitive therapy. Bryant and Harvey (2000) noted that prolonged exposure is not appropriate for everyone (e.g., those experiencing acute bereavement, extreme anxiety, severe depression, those experiencing marked ongoing stressors or at-risk for suicide). Cognitive restructuring may have wider applicability in that it may be expected to produce less distress than exposure.

Toxic Exposure, Physical Health Concerns, and Mental Health

War syndromes have involved fundamental, unanswered questions about chronic somatic symptoms in armed conflicts since the U.S. civil war (Hyams et al., 1996). In recent history, unexplained symptoms have been reported by Dutch peacekeepers in Lebanon, Bosnia, and Cambodia, Russian soldiers in Afghanistan and Chechnya, Canadian peacekeepers in Croatia, soldiers in the Balkan war, individuals exposed to the El Al airliner crash, individuals given the anthrax vaccine, individuals exposed to the World Trade Center following 9/11, and soldiers in the Gulf War. Seventeen percent of Gulf War veterans believe they have “Gulf War Syndrome” (Chalder et al., 2001).

Besides PTSD, modern veterans may experience a range of “amorphous stress outcomes” (Engel, 2001). Factors contributing to these more amorphous syndromes include suspected toxic exposures, and ongoing chronic exhaustion and uncertainty. Belief in exposure to toxic contaminants has a strong effect on symptoms. Added to this, mistrust of military and industry, intense and contradictory media focus, confusing scientific debates, and stigma and medicalization can contribute to increased anxiety and symptoms.

When working with a recent veteran, the clinician needs to address a full range of potentially disabling factors: harmful illness beliefs, weight and conditioning, diagnostic labeling, unnecessary testing, misinformation, over-medication, all or nothing rehabilitation approaches, medical system rejection, social support, and workplace competition. The provider needs to be familiar with side effects of suspected toxins so that he or she can educate the veteran, as well as being familiar with the potential somatic symptoms that are related to prolonged exposure to combat stressors, and the side effects of common medications. The provider should take a collaborative approach with the

patient, identifying the full range of contributing problems, patient goals and motivation, social support, and self-management strategies. A sustained follow-up is recommended.

For those with inexplicable health problems, Fischoff and Wessely (2003) outlined some simple principles of patient management that may be useful in the context of veteran care:

- Focus communication around patients' concerns
- Organize information coherently
- Give risks as numbers
- Acknowledge scientific uncertainty
- Use universally understood language
- Focus on relieving symptoms

There is evidence that both cognitive-behavioral group therapy (CBGT) and exercise are effective for treating Gulf War illness. In a recent clinical trial, Donata et al. (2003) reported that CBGT improved physical function whereas exercise led to improvement in many of the symptoms of Gulf War veterans' illnesses. Both treatments improved cognitive symptoms and mental health functioning, but neither improved pain. In this study, CBGT was specifically targeted at physical functioning, and included time-contingent activity pacing, pleasant activity scheduling, sleep hygiene, assertiveness skills, confrontation of negative thinking and affect, and structured problem solving skills. The low-intensity aerobic exercise intervention was designed to increase activity level by having veterans exercise once per week for one hour in the presence of an exercise therapist, and independently 2-3 times per week. These findings are important because they demonstrate that such treatments can be feasibly and successfully implemented in the VA health care system, and thus should be considered for the treatment of Iraq War veterans who present with unexplained physical symptoms.

Family Involvement in Care

The primary source of support for the returning soldier is likely to be his or her family. We know from veterans of the Vietnam War that there can be a risk of disengagement from family at the time of return from a war zone. We also know that emerging problems with ASD and PTSD can wreak havoc with the competency and comfort the returning soldier experiences as a partner and parent. While the returning soldier clearly needs the clinician's attention and concern, that help can be extended to include his or her family as well. Support for the veteran and family can increase the potential for the veteran's smooth immediate or eventual reintegration back into family life, and reduce the likelihood of future more damaging problems.

Outpatient treatment. If the veteran is living at home, the clinician can meet with the family and assess with them their strengths and challenges and identify any potential risks. Family and clinician can work together to identify goals and develop a treatment plan to support the family's reorganization and return to stability in coordination with the veteran's work on his or her own personal treatment goals.

If one or both partners are identifying high tension or levels of disagreement, or the clinician is observing that their goals are markedly incompatible, then issues related to safety need to be assessed and plans might need to be made that support safety for all family members. Couples who have experienced domestic violence and/or infidelity are at particularly high risk and in need

of more immediate support. When couples can be offered a safe forum for discussing, negotiating, and possibly resolving conflicts, that kind of clinical support can potentially help to reduce the intensity of the feelings that can become dangerous for a family. Even support for issues to be addressed by separating couples can be critically valuable, especially if children are involved and the parents anticipate future co-parenting.

Residential rehabilitation treatment. Inpatient hospitalization could lengthen the time returning personnel are away from their families, or it could be an additional absence from the family for the veteran who has recently returned home. It is important to the ongoing support of the reuniting family that clinicians remain aware that their patient is a partner and/or parent. Family therapy sessions, in person or by phone if geographical distance is too great, can offer the family a forum for working toward meeting their goals. The potential for involving the patient's family in treatment will depend on their geographic proximity to the treatment facility. Distance can be a barrier, but the family can still be engaged through conference phone calls, or visits as can be arranged.

Pharmacotherapy

Pharmacologic treatment of acute stress reactions. Pharmacological treatment for acute stress reactions (within one month of the trauma) is generally reserved for individuals who remain symptomatic after having already received brief crisis-oriented psychotherapy. This approach is in line with the deliberate attempt by military professionals to avoid medicalizing stress-related symptoms and to adhere to a strategy of immediacy, proximity, and positive expectancy.

Prior to receiving medication for stress-related symptoms, the war zone survivor should have a thorough psychiatric and medical examination, with special emphasis on medical disorders that can manifest with psychiatric symptoms (e.g., subdural hematoma, hyperthyroidism), potential psychiatric disorders (e.g., acute stress disorder, depression, psychotic disorders, panic disorder), use of alcohol and substances of abuse, use of prescribed and over-the-counter medication, and possible drug allergies. It is important to assess the full range of potential psychiatric disorders, and not just PTSD, since many symptomatic soldiers will be at an age when first episodes of schizophrenia, mania, depression, and panic disorder are often seen.

In some cases a clinician may need to prescribe psychotropic medications even before completing the medical or psychiatric examination. The acute use of medications may be necessary when the patient is dangerous, extremely agitated, or psychotic. In such circumstances the patient should be taken to an emergency room; short acting benzodiazepines (e.g., lorazepam) or high potency neuroleptics (e.g., Haldol) with minimal sedative, anticholinergic, and orthostatic side effects may prove effective. Atypical neuroleptics (e.g., risperidone) may also be useful for treating aggression.

When a decision has been made to use medication for acute stress reactions, rational choices may include benzodiazepines, antiadrenergics, or antidepressants. Shortly after traumatic exposure, the brief prescription of benzodiazepines (4 days or less) has been shown to reduce extreme arousal and anxiety and to improve sleep. However, early and prolonged use of benzodiazepines is contraindicated, since benzodiazepine use for two weeks or longer has actually has been associated with a higher rate of subsequent PTSD.

Although antiadrenergic agents including clonidine, guanfacine, prazosin, and propranolol have been recommended (primarily through open non-placebo controlled treatment trials) for the

treatment of hyperarousal, irritable aggression, intrusive memories, nightmares, and insomnia in survivors with chronic PTSD, there is only suggestive preliminary evidence of their efficacy as an acute treatment. Of importance, antiadrenergic agents should be prescribed judiciously for trauma survivors with cardiovascular disease due to potential hypotensive effects and these agents should also be tapered, rather than discontinued abruptly, in order to avoid rebound hypertension. Further, because antiadrenergic agents might interfere with counterregulatory hormone responses to hypoglycemia, they should not be prescribed to survivors with diabetes.

Finally, the use of antidepressants may make sense within four weeks of war, particularly when trauma-related depressive symptoms are prominent and debilitating. To date, there has been one published report on the use of antidepressants for the treatment of Acute Stress Disorder. Recently-traumatized children meeting criteria for Acute Stress Disorder, who were treated with imipramine for two weeks, experienced significantly greater symptom reduction than children who were prescribed chloral hydrate.

Pharmacologic treatment of posttraumatic stress disorder. Pharmacotherapy is rarely used as a stand-alone treatment for PTSD and is usually combined with psychological treatment. The following text briefly presents recommendations for the pharmaco-therapeutic treatment of PTSD, and then the article by Friedman, Donnelly, and Mellman (2003) in Appendix H provides more detailed information. Findings from subsequent large-scale trials with paroxetine have demonstrated that SSRI treatment is clearly effective both for men in general and for combat veterans suffering with PTSD.

We recommend SSRIs as first line medications for PTSD pharmacotherapy in men and women with military-related PTSD. SSRIs appear to be effective for all three PTSD symptom clusters in both men and women who have experienced a variety of severe traumas and they are also effective in treating a variety of co-morbid psychiatric disorders, such as major depression and panic disorder, which are commonly seen in individuals suffering with PTSD. Additionally, the side effect profile with SSRIs is relatively benign (compared to most psychotropic medications) although arousal and insomnia may be experienced early on for some patients with PTSD.

Second line medications include nefazadone, TCAs, and MAOIs. Evidence favoring the use of these agents is not as compelling as for SSRIs because many fewer subjects have been tested at this point. The best evidence from open trials supports the use of nefazadone, which like SSRIs promotes serotonergic actions and is less likely than SSRIs to cause insomnia or sexual dysfunction. Trazadone, which has limited efficacy as a stand-alone treatment, has proven very useful as augmentation therapy with SSRIs; its sedating properties make it a useful bedtime medication that can antagonize SSRI-induced insomnia. Despite some favorable evidence of the efficacy of MAOIs, these compounds have received little experimental attention since 1990. Venlafaxine and buproprion cannot be recommended because they have not been tested systematically in clinical trials.

There is a strong rationale from laboratory research to consider antiadrenergic agents. Iit is hoped that more extensive testing will establish their usefulness for PTSD patients. The best research on this class of agents has focused on prazosin, which has produced marked reduction in traumatic nightmares, improved sleep, and global improvement in veterans with PTSD. Hypotension and sedation need to be monitored. Patients should not be abruptly discontinued from antiadrenergics.

Despite suggestive theoretical considerations and clinical findings, there is only a small amount of evidence to support the use of carbamazepine or valproate with PTSD patients. Further, the complexities of clinical management with these effective anticonvulsants have shifted current attention to newer agents (e.g., gabapentin, lamotrigine, and topirimate), which have yet to be tested systematically with PTSD patients.

Benzodiazepines cannot be recommended for patients with PTSD. They do not appear to have efficacy against core PTSD patients. No studies have demonstrated efficacy for PTSD-specific symptoms.

Conventional antipsychotics cannot be recommended for PTSD patients. Preliminary results suggest, however, that atypical antipsychotics may be useful, especially to augment treatment with first or second line medications, especially for patients with intense hypervigilance or paranoia, agitation, dissociation, or brief psychotic reactions associated with their PTSD. As for side effects, all atypicals may produce weight gain and olanzapine treatment has been linked to the onset of Type II diabetes mellitus.

General guidelines. Pharmacotherapy should be initiated with SSRI agents. Patients who cannot tolerate SSRIs or who show no improvement might benefit from nefazadone, MAOIs, or TCAs.

For patients who exhibit a partial response to SSRIs, one should consider continuation or augmentation. A recent trial with sertraline showed that approximately half of all patients who failed to exhibit a successful clinical response after 12 weeks of sertraline treatment, did respond when SSRI treatment was extended for another 24 weeks. Practically speaking, clinicians and patients usually will be reluctant to stick with an ineffective medication for 36 weeks, as in this experiment. Therefore, augmentation strategies seem to make sense. Here are a few suggestions based on clinical experience and pharmacological "guesstimates," rather than on hard evidence:

- Excessively aroused, hyperreactive, or dissociating patients might be helped by augmentation with an antiadrenergic agent;
- Labile, impulsive, and/or aggressive patients might benefit from augmentation with an anticonvulsant;
- Fearful, hypervigilant, paranoid, and psychotic patients might benefit from an atypical antipsychotic.

Integrating Iraq War Soldiers into Existing Specialized PTSD Services

Iraq War service members with stress-related problems may need to be integrated into existing VA PTSD Residential Rehabilitation Programs or other VA mental health programs. Approaches to this integration of psychiatric evacuees will vary and each receiving site will need to determine its own "best fit" model for provision of services and integration of veterans. At the National Center's PTSD Residential Rehabilitation Program in the VA Palo Alto Health Care System, it is anticipated that Iraq War patients will generally be integrated with the rest of the milieu (e.g., for community meetings, affect management classes, conflict resolution, communication skills training), with the exception of identified treatment components. The latter elements of treatment, in which Iraq War veterans will work together, will include process, case management, and acute stress/PTSD education groups (and, if delivered in groups, exposure therapy, cognitive restructuring, and

family/couples counseling). The thoughtful mixing of returning veterans with veterans from other wars/conflicts is likely, in general, to enhance the treatment experience of both groups.

Practitioner Issues

Working with Iraq War veterans affected by war zone trauma is likely to be emotionally difficult for therapists. It is likely to bring up many feelings and concerns - reactions to stories of death and great suffering, judgments about the morality of the war, reactions to patients who have killed, feelings of personal vulnerability, feelings of therapeutic inadequacy, perceptions of a lack of preparation for acute care - that may affect ability to listen empathically to the patient and maintain the therapeutic relationship (Sonnenberg, 1996). Koshes (1996) suggested that those at greatest risk for strong personal reactions might be young, inexperienced staff who are close in age to patients and more likely to identify with them, and technicians or paraprofessional workers who may have less formal education about the challenges associated with treating these patients but who actually spend the most time with patients. Regardless of degree of experience, all mental health workers must monitor themselves and practice active self-care, and managers must ensure that training, support, and supervision are part of the environment in which care is offered.

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V. Treatment of Medical Casualty Evacuees

Josef I. Ruzek, Ph.D. and Harold Kudler, M.D.

Men and women evacuated from the war zone due to physical injury are at higher-risk than other soldiers for development of PTSD and other trauma-related problems. If the VA serves as a care facility for Iraq War medical casualties, it will be important that clinical attention be given not just to their physical recovery and health, but to their mental health needs. Failure to do so may be to lose a significant and unique opportunity for early intervention to prevent development of more chronic emotional and behavioral problems. In this section of the *Iraq War Clinician Guide* we outline some considerations related to the integration of mental health care with physical care of recently evacuated Iraq War veterans. (See also Chapter IV for general treatment considerations).

This kind of activity represents a challenge for VA mental health professionals. While VA PTSD, behavioral medicine, and other mental health practitioners are familiar with delivery of traumatic stress assessment and treatment to help-seeking veterans with chronic PTSD or general health problems, they are less likely to have delivered such services to individuals who have been injured during very recent exposure to traumas of war. More generally, focus on treatment of physical problems is often accompanied by a strong desire on the part of both patient and provider to avoid discussing emotional issues (Scurfield & Tice, 1991).

Offering Comprehensive Care

Traumatic stress-related interventions should be presented as part of *routine* care given to all patients, and framed as a component of a comprehensive response to the needs of the veteran, in which the whole person is treated. Stress-related education will be helpful for all patients, including those not showing traumatic stress reactions, because health problems inevitably bring stress and challenges in coping.

Most medical casualties will not be seeking mental health care. Many can be expected to be reluctant to acknowledge their emotional distress and some will be concerned that a mental health diagnosis (e.g., PTSD) in their medical record may harm their chances of future promotion. Therefore, clinicians need to minimize mental health jargon, avoid pathologizing common stress reactions, and be thoughtful about assignment of DSM-IV diagnoses.

Helping Services

In civilian work with patients receiving hospital care for traumatic injury, mental health services are not routinely delivered. However, the VA service delivery context has a number of potential advantages compared with other post-trauma intervention settings (e.g., disaster mental health services, hospital trauma centers). These advantages are based on the availability of experienced mental health professionals with expertise in traumatic stress care, and include opportunities for: routine screening, routine patient education, careful individual assessment, psychiatric consultation, individualized mental health treatment with multi-session contact, family involvement in care, and mobilization of group support from other hospitalized Iraq War veterans and veterans of other wars. In other words, there is the opportunity to deliver a level of intensity of care that is matched to the veteran, rather than relying on a one-size-fits-all, brief intervention.

Routine screening. Proactive care of returning veterans will require that they be routinely screened for post-traumatic distress and mental health problems. In the absence of direct enquiry about distress and symptoms, it is likely that many individuals with significant problems will be missed. Iraq War veterans, like other populations, cannot be expected to spontaneously disclose their distressing war experiences and associated problems. Several paper-and-pencil screens are available (see Assessment and Primary Care sections). It is important for mental health professionals to become a routine presence on medical and surgical settings. Rather than appear with a series of medical questions, it is more helpful to present as a member of the team who would like to be helpful and who has time to listen, answer questions, or help with a problem. This approach, sometimes referred to as "therapy by walking around," is consistent with the importance of not pathologizing reactions to overwhelming stress. It fosters trust and openness and still offers opportunities, if needed, for further assessment, triage, and treatment.

Routine patient education. A good way to present services is to frame them as patient education in stress management. Patient education will offer a primary means of initiating proactive mental health care. Patients may differ greatly in their receptiveness to such discussions, and staff must remain sensitive to the state of readiness of each individual patient, and vary their approach and degree of discussion accordingly. However, it is important to initiate some discussion; failure to do so may encourage emotional avoidance and miss a significant and perhaps unique opportunity to offer preventive care. Group education "classes" can be helpful in making such discussions more acceptable to patients. They also provide opportunities for more receptive patients to model open communication and disclosure of personal stress reactions, thoughts, and feelings.

Assessment. Administration of screening tools and patient education activities offer chances to determine which veterans will benefit from a more detailed assessment. Suggestions for the conduct of individual assessment are outlined in the Assessment section of this Guide, and the Instrumentation section draws attention to some useful assessment tools. In assessing stressors experienced in the war zone, clinicians should also take care to actively inquire about experiences associated with medical care and evacuation. Those being evacuated are often exposed to the suffering and death of other wounded vets. Preliminary work in the civilian sector suggests that the majority of injured patients values the opportunity to undergo a comprehensive psychosocial assessment during hospitalization, despite any inconvenience or distress caused by the process (Ruzek & Zatzick, 2000).

Psychiatric consultation. In addition to their role in providing the various helping services listed in this section, consultation with psychiatry is especially important given the wide range of possible patient presentations and possible usefulness of psychotropic medications. In addition to ASD/PTSD, depression, and substance abuse, a large variety of mental health disorders (including other anxiety disorders, adjustment disorders, somatoform disorders, psychosomatic disorders, conversion disorders, dissociative amnesia disorder, and dissociative identity disorder) may be associated with exposure to combat and other war zone stressors. Medications may be useful in treating traumatic stress symptoms, associated disorders, and associated problems (e.g., sleep, nightmares). Mental health staff need to partner with Med/Surg nursing staff because these are the people who will know which patients are sleeping well, crying out in their dreams, having problems before or after family meetings, etc. Chaplain service is another valuable partner as they are a regular presence on Med/Surg units and because military personnel are used to sharing stress-related issues with military chaplains. It is essential to promote a team approach in which mental health can be a full partner in the response to medical and/or surgical patients.

Individualized treatment. The Treatment section of this Guide outlines a variety of considerations related to delivery of services. If treatments involving exploration of traumatic experiences, cognitive restructuring, or skills training are delivered, they should include multiple treatment sessions. Where patients report symptoms consistent with a diagnosis of Acute Stress Disorder or PTSD, cognitive-behavioral treatments, comprised of education, breathing training/relaxation, imaginal and *in vivo* exposure, and cognitive restructuring, should be considered, given the evidence for their effectiveness with other trauma populations with ASD (Bryant, Harvey, Dang, Sackville, & Basten, 1998; Bryant, Sackville, Dang, Moulds, & Guthrie, 1999) and PTSD (e.g., Rothbaum, Meadows, Resick, & Foy, 2000). Existing alcohol and drug problems should be treated, and brief preventive alcohol interventions should be routinely administered to all other veterans who consume alcohol, given the strong association between PTSD and alcohol problems (Ouimette & Brown, 2002). In the civilian sector, a brief alcohol intervention provided to heavy drinking hospital trauma center patients resulted in significant decreases in drinking levels (Gentilello et al., 1999).

In addition to such treatment, mental health practitioners can help injured and ill returnees cope more effectively with some of the specific challenges associated with their medical condition. They can help patients prepare for medical procedures (e.g., surgery) that are often experienced as trauma reminders. Such help may be especially important with sexual assault survivors, because health care examinations may present powerful triggers for traumatic stress reactions. For example, Resnick, Acierno, Holmes, Kilpatrick, and Jager (1999) developed a 17-minute educational videotape to prepare sexually-assaulted women to undergo forensic rape examinations. Shown to women immediately before the exam, the video provided information about exam procedures, showed model victims calmly completing the procedures, and instructed viewers in self-directed exposure exercises, ways of reducing avoidance, and ways of improving mood and lowering anxiety. Women viewing the video had significantly lower post-exam distress ratings and anxiety symptoms than non-viewers. Mental health professionals can also teach ways of managing pain, an important goal given that post-trauma pain has sometimes been found to predict PTSD. Generally, illness and the patient role are often associated with perceptions of lack of control, and providers need to find ways to involve their patients as active participants in their medical care, by giving information about medical conditions and procedures and maximizing patient choice wherever possible.

Family involvement in care. One of the primary concerns and tasks facing the veteran is reconnection with the family. This may present some challenges for those evacuated due to injury or illness. Veterans and family members alike may feel awkward and unsure of how to talk to each other about what has happened. Scurfield and Tice (1991) identified a variety of family concerns and difficulties, including that families may feel embarrassment or shame about the emotional "breakdown" of the veteran, anger at the veteran for abandoning the family or jeopardizing its financial security, or guilt about having encouraged or allowed the veteran to go to war. Some hospitalized patients may not wish to have immediate contact with their families. Whatever the situation, mental health professionals can provide a valuable service in helping prepare patients and families alike for their initial reunion, and helping them address their emerging challenges. (See Chapter IV for a more detailed discussion of family involvement in treatment).

Group support. Groups are likely to be helpful for and well received by Iraq War veterans. They may create a forum in which stress reactions can be normalized, education delivered, support given and received, and skills practiced. Groups can be expected to foster a sense of belonging to

counter the feelings of loneliness and isolation so often experienced by returning veterans (Wain & Jaccard, 1996). Providers may wish to consider integrating Iraq War soldiers into existing specialized PTSD group services, to help the younger veterans connect with veterans of other conflicts, and to provide them with a valuable perspective on their problems.

Support for health care providers. In addition to consulting with the medical care team and providing direct education, assessment, treatment, and group therapy services, mental health workers can offer a valuable service in training, and providing structured emotional support for health care workers serving casualties. Experience in military medical programs and in post-disaster situations such as the aftermath of the attacks of September 11th clearly point to the importance of taking good care of your staff. This is primarily accomplished by making sure that they take good care of themselves. Extended tours of duty are common in emergency situations but individual staff can only function under such conditions for so long. It is important to cultivate a professional culture in which people take regular breaks, get reasonable sleep and food, and have regular contact with their own colleagues, friends and family in order to support their continued work with casualties and their families.

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VI. Treating the Traumatized Amputee

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Although injuries resulting from war produce many turbulent and confused emotions, the needs of those who suffer amputations are unique. Amputation or blindness results in a loss of body function and is an insult to the patient's psychological sense of body integrity and competence. In addition to the loss of body parts, service members often must endure other injuries, as well as psychological traumas. Fear of persistent threats, anxiety related to military career curtailment, and reactions to other past overwhelming experiences may all contribute to the complex turmoil with which they struggle. Any of the above by itself is enough to overwhelm one's psychological equilibrium. Combined with the loss of a limb, eye, or other body part, additional trauma can be exceptionally devastating.

Caring for the amputee patient requires a biopsychosocial approach. The initial clinical focus is rightly on medical stabilization. Follow-on rehabilitation focuses on restoring the individual to the greatest physical, psychological, social and economic functioning possible (Haslam et al., 1960; Mendelson, Burech, Phillips, & Kappel, 1986). A successful team approach to rehabilitation includes the patient, physicians, nurses, therapists, and family members working together to create short and long term goals for the patient's rehabilitation**.** As the medical injury stabilizes, attention must shift to ensure the psychological well being of the patient and the support of his/her confident reintegration into society.

This chapter focuses on the unique psychological needs of the amputee patient. A brief review of the literature on treatment of amputee patients is provided. As members of the Walter Reed Army Medical Center Psychiatry Consultation Liaison Service (WRAMC PCLS) at the military medical center receiving the majority of amputees from Operation Iraqi Freedom, we provide a description of the amputee population treated and the therapeutic practices that have appeared to be most successfully implemented.

A Brief Review of the Literature Regarding Treatment of Amputees

The literature reports a variety of emotions that occur in the amputee after the initial trauma and throughout the rehabilitation process. Depression, anxiety, resentment, anger, fear, helplessness, hopelessness, as well as loss of body integrity have all been described in this population (Brown, 1990; Caine, 1973; Olson, 2002). Amputees may also develop grief responses (Olson, 2002), relationship difficulties (Mendelson et al., 1986), body image problems (Ronaldson, 2000), or phantom limb pain (Murray & Fox, 2002). Changes in physical appearance may complicate interpersonal relationships (Hanna, 1996) or create discomfort with sexual intimacy (Ronaldson, 2002). Murray and Fox (2002) reported that patients with fewer emotional problems and good social support had better outcomes in adjusting to prostheses. Therefore, treatment of the amputee's psychiatric symptoms may also help restore function.

Brown (1990) highlighted the positive impact of social support during the rehabilitation process. He discussed the benefit of directing psychological interventions toward helping the amputee

regain independence and reinforcing his/her strengths. Staff from surgical, medical, nursing, and psychiatry services as well as physical and occupational therapists play an important role in the psychological rehabilitation of the amputee. Mendelson et al. (1986) described how all staff members may need to be prepared for the sometimes draining job of providing emotional support to amputee patients. He stressed the importance of medical staff recognizing that patients who are highly anxious and fearful prior to surgery are more likely to be angry and resentful toward their surgeon later on. The medical staff may be able to alleviate some of this anxiety by taking the time to listen and validate patient fears (Mendelson et al., 1986).

Gerhards, Florin, and Theodore (1984) emphasized the necessity of establishing a safe place in which patients can discuss their anxieties and concerns. These authors proposed that allowing the patient to discuss personal problems in confidence possibly will facilitate positive rehabilitation outcomes. Therapeutic groups may serve this purpose well. Such amputee groups provide patients with social support as well as a safe environment in which to discuss the details surrounding their amputation and any perceived problems with rehabilitation. Patients are able to gain support from other patients in similar situations. Fisher and Samelson (1971) found that holding group discussions for amputees facilitated patient's acceptance of the amputation. Caine (1973) reported similar findings. The WRAMC PCLS service has published reports regarding the benefit of group therapy with injured military members (to include some amputees) during Operation Desert Storm (Wain & Jacaard, 1996), following the embassy bombing in Nairobi (Wain & Stasinos, 1999), and during the current conflicts in Iraq and Afghanistan (Wain, Grammer, Stasinos et al., 2004).

Depending upon the particular psychiatric symptoms or diagnoses that present as a result of an amputation trauma, a variety of specific treatments may be appropriate. The authors will not review this wide-ranging literature. Of course, the treatments of choice for patients suffering from mood or anxiety disorders (the more likely diagnoses in amputee patients) include pharmacotherapy and psychotherapy. Pharmacological treatment of insomnia is also indicated. Those patients specifically suffering from PTSD may additionally benefit from cognitive behavioral approaches that include some elements of exposure as well as cognitive restructuring.

The WRAMC Amputee Population

Since the onset of Operation Iraqi Freedom more than 75 amputee patients have been treated at WRAMC. This number reflects approximately one-quarter of the total returning battle-injured patients. Within this amputee group, just over half were lower limb amputations (either unilateral or bilateral above or below knee amputations). Sixteen percent were categorized as eye injuries or enucleations that resulted in blindness. The remainder related to arm, hand, finger, or foot amputations. The psychological impact of the amputation varied, depending upon the loss of body part and the resultant functional loss, the disfigurement, the impact on sense of body integrity and the psychological resilience of the individual.

WRAMC PCLS Approach to the Amputee Patient

Members of the WRAMC PCLS team developed a plan of action prior to the arrival of battle casualties. As a well-known and well-integrated clinical service among medical and surgical teams in the hospital, WRAMC PCLS was well situated to play a major role in the medical response to all battle casualties. The plan was informed by a review of the literature and by prior team member

experiences in treating injured patients in previous wars (Wain & Jacaard, 1996), as well as the recent attack on the Pentagon (Wain et al., 2002).

Preventive Medical Psychiatry (PMP). The PCLS team members came to appreciate their need to be immediately and universally available to returning injured patients while team members minimized perceived stigma related to psychiatric consultation. This understanding significantly shaped the response plan. The team determined that these requirements would be best accomplished by redefining WRAMC PCLS as an intrinsic part of the trauma team. All injured service members, including amputees, were always seen. There was no requirement for traditional consultation from the primary treatment team. The medical and surgical teams valued the regular and intensive involvement of WRAMC PCLS. Because patients were told that members of the PCLS service routinely saw all those who were injured, little resistance developed.

In an additional effort to decrease patient stigma PCLS renamed itself (for the purposes of trauma consultation) as the Preventive Medical Psychiatry Service. All chart notes were written under the title of PMP and professional cards were distributed to the patients with the same name. The purpose of this renaming was to communicate to patients that mental health clinicians were available to help them with what were explained as normal, expected responses to the trauma, rather than pathological states. The use of the name PMP appeared to debunk myths among patients about psychiatry as an intrusive and "labeling" specialty, facilitating the mental health clinician being seen more as an ally and an advocate.

Therapeutic Intervention for the Prevention of Psychiatric Stress Disorders (TIPPS). Wain, Grammer, and DeBoer (2004) described their program Therapeutic Intervention for the Prevention of Psychiatric Stress Disorders. The fundamental tenet of TIPPS is its emphasis on normalizing psychological experiences, supporting healthy defenses, and monitoring for the development of psychiatric disorders both while in the hospital as well as upon discharge. While primary prevention was a goal of implementation, TIPPS also focuses on secondary and tertiary prevention models through post-hospitalization identification of at-risk or symptomatic service members and their referral for intervention.

Upon initial introduction to the patient, the clinician psychiatrically screens all patients in a safe and private environment. The interview is conducted in a noninvasive and nonconfrontational manner. The patient verbally recounts the trauma experiences with the ultimate goal of consciously weaving and integrating the experience into a cohesive narrative. The patient is allowed to relate memories, thoughts and feelings about the trauma, at his/her own pace. Early on, the clinician supports the patient's defensive style and normalizes these responses and cognitions. An example of a comment supporting the patient's defensive style might be: "It is amazing that despite how hurt you were and how much pain you were in you still were able to climb out from under the rubble to get help." An example of a normalizing comment is: "It is hard to imagine that anyone could not feel scared given what you went through." This process is regularly repeated in individual and group sessions. The patient's effective use of defenses and healthy behavioral reactions are underlined and reinforced as appropriate.

Applying TIPPS principles, the mental health clinician must allow patients to maintain appropriate defenses while offering them sufficient hope if their treatment is to be effective. Attacking defenses, as in breaking through normal denial, will likely cause the patient to view the clinician as caustic and intrusive rather than as helpful. During the initial stages of treatment it is vital to avoid

confrontation and irrelevant insights. Focusing initially on concrete discussions related to the physical injuries, treatments and the healing process appears to be beneficial.

The Therapeutic Alliance and Therapeutic Interactions

The therapeutic alliance with the patient is key to successful treatment response. Anecdotally, clinicians observe that the better the relationship between the PMP clinician and the patient, the more helpful the intervention seems to be. The importance of developing a positive therapeutic relationship may be even greater in medical-surgical patients given their natural tendency to be skeptical of psychiatric involvement. As a good relationship develops, the patient begins to see the clinician more as an advocate who can be helpful. PMP team members have suggested that patients who develop good therapeutic relationships with providers are more likely to seek assistance both during hospitalization and after discharge when problems arise. This undoubtedly would contribute to the success of any secondary or tertiary illness prevention plan.

Following the development of good therapeutic relationships with their assigned clinicians, patients are then asked to recount their trauma in greater detail. They continue to be positively reinforced for their participation, their ability to describe their experiences and for the healthy behavioral choices that were made both during and after the trauma. As the patient is able to tolerate greater interest in and discussion of the traumatic events, he/she is helped to cognitively reframe distortions. Emotional conflicts are acknowledged in a supportive and compassionate manner; with the particular goal of helping build a more reality based appreciation of the traumatic events. All therapeutic involvement encourages the patient's positive acceptance of rehabilitation as well as an appreciation of his/her clinical progress.

As the treatment continues, therapeutic issues may arise in a number of areas. Amputees often have questions about whether and how relationships with friends and family members will change. Anger resulting from a variety of sources is not uncommon and will be expressed in many different forms. Clinicians must be able to tolerate and accept patient anger, recognizing it as a normal expression. Patients must be allowed to find effective and healthy ways of communicating their own frustrations so as to have their needs met, not letting these frustrations interfere with the treatment process.

Later in treatment amputees may become more comfortable in addressing fears about the impact of the amputation on sexual functioning. Such worries are particularly understandable given that most of these amputees are young and many have yet to establish long-term intimate relationships. Of course every amputee faces the task of integrating a new sense of his or her body and its wholeness. The lack of confidence in body image, either due to amputation or disfigurement, is likely to have an impact on the amputee's sense of attractiveness and possibly his/her sense of sexual competence. The ability to address these issues openly and honestly reassures these patients that such concerns can be discussed and that valuable information is available.

Mental health liaison with orthopedics, physical medicine, and occupational therapy becomes increasingly crucial as amputees work through rehabilitation, regain strength, and are fitted for prostheses. Liaison work with prosthetists focuses on helping amputees effectively accept and integrate the prosthesis into their new body image. For those who harbor resentment and anger about amputations, the transition to effective prosthetic use may be more difficult. Members of the PMP team have been impressed with the emotional resilience of many amputees who actively

incorporate prosthetic use. This is a healthy response in which patients put themselves back together, both physically and psychologically. Many such motivated service members have demonstrated incredible physical feats using their prostheses in large part due to their psychological striving for health. Nevertheless, the therapeutic road may not always be smooth. Having regular contact with amputees allows them to share their concerns, both individually and in groups. Patients develop strong attachments to and reliances on their new artificial limbs, sometimes worrying about breaking them. Practically speaking, just having the contact numbers of the prosthetists, should any problems arise, generally decreases their apprehension and separation anxiety when they leave the hospital.

Working with Families

No amputee patient can be effectively treated without understanding and addressing the needs of the patient's family. Loved ones understandably want to spend time with their injured family member and some families remain in hospital rooms throughout the day, evenings, and even nights. WRAMC nurses have recognized the importance of family member involvement and work to incorporate families into the overall treatment plan. Family members who have feelings of anger or frustration related to the injury may direct those emotions toward the treatment team. Under such circumstances its important to recognize and address such emotions in ways that the feelings do not become destructive to the effective treatment of the patient. WRAMC PCLS team members become actively involved to assist family members and health care providers in addressing any conflicts and finding effective resolutions. All families have a PCLS team member assigned to provide support and address any concerns that might arise during the hospitalization or after discharge.

As the amputee program has evolved it has become clearer that families are not always prepared to meet their loved ones and face the injuries of the amputee when he or she returns stateside. This is particularly true of the children of the injured. In the flurry of activity involved in treating amputee patients, the vulnerability of these smaller and more psychologically fragile family members can be missed. Just as in other upsetting or frightening circumstances, adults should prepare children for what they will witness and observe. Oftentimes, children's fantasies about injuries may be worse than reality. Discussing the nature of the injury, what the hospital room will look like, what medical equipment is present, what bandages, tubes and other paraphernalia will be attached to the patient can all help children understand and integrate the experience in a less traumatic fashion. Many amputee or otherwise disfigured patients recognize their potential impact on their own children and are interested in discussing the best ways to interact with these younger family members, particularly at the first meeting. Mental health clinicians, in conjunction with nurses and other health care providers, should discuss these concerns openly and build practical plans with the amputees to avoid discomfort on the part of either the patient or the small child.

Other Modalities of Treatment

Other clinical treatments are integrated into the therapeutic plan, as appropriate. PCLS team members have found the use of hypnosis to be extremely effective. Clinicians teach patients to use hypnotic-relaxation techniques so that they might be able to control their emotional responses and recede into quiet contemplative states when desired. Patients are taught that such approaches can be used to modulate their emotional reactions to the trauma, moving closer at times and more distant at other times. Such control facilitates eventual integration of the experience and promotes

the overall rehabilitation process. Teaching self hypnotic-relaxation techniques may also help the patient sleep, decrease phantom limb sensations and reframe concerns while they are "working through" the trauma. Amputees can also use imagery as a way of visualizing success in their rehabilitation. Wain (1979) described a formal procedure for helping patients learn to use their individual self-hypnotic capability.

Psychoeducational approaches are extremely valuable in helping patients identify the emotional responses that they are experiencing and to recognize warning signs that indicate the need for more rapid or intensive treatment. While TIPPS works to normalize rather than pathologize emotional responses and symptoms, certain symptoms must be watched for. Patients are instructed to identify and report problems with sleep, to include difficulties with sleep onset, nighttime awakenings and nightmares. Similarly, while initial anxiety and depressive symptoms are common and expected after a traumatic amputation, patients are instructed to watch out for continued or worsening symptoms. They should seek out additional help if these occur.

Pharmacotherapy is a major modality of care in treating trauma patients. WRAMC PCLS clinicians have identified the benefit of low dose quetiapine (25-50 mg) as an excellent sedative hypnotic that both reduces sleep latency and drastically diminished nightmares. When used, no morning sedation was noted. As mentioned previously, standard psychopharmacotherapy is indicated when treating diagnosed illnesses. (Please see Chapter IV.)

Although uncommon, amputees can express suicidal ideation as a result of adjustment problems related to the amputation or actual depressive disorders. Of course, when identified, such symptoms need to be carefully evaluated. Risk of self-injury must be determined and appropriate treatments implemented, when necessary.

Follow up After Hospitalization

Amputees receiving these services largely describe satisfaction with the care they receive. They value and appreciate the interest of their care providers and they develop healthy and lasting therapeutic relationships with WRAMC PCLS team members. While TIPPS was initially designed as a primary prevention endeavor, no data have been collected to date that firmly support the conclusion that these interventions prevent the future development of psychiatric illness. TIPPS impact on secondary and tertiary prevention appears more certain. As part of the TIPPS program follow-up telephonic contact is made at three and six months after the initial assessment. Because therapeutic relationships were solidified during the hospitalization, service members are generally comfortable with post-hospitalization contact and are often grateful for the continued interest on the part of the clinical staff. Injured service members suffering from continued medical or psychiatric problems are identified. They are encouraged to obtain appropriate resources and follow up treatment. Assistance is provided as necessary. The importance of tracking these injured who are at-risk and case managing their care cannot be overemphasized.

Medical Discharge From Military Service

A discussion regarding therapeutic approaches to amputee patients is not complete without some attention given to medical discharge proceedings. While some amputees successfully remain on active duty after rehabilitation, many more undergo medical discharge through the Medical Evaluation Board process. Medically discharged service members obtain medical retirement pay

and receive disability allowances through the Department of Veterans Affairs (VA) system. Questions related to military retirement, monetary compensation and future military benefits are understandably concerning to many of these military patients. Different rules apply depending upon time in grade and upon the component to which the service member is assigned (e.g., active duty, reserve, or National Guard).

Some service members appeal medical board recommendations for military discharge and they request to stay on active duty. For some, patriotism and their military identities drive their motivation to remain in service. They don't want to give up their uniform, positions or benefits for their family. Improvements in prosthetic devices have facilitated this process by allowing many more amputees to continue to function effectively in the military service, albeit not in a combat role. WRAMC PCLS clinicians help amputees develop realistic goals for their futures that may or may not include continuation on active duty status. Those military patients who have questions related to the medical board process, disability or other retirement benefits are referred to other appropriate resources.

Conclusions

Taking care of the amputee patient is a challenging, but rewarding process. The WRAMC PCLS service has effectively incorporated the principles of PMP and TIPPS in successfully supporting and treating service members who have been medically returned from Operation Iraqi Freedom. Amputee patients, similar to other trauma patients, benefit from active engagement by mental health clinicians who assist them in integrating their traumatic experiences and who monitor the development of psychiatric symptoms or disorders. Although the primary preventive effect of these approaches remains unclear the process of post-discharge tracking of patients seems to be an effective secondary and tertiary preventive approach. Such post-discharge follow up identifies those patients who develop more serious symptoms or disorders. They then can be referred for more intensive treatments. Therapeutic considerations unique to the amputee patient include the psychological impact of the trauma on body integrity, apprehension about the impact of the amputation on future functioning and the development of intimate relationships, the effective incorporation and use of the prosthetic device, and concerns about medical discharge, disability and future benefits. The mental health team has a responsibility to support amputees and their families as they address all these issues, as well as any others that might develop.

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VII. PTSD in Iraq War Veterans: Implications for Primary Care

Annabel Prins, Ph.D., Rachel Kimerling, Ph.D., and Gregory Leskin, Ph.D.

During and after the Iraq War, primary care providers may notice changes in their patient population. There may be an increased number of veterans or active duty military personnel returning from the war. There also may be increased contact with family members of active duty personnel, including family members who have lost a loved one in the war or family members of individuals missing in action or taken prisoner of war. In addition, there may be increased distress in veterans of other wars, conflicts, and peacekeeping missions

All of these patients may be experiencing symptoms of posttraumatic stress disorder (PTSD):

- Veterans and active duty military personnel may have witnessed or participated in frightening and upsetting aspects of combat.
- Veterans and active duty military personnel may have experienced military-related sexual trauma during their service.
- Family members may suffer traumatic stress by hearing about frightening or upsetting events that happened to loved-ones, or from the loss or fears of loss related to family members missing or deceased.
- Other veterans may be reminded of frightening and upsetting experiences from past wars, which can exacerbate traumatic stress responses.

These types of stress reactions often lead people to increase their medical utilization. Because far fewer people experiencing traumatic stress reactions seek mental health services, primary care providers are the health professionals with whom individuals with PTSD are most likely to come into contact.

What Do Primary Care Practitioners Need To Know About PTSD?

Patients want primary care providers to acknowledge their traumatic experiences and responses

- Over 90% of patients indicate that traumatic experiences and responses are important and relevant to their primary care.
- Over 90% of patients in VA primary care settings will have experienced at least one traumatic event in their life. Most will have experienced 4 or more.
- The relationship between trauma exposure and increased health care utilization appears to be mediated by the diagnosis of PTSD.
- Thus, primary care practitioners should be aware of the essential features of PTSD: re-experiencing symptoms (e.g., nightmares, intrusive thoughts), avoidance of trauma cues, numbing/ detachment from others, and hyperarousal (e.g., increased startle, hypervigilance).

PTSD can be detected in primary care settings

- The Primary Care PTSD (PC-PTSD) screen can be used to detect PTSD in primary care.
- Endorsement of any three items is associated with a diagnostic accuracy of .85 (sensitivity .78; specificity .87) and indicates the need for additional assessment.

PTSD can be effectively managed in primary care settings

By recognizing patients with PTSD and other trauma-related symptoms you can:

- Provide patients and their family members with educational materials that help them understand that their feelings are connected to the Iraq War and its consequences.
- Validate patients' distress, and help them know that their feelings are not unusual in these circumstances.
- When appropriate, initiate treatment for PTSD or mental health consultation.

PC-PTSD

In your life, have you had any experiences that were so frightening, horrible, or upsetting that, in the past month, you…..

1. Have had nightmares about it or thought about it when you did not want to?
2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
3. Were constantly on guard, watchful, or easily startled?
4. Felt numb or detached from others, activities, or your surroundings?

What Can Primary Care Providers Do For Their Patients?

Determine the patient's status in relationship to the war

By assessing the patient's status in relation to the war, primary care providers acknowledge the relevance and importance of this event. Example questions include:

- "Have you recently returned from the Persian Gulf? How has your adjustment been?"
- "Do you have family members or friends who are currently in the Persian Gulf? How are you dealing with their absence?"
- "How has the war in Iraq affected your functioning?"

Acknowledge the patient's struggles

Regardless of their specific relationship to the war, primary care providers should recognize and normalize distress associated with war. Example statements include:

- "I am so sorry that you are struggling with this."
- "I can appreciate how difficult this is for you."
- "You are not the only patient I have who is struggling with this."
- "It's not easy, is it?"

Assess for PTSD symptoms

The PC-PTSD can be used either as a self-report measure or through interview. It can be a standard part of a patient information form or introduced as follows:

- "I would like to know if you are experiencing any specific symptoms."
- "It is not uncommon for people to have certain types of reactions. I would like to know if…"

Be aware of how trauma may impact on medical care

The specific health problems associated with PTSD are varied and suggest multiple etiologies; neurobiological, psychological, and behavioral factors are likely explanations. Research has increasingly demonstrated that PTSD can lead to neurobiological dysregulation, altering the functioning of catecholamine, hypothalamic-pituitary-adrenocorticoid, endogenous opioid, thyroid, immune, and neurotransmitter systems.

- Exposure to traumatic stress is associated with increased health complaints, health service utilization, morbidity, and mortality.
- PTSD appears to be a key mechanism that accounts for the association between trauma and poor health.
- PTSD and exposure to traumatic experiences are associated with a variety of health-threatening behaviors, such as alcohol and drug use, risky sexual practices, and suicidal ideation and gestures.
- PTSD is associated with an increased number of both lifetime and current physical symptoms, and PTSD severity is positively related to self-reports of physical conditions.

Determine if and how trauma responses can be managed in PC

The delivery of mental health care is possible in the general or primary care setting. According to this approach, brief psychotherapeutic, psychoeducational, and pharmacological services are delivered as a "first line" intervention to primary care patients. If a patient fails to respond to this level of intervention, or obviously needs specialized treatment (e.g., presence of psychotic symptoms or severe dissociative symptoms), the patient is referred to mental health emergency, outpatient mental health intake coordinator, or PTSD program.

Procedures to follow if patient demonstrates PTSD symptoms during medical examination

Medical examinations or procedures may cause the patient to feel anxious or panicky. The following techniques may help in addressing trauma-related symptoms that arise in the medical setting:

- Speak in a calm, matter of fact voice.
- Reassure the patient that everything is okay.
- Remind the patient that they are in a safe place and their care and well being are a top priority.
- Explain medical procedures and check with the patient (e.g., "Are you ok?").
- Ask (or remind) the patient where he or she is right now.
- If the patient is experiencing flashbacks, remind him or her that they are in a doctor's office at a specific time in a specific place (grounding).
- Offer the patient a drink of water, an extra gown, or a warm or cold wash cloth for the face, anything that will make the patient feel more like his or her usual self.

Any assistance and sensitivity on the part of the primary care provider can help reinforce an effective and positive alliance with the patient.

Additional Resources

To learn more about screening and treatment for PTSD in primary care settings, additional educational materials are available at the following websites:

Post-Traumatic Stress Disorder: Implications for Primary Care Independent Study Course, Veterans Health Initiative: http://vaww.sites.lrn.va.gov/vhi (available through VA intranet only).

National Center for PTSD website: http://www.ncptsd.org/topics/health.html

National Institute for Mental Health information on PTSD: http://www.nimh.nih.gov/anxiety/ptsdmenu.cfm

VIII. Caring for the Clinicians Who Care for Traumatically Injured Patients

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The experiences of physically injured patients impact their surgeons, other physicians, therapists, nursing staff, and administrators. The intensity of caring for these patients may contribute to the treatment team's own stress and burnout. Enhancing the clinicians' understanding of how their feelings and perceptions contribute to their responses to trauma patients can decrease the amount of stress and burnout experienced by both clinician and patients. Clinicians' responses to their patients are often dependent upon the formers' experiences and coping styles.

Vicarious Traumatization

McCann and Pearlman (1990) acknowledged that clinicians who work with trauma victims may experience vicarious traumatization. Vicarious or secondary trauma is a countertransference reaction experienced by the clinician as a result of the victim's retelling of the trauma (Benedek, 1984). Clinicians working with trauma victims often experience a myriad of countertransferential feelings. Clinicians' responses to the trauma endured by their patients may affect therapeutic alliances and ultimately the effectiveness of the clinicians (Fischman, 1991; Lyon, 1993).

Clinicians may be affected by painful or disruptive psychological sequelae in the months or even years following their work with trauma victims. The affective reactions of therapists who worked with Holocaust survivors and their children included bystander's guilt, rage, grief and mourning, dread, horror, and inability to contain intense emotions (Danieli, 1984). Clinicians working with patients who have suffered the extreme trauma of torture may be more vulnerable to intense affective reactions themselves (Fischman, 1984; Fischman & Ross, 1990).

Riba and Reches (2002) conducted a study to understand experiences of nurses caring for victims of trauma. Nurse described being anxious and afraid of what they were going to see. Fears about not being able to perform their job or function properly were reported more often by younger nurses. Nurses described feelings of frustration and guilt, especially if their patient died. Nurses experienced restlessness, sleeplessness, and nightmares following the care of trauma patients.

In another study, nurses working with victims of a bombing reported sadness, grief, depression, anxiety, dread and horror, fear, rage, and shame (Collins, 2001). Nurses also reported difficulties initiating or maintaining sleep, problems with irritability/outbursts of anger, and difficulty concentrating. Interestingly, not only psychological symptoms evolve; nurses involved with trauma patients may present with somatic complaints such as persistent headaches, backache, and gastrointestinal distress (Collins, 2001; Lyon, 1993). In summary, trauma nurses may experience vicarious traumatization leading to such symptoms as depression and suicidal tendencies, panic attacks, and alcohol abuse. Others experienced post-traumatic stress disorder (Collins, 2001).

Alexander (1990) similarly suggested that other hospital staff working with trauma or disaster victims might become hidden victims (e.g., dietary, OT, PT, etc.). All of these reports emphasize that hospital administration must recognize the stress placed on the hospital staff who closely work with these victims and must also provide needed interventions and support to them.

Burnout

Taking care of trauma patients for long periods can take a toll on the staff, resulting in "burnout." Solite and Solite (2003) define burnout as "a state of physical, emotional, and mental exhaustion that results from intense involvement with people over long periods of time." Symptoms of burnout include feeling strained by having to work with people, increasing difficulty sustaining concentration and attention levels throughout prolonged periods of work, decreasing memory for work-related details, and reacting to challenges with increasing cognitive rigidity rather than with cognitive flexibility.

Among physicians, surgeons may be at the greatest risk of burnout. In a recent study (Michigan Medicine, 2002) graduates of the University of Michigan surgical residency programs were asked to rate their level of burnout. One third of the respondents reported "emotional exhaustion" indicating that they "had nothing left to give" and one sixth reported "depersonalization," meaning they distanced themselves from the experience of taking care of patients. Nursing staff is a group that interacts with trauma patients around the clock and may be more vulnerable than other clinician groups.

Strategies for Addressing Vicarious Traumatization at Burnout

The Walter Reed Army Medical Center (WRAMC) Psychiatry Consultation Liaison Service (PCLS) focuses on the following methods for preventing burnout:

- managing relationships
- maintaining collaboration and collegiality at work and intimate connections at home
- making regular adjustments in one's lifestyle
- living in harmony with ones innermost values
- managing one's attitude
- developing philosophies that foster hope and reasonable optimism about one's future.

A mental health consultant can facilitate the use of these methods. Tips for managing stress that can be shared with clinical staff include ensuring one's own safety, accepting support when offered, and making phone calls to speak with helpful family members or friends. These methods allow clinicians to distance themselves from the day-to-day emotionally taxing tasks of caring for trauma patients. Clinical staff should also be instructed to take time to seek enjoyment from outside activities; use deep breathing techniques, muscle contraction or other effective relaxation techniques; make good use of humor; avoid becoming absorbed in negative news; and use support services as available. Clinicians may also benefit by taking the opportunity to become more knowledgeable about other non-trauma care-related subjects, remembering to employ other previously successful coping styles, watching for signs of depression or anxiety in themselves and co-workers, and contacting local mental health resources for additional options, when necessary.

WRAMC PCLS has developed ongoing programs to provide support to the hospital staff. Attendance at nursing morning reports and shift changes has allowed PCLS staff members to provide encouragement and education to the nursing staff. Support groups or venting sessions worked initially in the beginning of Operation Iraqi Freedom. As nurses became more clinically proficient and gained mastery, plans and protocols to take care of injured soldiers were developed

and with that came greater mastery to meet this clinical challenge. As time passed fewer nurses attended these support sessions, suggesting greater self-sufficiency and confidence.

Another perceived helpful recommendation to the nursing staff was to suggest that they leave their assigned clinical environments to see the progress patients were making further into recovery. Nurses were encouraged to visit during patient physical therapy (learning to walk with a prosthetic limb) or occupational therapy (shaving for the first time with a prosthetic arm) sessions. These visits permitted the nursing staff (especially operating room and intensive care units nurses) to see that patients were getting better and more capable despite the staff's initial less hopeful perceptions. Other staff members would likely benefit from a similar approach.

The recent influx of critically injured young men and women with amputations from Iraq has posed a new and unusual challenge to the medical treatment teams. The staff has had to rapidly assimilate new knowledge in providing clinical treatment to this population, as well as appreciate and deal with the emotional impact of the loss of a limb on a service member. The patient or his/her family member often go through stages of grieving that can understandably result in anger or resentment regarding the injury. Not infrequently, staff members bear the brunt of this ill feeling. Often, discussion of the dynamics of patient and family member's responses can be extremely helpful to members of the treatment team in order to put unpleasant interactions into perspective and maintain an empathic stance toward the patient.

Frequently, patients, family members, or staff members benefit from a discussion of their emotional responses to the traumatic event or the resulting treatments. This might occur in either individual or small group settings. As embedded members of the trauma team, PCLS clinicians facilitate patient and staff acceptance of interventions without the fear their responses or "symptoms" are going to be labeled as pathological. Offerings of support, encouragement and normalization of response are necessary and experienced as helpful. Encouragement of appropriate laughter, use of relaxation techniques for staff and patients alike, building of esprit de corps, and the opportunity to share food all help. Most important is communicating respect and genuine concern for each other.

Physicians, particularly surgeons, work extended hours**.** Their unique burden is best exemplified in the words of one WRAMC physician: "How difficult it was for me when I needed to cut off the legs of that young boy." Psychiatrists and other mental health clinicians work side-by-side with the surgeons as part of the trauma team. Similar to nursing, physician staff support groups were established at the onset of the Operation Iraqi Freedom. These groups were usually scheduled prior to their respective clinical rounds. Psychoeducational approaches have also been useful. PCLS members have presented at surgical department Grand Rounds or staff forums on topics related to stress, burnout and the management of difficult patients. By encouraging availability through informal curb siding, frequent phone calls and spontaneous as-needed appointments has improved perceived availability and interest on the part of PCLS staff members. Of course, e-mail similarly supports such communication and also has the benefit of making additional resources quickly available to hospital staff through attached document files or hyperlinks to useful websites.

Conclusions

Hospital clinicians treating trauma patients are at risk for emotional reactions that, if left unattended, can lead to psychological stress, burnout, and reduction in clinical efficiency and effectiveness. The Walter Reed PCLS service recommends a combination of approaches that serve

to develop and sustain liaison relationships with all members of the treatment team. Techniques include attending to the emotional responses of patients and staff members through attentive but nonjudgmental listening. This may be accomplished in an individual or group format. Psychoeducational approaches can provide information about self-care, stress reduction, and burnout recognition in oneself and others. Finally, helping staff members gain perspective regarding their participation in the therapeutic process can be extremely helpful. To observe a seriously injured patient advance to use a prosthetic device and reestablish preexisting function can provide a clinician with a rejuvenated sense of purpose and meaning.

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IX. Military Sexual Trauma: Issues in Caring for Veterans

Amy Street, Ph.D. and Jane Stafford, Ph.D.

What is Military Sexual Trauma?

Military sexual trauma refers to both sexual harassment and sexual assault that occurs in military settings. Both men and women can experience military sexual trauma and the perpetrator can be of the same or of the opposite gender. A general definition of sexual harassment is unwelcome verbal or physical conduct of a sexual nature that occurs in the workplace or an academic or training setting. Sexual harassment includes gender harassment (e.g., put you down because of your gender), unwanted sexual attention (e.g., made offensive remarks about your sexual activities or your body) and sexual coercion (e.g., implied special treatment if you were sexually cooperative). Sexual assault is any sort of sexual activity between at least two people in which one of the people is involved against his or her will. Physical force may or may not be used. The sexual activity involved can include many different experiences including unwanted touching, grabbing, oral sex, anal sex, sexual penetration with an object, and/or sexual intercourse.

People tend to think that only women experience sexual trauma, however, this is not the case. In 1995 the Department of Defense conducted a large study of sexual victimization among active duty populations and found rates of sexual harassment to be 78% among women and 38% among men over a one-year period. Rates of attempted or completed sexual assault were 6% for women and 1% for men. Rates of military sexual trauma among veteran users of VA healthcare appear to be even higher than in general military populations. In one study, 23% of female users of VA healthcare reported experiencing at least one sexual assault while in the military.

Does Military Sexual Trauma Occur During Wartime?

Sexual trauma in the military does not occur only during training or peacetime and in fact, the stress of war may be associated with increases in rates of sexual harassment and assault. Research with Persian Gulf War military personnel conducted by Jessica Wolfe and her colleagues found that rates of sexual assault (7%), physical sexual harassment (33%) and verbal sexual harassment (66%) were higher than those typically found in peacetime military samples.

Are There Unique Aspects of Sexual Trauma Associated with Military Service?

While there is almost no empirical data comparing experiences of military sexual trauma with experiences of sexual harassment and assault that occur outside of military service, there is some anecdotal evidence that these experiences are unique and may be associated with qualitatively or quantitatively different psychological outcomes.

Sexual trauma that is associated with military service most often occurs in a setting where the victim lives and works. In most cases, this means that victims must continue to live and work closely with their perpetrators, often leading to an increased sense of feeling helpless, powerless, and at risk for additional victimization. In addition, sexual victimization that occurs in this setting often means that victims are relying on their perpetrators (or associates of the perpetrator) to provide for basic needs including medical and psychological care. Similarly, because military

sexual trauma occurs within the workplace, this form of victimization disrupts the career goals of many of its victims. Perpetrators are frequently peers or supervisors responsible for making decisions about work-related evaluations and promotions. In addition, victims are often forced to choose between continuing military careers during which they are forced to have frequent contact with their perpetrators or sacrificing their career goals in order to protect themselves from future victimization.

Most military groups are characterized by high unit cohesion, particularly during combat. While this level of solidarity typically reflects a positive aspect of military service, the dynamics of cohesion may play a role in the negative psychological effects associated with sexual harassment and assault that occurs. Because organizational cohesion is so highly valued within the military environment, divulging any negative information about a fellow soldier is considered taboo. Accordingly, many victims are reluctant to report sexual trauma and many victims say that there were no available methods for reporting their experiences to those in authority. Many indicate that if they did report the harassment they were not believed or encouraged to keep silent about the experience. They may have had their reports ignored, or even worse, have been themselves blamed for the experience. Having this type of invalidating experience following a sexual trauma is likely to have a significant negative impact on the victim's post-trauma adjustment.

What Type of Psychological Responses are Associated with Military Sexual Victimization?

Given the range of sexual victimization experiences that veterans report (ranging from inappropriate sexual jokes or flirtation, to pressure for sexual favors, to completed forcible rape) there are a wide range of emotional reactions reported by veterans in response to these events. Even in the aftermath of severe forms of victimization, there is no one way that victims will respond. Instead, the intensity, duration, and trajectory of psychological responses will all vary based on factors like the veterans' previous trauma history, their appraisal of the traumatic event, and the quality of their support systems following the trauma. In addition, the victim's gender may play a role in the intensity of the post-trauma reactions. While the types of psychological reactions experienced by men and women are often similar, the experience of sexual victimization may be even more stigmatizing for men than it is for women because these victimization experiences fall so far outside of the proscribed male gender role. Accordingly, men may experience more severe symptomatology than women, may be more likely to feel shame about their victimization, and may be less likely to seek professional help.

Among both men and women in the active duty military, sexual harassment is associated with poorer psychological well-being, more physical problems and lower satisfaction with health and work. Female veterans who use VA healthcare and report a history of sexual trauma while in the military also report a range of negative outcomes, including poorer psychological and physical health, more readjustment problems following discharge (i.e., difficulties finding work, alcohol and drug problems), and a greater incidence of not working due to mental health problems. Studies of sexual assault among civilian populations identify posttraumatic stress disorder (PTSD) as a frequent outcome. Sexual assault victimization is associated with high lifetime rates of PTSD in both men (65%) and women (45.9%). Interestingly, these rates are higher than the rate reported by men following combat exposure (38.8%). Major depressive disorder (MDD) is another common reaction following sexual assault, with research suggesting that almost a third of sexual assault victims have at least one period of MDD during their lives. Victims of sexual assault may also report increased substance use, perhaps as a means of managing other psychological symptoms.

One large-scale study found that compared to non-victims, rape survivors were 3.4 times more likely to use marijuana, 6 times more likely to use cocaine, and 10 times more likely to use other major drugs. In addition to these psychological conditions, victims of sexual trauma may continue to struggle with a range of other symptoms that interfere with their quality of life. Common emotional reactions include anger and shame, guilt or self-blame. Victims of sexual trauma may report problems in their interpersonal relationships, including difficulties with trust, difficulties engaging in social activities or sexual dysfunction. Male victims of sexual trauma may also express concern about their sexuality or their masculinity.

How Has the VA Responded to the Problem of Military Sexual Trauma?

Given the alarming prevalence rates of sexual harassment and sexual assault among military veterans, it has been necessary for the VA to respond actively to the healthcare needs of veterans impacted by these experiences. In July 1992, a series of hearings on women veterans' issues by the Senate Veterans Affairs Committee first brought the problem of military sexual trauma to policy makers' attention. Congress responded to these hearings by passing Public Law 102-585, which was signed into law in November of 1992. Among other things, Public Law 102-805 authorized health care and counseling to women veterans to overcome psychological trauma resulting from experiences of sexual assault or sexual harassment during their military service. Later laws expanded this benefit to male veterans as well as female veterans, repealed limitations on the required duration of service, and extended the provision of these benefits until the year 2005. Following the passage of these public laws, a series of VA directives mandated universal screening of all veterans for a history of military sexual trauma and mandated that each facility identify a Military Sexual Trauma Coordinator to oversee the screening and treatment referral process.

Are There Screening, Assessment or Treatment Issues That Are Unique to Sexual Assault and Harassment?

Screening. It is important to screen all veterans for a history of sexual harassment and assault. Not only is universal screening mandated by VA, it also represents good clinical practice given the high prevalence rates of military sexual trauma among male and female veterans and the reluctance of many sexual trauma survivors to volunteer information about their trauma histories. Screening for all forms of trauma exposure should be approached with compassion and sensitivity, but screening for a history of sexual trauma requires particular care because of the stigma associated with this type of victimization. For accurate screening, good rapport with the veteran is essential, as is close attention to issues of confidentiality (e.g., not screening in the presence of other providers or family members). Regardless of the care taken by the interviewer, the victims' shame and self-blame may prevent or delay disclosure, particularly for male victims or for victims who have experienced punishment or disbelief following previous disclosures.

When screening for a history of sexual trauma it is important to avoid words like "rape" and "sexual harassment." Asking the question, "While you were in the military, were you ever raped?" assumes that the victimized person knows how rape is defined and perceives what happened to them as a rape. Additionally, these words are "loaded terms" for many people and a victim may respond negatively in order to avoid the social stigma that goes along with being a rape victim. A method of screening that is likely to yield fairly accurate results without being perceived by the veteran as too intrusive involves two general questions that use descriptive, non-judgmental wording (i.e., While you were in the military did you ever experience any unwanted sexual

attention, like verbal remarks, touching, or pressure for sexual favors?; Did anyone ever use force or the threat of force to have sex with you against your will?).

Assessment. At this time, there are no published measures specifically designed to assess sexual trauma that occurs as part of military service. While most checklist measures that assess for trauma exposure include at least one question about sexual assault, generally these measures do not assess sexual harassment. However, there are a number of existing self-report measures and structured interviews specifically designed to assess sexual harassment and/or sexual assault. The Sexual Experience Questionnaire by Louise Fitzgerald is the most widely used measure of sexual harassment. One of the most widely used measures of sexual assault, the Sexual Experiences Survey by Mary Koss and her colleagues, is a self-report measure that assesses a variety of unwanted sexual experiences including those associated with substance use. An example of an interview developed for the purpose of assessing sexual assault is The National Women's Study interview developed by Heidi Resnick and her colleagues. It includes a series of behaviorally specific questions that ask about a variety of unwanted sexual experiences.

Treatment. While the consequences of sexual harassment and assault can be severe and complex, there are treatments available that can significantly reduce psychological symptoms and improve a victim's quality of life. There is very little empirically-based information on the treatment of sexual harassment or on the treatment of any sexual trauma associated with military service. However, there is a wealth of information available on the treatment of sexual assault in civilian populations that can be used to inform treatment of veteran populations.

Interventions for sexual trauma often involve addressing immediate health and safety concerns (particularly in the case of an acute trauma), normalizing post-trauma reactions by providing education about trauma and psychological reactions to traumatic events, providing the victim with validation, supporting existing adaptive coping strategies and facilitating the development of new coping skills, like muscle relaxation or deep breathing. Treatment interventions may also include exploring affective and cognitive reactions including fear, self-blame, anger and disillusionment, some form of exposure therapy and/or some form of cognitive restructuring. Clinicians looking for more in depth information on the treatment of sexual trauma are referred to Foa and Rothbaum (1998) and Resick and Schnicke (2002).

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X. Assessment and Treatment of Anger in Combat-Related PTSD

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Veterans of Operation Iraqi Freedom who suffer from symptoms of PTSD are likely to have difficulties with anger regulation given the centrality of anger in the human survival response. Research among military veterans has consistently shown that those with PTSD are higher in anger, hostility, aggression, general violence, and relationship violence and abuse than those without the disorder (e.g., Jordan et al., 1992). "Irritability and outbursts of anger" represent one of the diagnostic criteria for PTSD (American Psychiatric Association, 1994) and can have a debilitating impact across several domains. Anger dysregulation typically has a deleterious impact on the veteran's relationships with family members and other loved ones, and may significantly interfere with other social and occupational functioning. These interpersonal difficulties may have a profound negative effect on the veteran's social support network, which places him or her at risk for PTSD exacerbation, and possibly for cardiovascular disease and other health problems that have been associated with anger, hostility, and PTSD. Angry outbursts may also place the veteran at risk for legal problems and may lead to severe consequences for those who are exposed to these outbursts.

Although little theory or research explicates the role of PTSD with respect to anger, one important theory for anger problems among veterans with PTSD emphasizes the role of context-inappropriate activation of cognitive processes related to a "survival mode" of functioning (Chemtob, Novaco, Hamada, Gross, & Smith, 1997).

This response includes heightened arousal, a hostile appraisal of events, a loss in the ability to engage in self-monitoring or other inhibitory processes, and resulting behavior produced to respond to this perceived severe threat. These processes lead the veteran to see threats in the civilian environment that do not objectively pose any significant danger, and he or she may respond in an aggressive manner to such threats. This "survival mode," while adaptive in combat situations, typically becomes maladaptive when the individual interacts with his or her environment in civilian life. Therefore, in therapy with this population, an important treatment target often involves the detection of cognitive biases with respect to environmental threats and the detection of disconfirming evidence. This sense of heightened threat may be particularly acute among individuals who served in Operation Iraqi Freedom because the enemy was not always clearly defined and military personnel were forced to be vigilant to attack at all times.

Assessment of Anger and Related Constructs

Anger, hostility, and aggression are typically assessed via self-report questionnaire measures of these constructs. Two of the most widely used measures are the Buss Durkee Hostility Inventory (BDHI; Buss & Durkee, 1957) and the State-Trait Anger Expression Inventory (STAXI; Spielberger, 1988).

The BDHI (Buss & Durkee, 1957) is the most widely used measure of hostility. The measure consists of 75 true-false items, and 8 subscales: Assault, Indirect Hostility, Verbal Hostility, Irritability, Negativism, Resentment, Suspicion, and Guilt. The measure has received criticism based on methodological grounds (e.g., low predictive validity, poor reliability), and was recently revised by Buss and Perry (1992). The new measure, called the Aggression Questionnaire, consists

of 29 items that are rated on a 5-point Likert scales. An advantage of this measure is that it taps not only anger, but also the related constructs of hostility and aggression. Specifically, subscales include Anger, Hostility, Verbal Aggression, and Physical Aggression. This new measure and its subscales have been found to exhibit good psychometric properties.

The STAXI (Spielberger, 1988) is a 44-item measure that consists of subscales tapping State Anger, Trait Anger, and Anger Expression. This measure has some benefits over other existing anger measures. First, it distinguishes state anger and trait anger, and further distinguishes between the experience of anger and the expression of anger. Subscales can also be derived to assess whether individuals tend to keep in their anger (Anger-In), or express their anger openly (Anger-Out), or whether individuals effectively control and reduce their feelings of anger (Anger Control). These distinctions may be particularly important with veterans returning from Iraq. As described in the sections that follow, these men and women are likely to have problems with holding anger in and/or acting outwardly aggressive, and may vacillate between these two extremes. Therefore, this fine-grained assessment of the individual's anger expression style may assist in treatment planning.

Challenges for Anger Interventions

Veterans with PTSD frequently report that anger is one of their most troublesome problems, and anger often prompts their treatment entry. However, evidence suggests that anger and violence are often the precipitants for early termination from treatment, and higher anger levels are associated with poorer outcomes in treatment for PTSD more generally. This section highlights a number of important challenges for intervention with PTSD-positive veterans who have anger regulation problems.

For many who have served in Operation Iraqi Freedom, the thought of openly discussing their difficulties with anger and finding alternatives to threatening or intimidating responses to everyday frustrations may seem to have life-threatening implications. The individual's anger and aggressive behavior may have been very functional in the military and in combat situations and may serve as a valuable source of self-esteem. Therefore, attempts to change an anger response may be met with considerable resistance. The advantages of disadvantages of the individual's anger expression style should be discussed in order to move him or her in the direction of behavior change. Generally, veterans will list several serious negative consequences of their anger regulation problems and few benefits that cannot be achieved by other, more appropriate means. Therefore, discussion of the "pros" and "cons" of their anger style often serves as a powerful technique for enhancing motivation.

Veterans may resist attempts to participate in treatment for anger problems because they may associate authority figures with distrust. Angry veterans may also become impatient during the treatment process due to their desire to gain relief from their anger problems and their general heightened level of hostility and frustration. They may become easily frustrated when changes do not immediately occur as a result of therapy, and may become hostile or otherwise resistant to therapy. It is important that the treatment provider fully discusses each of these concerns with the veteran, who should be encouraged to appropriately communicate his or her concerns during the course of treatment. Given the difficulty of the therapeutic endeavor, it is critical that the provider and veteran establish and maintain a positive therapeutic relationship. The provider should also be very clear in his or her expectations for treatment. He or she should stress to the veteran that one's

anger expression style is learned, and the skills required to alter anger patterns will take time to master.

Several psychiatric problems tend to be highly comorbid with PTSD, such as depression and substance abuse. These problems also pose potential barriers for effective treatment of anger problems among those with PTSD. In addition, veterans with PTSD are more likely to suffer from physical health problems, and often suffer from severe social and occupational impairments. These factors serve to increase stress and ameliorate emotional and tangible resources for the veteran, placing him or her at additional risk for anger dysregulation and violence perpetration. Further, these factors may lead to a reduced ability to make use of treatment for anger problems. The veteran's capacity to marshal the cognitive resources to do the work of therapy (e.g., participate in self-monitoring exercises or practice communication skills) and to comply with the demands of treatment may be compromised. The treatment provider, therefore, must fully assess for comorbid problems and their impact on both the veteran's anger and his or her compliance with therapy, and should ensure that the veteran receives appropriate treatment for comorbid problems. For example, substance abuse must be addressed due to its disinhibiting effects with respect to anger and aggression.

Anger Management Intervention

Most PTSD treatment programs recommend and offer varied modalities and formats for the treatment of anger problems among veterans. Programs typically offer individual and group therapies, and cognitive-behavioral treatments for anger appear to be the most common. Increasingly, PTSD programs are utilizing manualized or standardized group treatments for anger treatment, and there is some research evidence for the effectiveness of such treatments (Chemtob, Novaco, Hamada, & Gross, 1997). Below, we briefly outline session content derived from a 12-week standardized cognitive behavioral group treatment for anger among veterans with PTSD. Although this material derives from a group treatment approach, the issues raised are relevant for other therapy formats and modalities.

Overview of the treatment. The goal of our anger management group is for veterans to learn to understand and to better regulate their anger responses through greater awareness of their anger triggers and an application of constructive anger management strategies. Additionally, veteran's appraisals of threat in their environment and daily experience of anger are targeted as they learn to prepare back-up responses (e.g., timeouts, relaxation, cognitive restructuring, ventilation, and positive distraction). Each session consists of group discussions and skills-building exercises. We have found that each group of veterans will present with special needs and the sessions should be adapted accordingly. Group leaders vary their coverage of the material to best complement the unique needs of their group, and make efforts to encourage group cohesion and a safe and supportive group atmosphere.

The first two sessions of group are devoted to orienting the veterans to treatment, discussing treatment goals and expectations of therapy, enhancing motivation to work on anger management, and providing psychoeducation on the anger response and the impact of PTSD on anger. Sessions 3 through 7 are devoted to self-monitoring exercises so that the veteran may better understand his or her anger response, developing an understanding of the distinction between different forms of anger expression, learning to use relaxation strategies for managing anger, and exploring motivational issues that may be impeding progress. The remaining sessions focus on

communication skills and learning to communicate assertively, barriers to anger management posed by comorbid problems, and wrapping up.

Setting treatment goals and exploring motivation. As discussed previously, it is extremely important that veterans with PTSD set realistic and attainable goals with respect to anger management, in order to prevent frustration with the therapy process and to reduce dropout. Both at the outset of therapy and throughout the course of treatment, motivational issues and barriers to successful barrier change should be explored. Also as discussed, for many veterans, anger dysregulation and aggressive behavior have served several adaptive functions, and anger expression styles may have been learned and reinforced throughout the life of the veteran. Therefore, discussions should center not only on the negative consequences of anger dyscontrol, but also on those factors that are maintaining these maladaptive behaviors, as well as more adaptive behaviors that may serve be substitute for identified problematic behaviors.

Psychoeducation on anger and PTSD. In order for veterans to better understand their anger dysregulation and to develop skills to better manage anger, it is important that they understand the constructs of anger and PTSD, and how the two are related. Veterans have often been noted to experience considerable relief upon the realization that their anger problems are directly related to their PTSD symptoms, and that others are experiencing the same difficulties. In addition to providing definitions of anger and PTSD, group leaders discuss the different components of the anger response (thoughts, emotions, physiology, and behaviors), and how these components are inter-related and negatively affected by PTSD. Further, it should be stressed that the goal of treatment is not to eliminate anger completely, since the anger response is a survival response that when communicated in a constructive manner, can be very useful and healthy. Therefore, group leaders stress that the goal of anger treatment is to learn to manage anger better and express anger in an assertive manner.

Self-monitoring. In order for veterans to learn new ways of handling their anger, they must first come to recognize when they are beginning to get angry, and recognize the thoughts and feelings associated with anger, as well as changes in their physiology. Many veterans returning from the war in Iraq may find this to be a difficult task, as their anger responses may be conditioned to respond immediately to the slightest risk of threat in their environment. That is, they may view their anger and aggression occurring instantly upon exposure to a perceived threat. However, upon completion of self-monitoring homework and in-group exercises, most group members will learn to identify signs of anger (e.g., heart racing, thoughts of revenge, feelings of betrayal) prior to an angry outburst. It is very important for veterans to develop this recognition as early as possible in the anger cycle, so that they may take active steps to avoid escalation to aggression (e.g., by taking a time-out, using relaxation strategies, etc.). Self-monitoring exercises also provide important information regarding the veteran's perceptions of threat in his or her environment, which may be appropriately challenged in the therapy context.

Assertiveness training. Many veterans have learned to respond to threats or other potentially anger-provoking stimuli either in an aggressive manner (e.g., physical or verbal assaults) or in a passive manner. Veterans may fear their own aggressive impulses and may lack self-efficacy with respect to controlling their anger, and therefore, they are more likely to "stuff" their anger and avoid conflict altogether. Not surprisingly, this overly passive behavior often leads to feelings of resentment and a failure to resolve problems, which in turn, leads to a higher likelihood of subsequent aggressive behavior. Therefore, considerable time in treatment is devoted to making

the distinctions clear between passive, aggressive, and assertive behavior, and group members are encouraged to generate and practice assertive responses to a variety of situations.

Stress management. In combating anger regulation problems, stress management interventions are critical to reduce the heightened physiological arousal, anxiety, depression, and other comorbid problems that accompany PTSD and contribute to anger problems. In our protocol, we implement an anger arousal exercise followed by a breathing-focused relaxation exercise to assist the veteran in becoming more aware of how thoughts are related to anger arousal and how relaxation exercises can assist in defusing the anger response. The aim is to assist the veteran in creating an early warning system that will help him or her recognize and cope with anger before it escalates to aggressive behavior. In addition to the implementation of relaxation strategies, several other stress management strategies are discussed and emphasized (e.g., self-care strategies, cognitive strategies) and the importance of social support in managing anger (e.g., talking with a friend or family member when angry) is stressed throughout the course of treatment.

Communication skills training. Anger dysregulation often results from a failure to communicate effectively and assertively, and likewise, heightened anger and PTSD hinder communication. In our group treatment for anger problems, we cover several communication strategies (e.g., active listening, the "sandwich technique") and tips (e.g., using "I statements," paraphrasing, refraining from blaming or using threatening language) for effective communication. In this regard, is important to emphasize both verbal and nonverbal communication, as veterans with PTSD often unknowingly use threatening or intimidating looks or gestures to maintain a safe distance from others.

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XI. Traumatic Grief: Symptomatology and Treatment in the Iraq War Veteran

Ilona Pivar, Ph.D.

Symptoms of Grief are Distinct from PTSD and Depression

Although research into the prevalence and intensity of grief symptoms in war veterans is limited, clinicians recognize the importance for veterans of grieving the loss of comrades. Grief symptoms can include sadness, longing, missing the deceased, non-acceptance of the death, feeling the death was unfair, anger, feeling stunned, dazed, or shocked, emptiness, preoccupation with thoughts and images of the deceased, loss of enjoyment, difficulties in trusting others, social impairments, and guilt concerning the circumstances of the death. Recent research results, although limited to one sample of Vietnam combat veterans in a residential rehabilitation unit for PTSD, have supported findings in the general bereavement literature that unresolved grief can be detected as a distress syndrome distinct from depression and anxiety. In this sample of combat veterans, grief symptoms were detected at very high levels of intensity, thirty years post-loss. The intensity of symptoms experienced after thirty years was similar to that reported in community samples of grieving spouses and parents at six months post-loss. This supports clinical observations that unresolved grief, if left untreated, can continue unabated and increases the distress load of veterans. The existence of a distinct and intense set of grief symptoms indicates the need for clinical attention to grief in the treatment plan.

Attachment and Bonding of Soldiers are Essential to Unit Cohesiveness

Bonds with unit members are described by many veterans as some of the closest relationships they have formed in their lives. During Vietnam, soldiers were rotated in and out of units on individual schedules. Nevertheless, the percentage of returning veterans with PTSD who also report bereavement-related distress is high. In the Iraq conflict, young soldiers and reservists have remained with their units throughout training and deployment. Levels of mutual trust and respect, unit cohesiveness, and affective bonding will have been further strengthened by the experiences of deployment. While bonding and attachment to the unit may result in some protection against subsequent development of PTSD, unresolved bereavement may be expected to be associated with increased distress over the life span unless these losses are acknowledged and grief symptoms treated on a timely basis.

Traumatic Grief

Traumatic grief refers to the experience of the *sudden loss* of a significant and close attachment. Having a close buddy, identification with soldiers in the unit, and experiencing multiple losses were the strongest predictors of grief symptoms in the above sample of Vietnam veterans**.** Other factors that may influence the development of prolonged grief syndrome include: survivor guilt; feelings of powerlessness in not being able to prevent the death; anger at others who are thought to have caused the death; anger at oneself for committing a self-perceived error resulting in the death; tasks of survival in combat taking precedence over grieving; not being able to show emotional vulnerability; numbing and defending against overwhelming emotions; not having an opportunity in the field to acknowledge the death; and increased sense of vulnerability by seeing

someone close killed. Factors important in the Iraq War may include exposure to significant numbers of civilian casualties, exposure to death from friendly fire or accidents resulting from massive and rapid troop movements, and concern about culpability for having caused death or harm to civilians in cities. These factors may contribute to experiences of shock, disbelief, and self-blame that increase risk of traumatic and complicated grief reactions.

Experiences That Can Influence the Development of Intense Grief: What We Learned from Vietnam

The sudden loss of attachments takes many forms in the war zone. Soldiers may experience overwhelming self-blame for events that are not under their control, including deaths during the chaos of firefights, accidents and failures of equipment, medical triage, and casualties from friendly fire. The everyday infantryman from Vietnam lived his mistakes over and over again, perhaps in order to find some way of relieving pain and guilt from the death of friends. Many medics during Vietnam suffered tremendously when they were not able to save members of their unit, especially when they identified strongly with the men under their care. Pilots called in to fire close to troops were overcome with guilt when their ordinance hit American soldiers even while saving a majority of men. Officers felt unique responsibility for the subordinates under their care and suffered undue guilt and grief when results of combat were damaging. Soldiers who worked closely with civilians were often shocked when they witnessed deaths of people with whom they had come to develop mutual trust. Deaths of civilian women and children were difficult to bear. Many of these same experiences can be expected to affect combat troops in Iraq.

Normal vs. Pathological Grief

Bereavement is a universal experience. Intense emotions, including sadness, longing, anger, and guilt, are reactions to the loss of a close person. Common in the first days and weeks of grieving are intense emotions, usually experienced as coming in waves lasting 20 minutes to an hour, with accompanying somatic sensations in the stomach, tightness in the throat, shortness of breath, intense fatigue, feeling faint, agitation, and helplessness. Lack of motivation, loss of interest in outside activities, and social withdrawal are also fairly common. A person experiencing normal grief will have a gradual decline in symptoms and distress. When grief symptoms remain at severely discomforting levels, even after two months, a referral to a clinician can be considered. If intense symptoms persist after six months, a diagnosis of complicated grief can be made and there is a definite indication for clinical intervention. Complicated grief prolonged over time has been shown to have negative effects on health, social functioning, and mental health.

Acute Traumatic Grief

Survivors of traumatic events can experience acute symptoms of distress including intense agitation, self-accusations, high-risk behaviors, suicidal ideation, and intense outbursts of anger, superimposed on the symptoms of normal bereavement. Soldiers who lose their comrades in battle have been known to make heroic efforts to save them or recover their bodies. Some soldiers have reacted with rage at the enemy, risking their lives with little thought (“gone berserk” or “kill crazy”). Some soldiers withdraw and become loners, seldom or never again making friends; some express extreme anger at the events and personnel that brought them to the conflict. Some soldiers are inclined to mask their emotions. Any sign of vulnerability or “losing” it can indicate that they

are not tough enough to handle combat. Delaying grief may well postpone problems that can become chronic symptoms weeks, months and years later. The returning veteran who has developed PTSD and/or depression may well be masking his or her grief symptoms.

Assessment and Treatment of Acute Grief in Returning Veterans

Clinical judgment is necessary in deciding when and how to treat acute grief reactions, especially when they are accompanied by a diagnosis of acute stress disorder. While a cognitive-behavioral treatment package that includes exposure therapy has been shown to prevent the development of PTSD some persons with acute stress disorder, exposure therapy during the initial stages of grief may often be contraindicated, because it may place great emotional strain on someone only just bereaved. Bereavement researchers also are hesitant to treat grief in the first few months of a normal loss, wishing not to interfere with a natural healing process. In the early stages of grief, symptoms may be experienced as intense, but this is normal for the first days, weeks, and months. Soldiers surviving a traumatic loss in the war zone will be more likely to mask intense feelings of sadness, pain, vulnerability, anxiety, anger, and guilt. Balancing other traumatic experiences with the intensity of grief may feel overwhelming. Therefore it is important to assess and respect the individual soldier's ability to cope and manage these feelings at any time. A soldier may be relieved to know that someone understands how he or she feels after losing a buddy, or experiencing other losses including civilians or multiple deaths in the field, and communication with a clinician may be a first step in coming to terms with loss. However, that soldier may not be ready to probe more deeply into feelings and circumstances. Care and patience in the assessment process, as well as in beginning treatment, is essential.

Treatment during the acute stages of grief would best include acknowledgement of the loss, communication of understanding of the depth of feelings, encouragement to recover positive memories of the deceased, recognition of the good intentions of the survivor to come to the aid of the deceased, education about what to expect during the course of acute grief, and encouragement of distraction and relaxation techniques as a temporary palliative. Efforts to reduce symptoms of PTSD and depression as co-morbid disorders would take precedence over grief symptoms in the initial phases of treatment, unless the loss itself is the main cause of distress.

Assessment of Complicated Grief in Returning Veterans

Grief symptoms including sadness, distress, guilt, anger, intrusive thoughts, and preoccupation with the death should be declining after about six months during a normal grieving process. If symptoms remain very high after six months, clinical intervention is warranted. There are several instruments that may be helpful in assessing a complicated grief. The Inventory of Complicated Grief-Revised is perhaps most widely used and reflects current bereavement research. Another instrument is the Texas Revised Inventory of Grief, which has been used in a variety of populations and has been well validated. Both allow comparisons with normative populations.

Treatment of Complicated Grief in Returning Veterans

There have been no outcome studies of treatments of veterans for prolonged and complicated grief symptoms at this time. Clinical experience supports the importance of education about normal and complicated grief processes, education about the cognitive processes of guilt, restructuring of

cognitive distortions of events that might lead to excessive guilt, looking at the function of anger in bereavement, restoring positive memories of the deceased, restoration and acknowledgment of caring feelings towards the deceased, affirming resilience and positive coping, retelling the story of the death, and learning to tolerate painful feelings as part of the grieving process. These activities can be provided in individual treatment or in closed groups.

Regardless of the techniques that are used, what is central to treating veterans for prolonged and complicated grief is recognition of the significance of their losses, provision of an opportunity to talk about the deceased, restructuring of distorted thoughts of guilt, and validation of the pain and intensity of their feelings. What is most essential is that bereavement and loss be treated in addition to PTSD and depression for a more complete recovery.

Medications Helpful in Treating Grief Symptoms in Non-Veteran Populations

One research study has shown that paroxetine as well as nortriptyline may be helpful in treating complicated grief after six months. Bupropion has been successful in treating symptoms at six to eight weeks. Again, research has been limited and has not included war zone veterans.

Additional Resources

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XII. Substance Abuse in the Deployment Environment

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Comprehensive screening for substance abuse requires a three-part analysis. Health care providers should focus on behavior prior to deployment, during actual operations, and post deployment. Each situation deserves special, but brief and focused, screening.

For the vast majority of individuals the notice of impending deployment unleashes a myriad of cognitive and behavioral reactions. These reactions are generally mild and transient as the individuals' healthy coping mechanisms respond to the news. In a minority of cases the fear and uncertainty of the looming deployment precipitates a maladaptive response. Among this group, a fairly significant number will turn to substance abuse as a means of quelling the troubled pre-deployment emotions. In fact, current numbers estimate that roughly one-third of the American population meets criteria for problem drinking. Naturally, that figure would be higher among individuals manifesting varying degrees of behavioral difficulties.

A reasonable pre-deployment substance abuse screening strategy might begin with the general, but openly stated recognition, that a pending deployment normally elicits a wide range of emotions. An innocuous screening interview might begin with a question such as: "Individuals run the gamut from being excited to being petrified when notified of their deployment - what best characterizes your reaction?" Another question or two, based on the answer to the first question, could address the individual's coping style. For example, if an individual relates that the notice of deployment created a sense of anxiety and panic the health care provider might ask, "How are you handling your anxiety?" or "What makes you feel less stressed?," or "What plans are you making now that you have the notice of deployment?". Finally, a comment such as, "Some people find that drinking a bit more alcohol, smoking a few more cigarettes, or pouring some extra java helps relieve the stress – have you noticed this in yourself?" If this question prompts the individual to disclose tendencies in the direction of increased substance use, the heath care provider should then conduct a more formalized screen using the quantity-frequency questions followed, as appropriate, by the CAGE questions.

The quantity-frequency questions require three simple steps:

① First ask, "On average, how many days a week do you drink alcohol?"
② Then ask, "On a typical day when you drink, how many drinks do you have?"
③ Multiply the days of drinking a week times the number of drinks.

For example, an individual might report drinking a six-pack of beer Friday night and both weekend days. Using the above formula (3 days a week X 6 drinks per typical day) results in a score of 18. Any score exceeding 14 for men or 7 for women suggests an at-risk behavior. The next question in the quantity-frequency screen asks, "What is the maximum number of drinks you had on any given day since learning of your deployment?" A score exceeding 4 for men or 3 for women again suggests a potential problem with alcohol (Dawson, 2000).

Individuals identified by the quantity-frequency screen should next be asked the CAGE questions. CAGE is an acronym for the following questions:

- **C** — Have you ever felt that you should **C**UT down on your drinking?
- **A** — Have people **A**NNOYED you by criticizing your drinking?
- **G** — Have you ever felt bad or **G**UILTY about your drinking?
- **E** — Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (i.e., as an **E**YE-OPENER)?

Individuals endorsing either 3 or 4 of the CAGE questions over the past year are most likely alcohol dependent. If the individual endorses 1 or 2 of the CAGE questions they may have current alcohol abuse. Combining the introductory screening comments with the quantity-frequency and CAGE questions can reliably predict 70-80% of individuals with alcohol abuse or dependence (Friedman et al., 2001).

The same screening tool can be adapted for illicit drug use. For example, the initial questions about the person's response to notification of deployment might uncover the use of marijuana. The health care provider can then ask quantity-frequency questions followed by the adapted CAGE. Unfortunately, there are no predetermined cut-off scores for all the potential drugs of abuse, requiring the substitution of clinical judgment.

The screening tools described so far will help guide the care provider's thinking in determining the best intervention for the individual awaiting deployment. Persons with a CAGE score of 3 or 4 will require a more in-depth clinical evaluation focusing on alcohol or drug related disability. If further evaluation confirms the presence of alcohol or illicit drug dependence, the care provider should determine whether imminent deployment is in the best interest of the individual and the military mission. The care provider might recommend a diversion for treatment before deployment.

Individuals with a CAGE score of 1 or 2 will also require additional assessment. The focus here once again is on impairment but the range of possible interventions may not interfere with deployment. The care provider might determine for example that the spike in alcohol or drug consumption is temporary and will likely abate with a strong suggestion that abstinence or reduction is essential. Part of the decision-making may center on the availability of alcohol or drugs in the theater of operations.

Typically forgotten in the abuse assessment are common legal products such a tobacco and caffeine. An increase in either prior to deployment may represent a soft warning signal that portends later problems. A substantial increase in the use of nicotine in the days leading up to deployment may be followed by a corresponding reduction once the individual arrives in the theater of operations. Many factors may promote the reduction, such as lack of availability or less free time, but the outcome will be the same. Nicotine withdrawal, most likely unrecognized, will produce irritability, dysphoria, and sleep disturbances.

Once the individual arrives in the theater of operations the stress of combat will be amplified by any preexisting, yet undetected, substance abuse problems. Two broad scenarios are possible. If the theater has easy access to drugs or alcohol then the pattern of abuse may continue or accelerate. If drug or alcohol acquisition is difficult, then the individual may experience symptoms of withdrawal. Clinicians in Iraq report that alcohol is easily accessible. Early on in the deployment, many soldiers were allowed to go to marketplaces in the cities where "black market"

diazepam was cheap and readily available. Abuse of this drug decreased after trips to the marketplaces were discontinued for safety/security reasons.

The previously discussed substance abuse screening questions have just as much applicability in the combat zone as in the pre-deployment phase. The simplicity, and accuracy of the screening questions, is ideally suited to the triage environment of combat. Given the statistical frequency of substance abuse in the American population the care provider must strongly suspect any cognitive behavioral symptoms arising in combat as the product of either ongoing use or withdrawal. Many of the signs and symptoms of alcohol withdrawal are easily misinterpreted. An individual presenting with autonomic hyperactivity, sleep difficulties, agitation, and anxiety may be suffering from withdrawal and not a combat related acute stress disorder. Appropriate detection could prevent an unnecessary evacuation and lead instead to a brief in-theater detoxification.

Once again, care providers in the combat zone should screen for the common legal substances such as tobacco and caffeine. Prompt recognition of tobacco withdrawal symptoms could lead to a prescription for some form of nicotine replacement therapy. New products that help quit smoking such as buproprion and mecamylamine hold promise too. A subsequent period of observation may help distinguish the interaction between withdrawal affects and local stressors.

Any provider considering evacuating an individual from the theater of operations for a substance abuse disorder should carefully consider advising the individual about the likely treatment options and the impact on a military career. Hopefully, individuals evacuated from a combat zone for a substance abuse disorder will have been counseled regarding the value of treatment and the ultimate expectation that recovery will lead to future, productive military service, including possible redeployment to the combat zone. Care providers at the secondary or tertiary level facility can then assess the individual and recommend appropriate outpatient or inpatient treatment.

The clinician must consider the role of the military command regarding alcohol and drug related problems. A standing order prohibiting the use of any alcohol or illegal drugs exists in deployed environments. As a result, the military commander usually becomes involved when a soldier is identified in an alcohol or drug related incident. Commanders vary in their biases as how to handle these situations, but in general try to balance their concerns for the individual soldier's medical/treatment needs with the need for unit discipline. Commanders often look for direction in balancing these legitimate concerns and usually appreciate input from mental health providers in making such decisions. At times, an inappropriately high level of tolerance of substance use or abuse occurs in some units. This may be more likely in National Guard or Reserve units. Some mental health clinicians in Iraq report that alcohol use in some units was prevalent to the degree that officers, NCOs and junior enlisted drink together. Though rare, such circumstances create significant challenges for proper unit functioning and for the effectiveness of mental health interventions.

Aside from screening for the common legal and illicit substances, the care provider in all phases of deployment should consider the role of herbal supplements, over the counter medications, and steroids. Another commonly neglected, but easily screened issue, involves the potential abuse of prescription medications.

Screening is also important in the post-deployment environment, where some individuals may resume previous problem drinking/drug use upon return to the US. or increase substance use as a means of coping with stress-related problems or attempting to manage traumatic stress reactions.

PTSD, depression, and alcohol and drug problems are often co-occurring in veterans. Both health and mental health providers should be alert to this and, as part of patient education, should inform returning veterans about safe drinking practices, discuss the relationship between traumatic stress reactions and substance abuse, and initiate preventive interventions to reduce drinking.

Evidence suggests that substance abuse recovery is made more difficult by concurrent PTSD, and it is important to provide routine screening for PTSD in alcohol and drug treatment programs. When an individual is experiencing problems with both substance abuse and PTSD, it is important to address both disorders in an integrated fashion. Individuals should be helped to understand both problems and their relationship, and relapse prevention programming should address coping with traumatic stress symptoms without alcohol or drugs. Protocols for integrated treatment, such as the "Seeking Safety" trauma-relevant coping skills group intervention (Najavits, 2002), are now becoming available.

This brief clinical guide proposes a simple process, with proven accuracy, to screen individuals for substance abuse. This guide further suggests that care providers employ the screen in the three phases of pre-deployment, in the combat zone, and upon evacuation. The data gained at each juncture will help the clinician's decision making process in clarifying the contribution of substance use to a muddled clinical picture, taking appropriate treatment steps, forestalling some unnecessary evacuations, and prompting the best match between the individual's needs and the military mission.

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Najavits, L.M. (2002). *Seeking safety: A treatment manual for PTSD and substance abuse*. New York: Guilford.

Additional Resources

National Institute on Alcohol Abuse and Alcoholism: http://www.niaaa.nih.gov/

National Institute on Drug Abuse: http://www.nida.nih.gov/

National Clearinghouse on Alcohol and Drug Information: http://www.health.gov/

Army Center for Substance Abuse Programs with links to world-wide ASAP locations: http://www.acsap.army.mil/

XIII. The Impact of Deployment on the Military Family

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The frequency of deployment of military service members has increased in the past ten years. This is largely due to their increased involvement in Operations Other than War, as well as actual combat scenarios. Servicemen and women may be deployed from active duty, as well as Reserve or National Guard positions. Deployments can be of varying level of challenge to military families. In families where medical or emotional/behavioral problems preexist, the deployment of a military parent can destabilize a tenuous situation, creating a significant ordeal for the family.

Active duty families often, but not always, live within military communities where family and individual support and therapeutic services are more readily available in situations of deployment. Reserve or National Guard service members may be activated for deployment from civilian jobs in geographical locations that are remote from any military resources. In such situations, families can feel isolated and less supported. These problems can be compounded if a service member takes a financial loss when activated from a better paying civilian position to a lesser paying military position.

Certainly, the nature of the deployment and the role of the service member in the military action can have a significant impact on children and family left behind. For example, the deployment of a service member on a scheduled peacekeeping mission rotation is likely to be experienced very differently than the deployment of a service member in a wartime scenario.

The Emotional Cycle of Deployment

Deployment is a routine part of military life for service members and their families. Most military families have accepted this as "part of the job." Although all families may respond somewhat differently, the emotional cycle of deployment has been described as being divided into five distinct stages: *pre-deployment, deployment, sustainment, re-deployment,* and *post-deployment*. Each stage is characterized by the time frame associated with it as well as specific emotional challenges that must be addressed and mastered.

- *Pre-deployment* is the phase from the time of notification of deployment to the actual departure of the service member. It is often a time of psychological denial of the event, intense preparation, and anticipation of the departure.

- *Deployment* is the phase from the time of departure through the first month of deployment. It can be a time of significant emotional turmoil as the family tries to regain its equilibrium after the departure of a parent. Feelings can include numbness, sadness, and feelings of isolation or abandonment. Many of the day-to-day responsibilities of the absent parent need to be absorbed by the remaining members of the family and a new balance is established. Communication from the deployed service member upon arrival can be tremendously reassuring. Any unrealistic worries that preoccupied family members in the pre-deployment phase are reduced as they develop a more realistic appreciation of the deployment.

- *Sustainment* is the phase that spans from one month post deployment to one month prior to return. In most adaptive families it is marked by "settling into the new routine" and going on about regular business, utilizing whatever resources either within or outside of the family are available. Should a family not be able to return to business-as-usual, this could impact negatively on the development of children within the family. Some children may have a difficult time during this period, in the absence of a parent, and may develop symptoms that should be readily identified and appropriately dealt with. Conflict between the service member and the remaining spouse can result in emotional turmoil, particularly because communication may not allow full resolution of all disagreements.

- *Re-deployment* is the phase that spans from one-month prior to return to the actual physical return of the service member to the family. This is a period of intense anticipation, with conflicting emotions and possibly some anxiety along with excitement.

- *Post-deployment* is the phase that begins with the return of the service member and ends with the reestablishment of family equilibrium. Generally, this period may take from one to several months. The homecoming can be a time of great excitement and jubilation. But, it also can result in frustration and feeling let down due to unmet unrealistic fantasies about the reunion. Service members may become frustrated in finding that the family has moved on in their absence and that changes have been made in family functioning that they were not involved in. The parent who remained behind during the deployment may experience a loss of independence with the return of the spouse who begins to re-exercise autonomy. Marital couples may require time to reestablish physical and emotional intimacy, which can lead to a sense of disappointment or disillusionment. Ultimately, it is important that the deployed service member reasserts his or her role within the family and again reestablishes a healthy equilibrium. Most families and children manage successfully during deployments, despite inherent challenges.

Children's Responses to Deployment

Children's responses to deployment are individualized and depend upon their developmental ages. Infants (12 months and younger) are likely to respond to changes in their schedule, physical environment, or in the presence or availability of caregivers. Disruptions in infant care can lead to risk of apathy, refusal to eat, or even weight loss. Toddlers (1-3 years) generally take clues from their primary caregiver. If the non-deploying parent is available and coping well a toddler is likely to cope well. If not, a toddler may become sullen, tearful, throw temper tantrums, or develop sleep disturbances. Parents must balance their care for young children with their own needs, using play dates and support from other parents to assist them.

Preschoolers (3-6 years) have a clearer awareness of the absence of a parent than do younger children. They may emotionally respond to this with regressive behaviors (regression in potty training, thumb sucking, sleep disturbance, clinginess, and separation anxiety). They may also demonstrate signs of irritability, depression, aggression, or somatic complaints. Due to their active imaginations, preschoolers may develop idiosyncratic or personalized explanations regarding the deployment of a parent, e.g., "Daddy (or Mommy) left because I was angry at him (her)." These inaccuracies can best be addressed through brief, matter-of-fact but accurate information related to the deployment. Preschoolers' concerns related to feelings of responsibility of the deployment should be dispelled. These young children can best be reassured by parents through attention,

emotional and physical warmth and by maintaining family routines (such as expecting them to sleep in their own beds).

School age children (6-12 years) may "act out" their feelings by demonstrating irritability, aggression, or whininess. They may have a clearer understanding of the realities of the deployment and the potential risks of the deployed parent. Worries and other feelings should be accepted to allow for ongoing communication. Information regarding the deployed parent should be provided in a clear fashion, as should expectations regarding functioning at school and at home. Parents should ensure that children are limited in the amount of media exposure, particularly during times of war.

Teenagers (13-18 years) may similarly demonstrate irritability, rebelliousness, or other challenging behaviors. It is important to maintain good communication with teenagers as they may present their anxiety and sadness in behaviorally destructive ways. Setting clear and realistic expectations regarding functioning at school and home can provide useful structure. Parents should particularly observe for any signs of high-risk behavior to include sexual acting out or alcohol/substance misuse.

What Parents Can Do

Although some adjustment reactions are to be expected during deployments, certain symptoms should warrant referral for professional services. The following are examples of concerns that should be raised to a higher level of care: uncontrolled or prolonged crying, prolonged and serious regressive behaviors, disorganized behavior, confusion, prolonged or serious eating or sleeping problems, prolonged or serious separation anxiety, school refusal, unexplained and recurring somatic complaints, academic performance deterioration, depression, prolonged sadness, suicidal ideation, aggression, sexual acting out, or alcohol/substance misuse.

Parents are the key for initial interventions and prevention of future problems for themselves and their families. Parents should take the lead in the following suggestions.

- *Encourage talking as a family before deployment, sharing information, and making plans*. Empower, rather than "dump" responsibilities on remaining family members. Being a family means pulling together during times of crisis. Additional responsibilities can be experienced as either burdens or shared responsibilities.

- *Plans should be made for the family to continue to progress together, and include the deploying parent*. Life should not be put "on hold" during deployments. Family traditions, the structure of the family routines should continue and new ones developed. The old traditions and new experiences should be shared with the deployed parent through whatever communication is possible. Similarly, discipline as well as structure should be maintained as this is reassuring and stabilizing to children.

- *Parents should be encouraged to listen to and to ask about a child's worries about the deployed parent and answer questions as truthfully as possible*. To children, no news is worse than bad news. Children benefit from receiving accurate and developmentally appropriate information about the deployment. They also gain from hearing their non-deployed parent discuss his/her own emotional response to the other parent's absence in a

controlled but honest fashion. Children can better formulate their own responses by understanding how the non-deployed parent is coping.

- *It can be helpful to younger children in appreciating the finite nature of a deployment by devising developmentally appropriate time-lines*. One way this can be accomplished is through the use of "countdown" calendars that allow children to mark off each day that passes, highlighting both the time that has passed since departure and the time remaining until return.

- *Support form the child's outside social structure is important as well*. A close relationship with the school and the child's teacher(s) will help others who share the child's day understand what the child is going through.

- *Non-deployed parents need to take care of themselves so that they can be available to their children*. Utilization of community and extended family resources, as available both within and outside the military system, can be extremely important for the non-deployed parent. Professional assistance should be sought out if the parent or the child is not adjusting well to the deployment. Multiple resources are available to the military family during deployments. The Family Assistance Center, Deployment Support Groups, Unit Command, Family Advocacy Program, Military Medical Clinic, Military Mental Health Services, Military Chaplains or other religious organization support, and the Youth Center are just a few examples of available resources.

Conclusions

Although the impact of deployment on families may be considerable, most families adjust well. The responses to the multiple stages of deployment depend upon the stability of the family unit prior to the deployment, the developmental ages of the family members, the availability of internal and external resources and the willingness of the family to use them. Clinicians need to be aware of these issues when working with families of deployed soldiers in order to identify those families that may need additional services.

Appendix A. Case Examples From Operation Iraqi Freedom

The following case examples describe veterans of Operation Iraqi Freedom who were treated at military and VA medical facilities in 2003-2004. Information has been modified to protect patient identities.

Case 1

Specialist LR is a 25 year-old single African American man who is an activated National Guardsman with 4 years of reserve service. He is a full-time college student and competitive athlete raised by a single mother in public housing. He has a history of minor assaults in school and his neighborhood and of exposure to street violence.

Initially trained in transportation, he was called to active duty and retrained as a military policeman to serve with his unit in Baghdad. He described enjoying the high intensity of his deployment and had become recognized by others as an informal leader because of his aggressiveness and self-confidence. He describes numerous exposures while performing convoy escort and security details. He reports coming under small arms fire on several occasions, witnessing dead and injured civilians and Iraqi soldiers and on occasion feeling powerless when forced to detour or take evasive action. He began to develop increasing mistrust of the operational environment, as the situation "on the street" seemed to deteriorate. He often felt that he and his fellow soldiers were placed in harm's way needlessly.

On a routine convoy mission, serving as driver for the lead HMMWV (HUMVEE), his vehicle was struck by an Improvised Explosive Device (IED), showering him with shrapnel in his neck, arm, and leg. Another member of his vehicle was even more seriously injured. He described "kicking into autopilot," driving his vehicle to a safe location, and jumping out to do a battle damage assessment. He denied feeling much pain at that time. He was evacuated to the Combat Support Hospital (CSH) where he was treated and Returned to Duty (RTD) after several days despite requiring crutches and suffering chronic pain from retained shrapnel in his neck. He began to become angry at his command and doctors for keeping him in theater while he was unable to perform his duties effectively. He began to develop insomnia, hypervigilance and a startle response. His initial dreams of the event became more intense and frequent and he suffered intrusive thoughts and flashbacks of the attack. He began to withdraw from his friends and suffered anhedonia, feeling detached from others and he feared his future would be cut short. He was referred to a psychiatrist at the CSH who initiated supportive therapy and an SSRI.

After two months of unsuccessful rehabilitation for his battle injuries and worsening depressive and anxiety symptoms, he was evacuated to a stateside military medical center via a European medical center. He was screened for psychiatric symptoms and was referred for outpatient evaluation and management. He met *DSM-IV* criteria for acute PTSD and was offered medication management, supportive therapy, and group therapy, which he declined. He was treated with sertraline, trazodone and clonazepam targeting his symptoms of insomnia, anxiety and hyperarousal. Due to continued autonomic arousal, quetiapine was substituted for the trazodone clonazepam for sleep and anxiety, and clonidine was started for autonomic symptoms. He responded favorably to this combination of medications. He avoided alcohol as he learned it would exacerbate symptoms. He was ambivalent about taking passes or convalescent leave to his

home because of fears of being "different, irritated, or aggressive" around his family and girlfriend. After three months at the military medical center, he was sent to his demobilization site to await deactivation to his National Guard unit. He was referred to his local VA Hospital to receive follow-up care.

Case 2

PV2 RJ is a 26-year old white female with less than 12 months of active duty service who was deployed to Iraq in September 2003. She reported excelling in high school but moved out of her house after becoming pregnant during her senior year. After graduating from high school on schedule, she worked at several jobs until she was able to become an x-ray assistant. She had been on her first duty assignment as an x-ray technician in Germany. As a single parent she attempted to make plans for her dependent 5-year old son. However, when notified of her impending deployment she needed to make hurried and unexpected care plans for her son.

Within a week of being deployed to Iraq the service member began experiencing depressed mood, decreased interest in activities, increased appetite, irritability, increased social isolation with passive suicidal ideations, and insomnia due to nightmares of the devil coming after her. She also began believing Saddam Hussein was the "Antichrist." In addition, she began experiencing command directed auditory hallucination of the devil whispering to her that people in her unit were saying she was stupid and that she should make them shut up. At one time, the devil told her to throw things at them. Her guilt intensified as her wish to act on the voices increased. She also described seeing visual hallucinations of "monsters" that were making fun of her.

These symptoms intensified when she went from an in-processing point to her assignment in Iraq. They also worsened when she ruminated about the stresses of being in Iraq (bombs exploding, missing her son and family, disgust at other women who were seeking the attention of men). Of most concern, she was worried that she might not survive the deployment. When she was around people, she experienced palpitations, increase swearing, shaking, shortness of breath, abdominal cramping, and dizziness. In hopes of getting rid of her symptoms especially the voices and monsters, she ingested Tylenol #3s she had obtained for a minor medical procedure. After confiding her symptoms to a military friend, RJ was referred for an evaluation and was evacuated out of Iraq to CONUS via Germany.

When she returned to CONUS, RJ also shared with the treatment team that in the week prior to deployment she believed she was drugged by a date and that he sexually assaulted her. RJ was hesitant to discuss the few memories she had of the incident, due to embarrassment. She denied any other previous traumatic events but she stated she distrusted men in general, as many men in her life had been unreliable or irresponsible. She admitted to occasional alcohol use but denied any drug use. Throughout the hospitalization, her greatest concern was being reunited with her son and leaving the military. She was treated with a combination of antidepressant and antipsychotic medications that resulted in improvement in her symptoms. Despite improvement, RJ underwent a Medical Evaluation Board for diagnoses of Major Depression with Psychotic Features and PTSD.

Case 3

SFC W is a 45-year-old divorced Operation Iraqi Freedom Reservist who was involved in a motor vehicle accident in Afghanistan in Jun 2003. SFC W suffered a Lumbar Burst Fracture and had multiple surgical procedures with instrumentation and fusion at a European military medical center, which was complicated by a Deep Vein Thrombosis.

SFC W was transferred through the Aeromedical Evacuation System to a stateside medical center where he was admitted as a Non-Battle Injury for Inpatient Rehabilitation for Spinal Chord Injury. SFC W's Treatment Plan consisted of a Rehabilitation Program involving Physical and Occupational Therapy with goals of independent ambulation with an assistive device and to establish a bowel and bladder program. The Coumadin Clinic treated his Deep Vein Thrombosis and he was evaluated by the Traumatic Brain Injury Program staff. Pain was controlled with MS Contin 15 mgm two times a day with Oxycodone IR 5 mgm 1-2 tabs every 4-6 hours as needed for breakthrough pain and Ambien 10 mgm per day as needed for sleep problems. Other staff included in his care included Nursing, Social Work, Chaplain, Reserve Liason, and Medical Holding Company, and Medical Board staff.

SFC W was followed by the Preventive Medicine Psychiatry Service (PMPS) in accordance with the service's Operation Iraqi Freedom Protocol. PMPS staff initially recommended beginning therapy with an SSRI such as Sertraline at a starting dose of 25 mgm a day to address concerning symptoms, such as his increased startle response, emotional lability, and intrusive thoughts, which the staff thought could be prodromal for an Acute Stress Disorder. PMPS staff also incorporated a combination of hypnotic and relaxation techniques to assist SFC W with sleep and pain related problems. Staff recommended increasing sertraline to 50 mgm per day because he reported that he was continuing to be troubled by some memories of his accident. Aside from the target symptoms that were addressed above, no other psychiatric issues were identified.

An initial Post Deployment Health Assessment Tool (PDHAT) was completed during SFC W's hospital admission. He endorsed depressive symptoms at a level of 11 (a score of 10 or above indicates a potential concern) and endorsed symptoms consistent with PTSD (one intrusive symptom, two arousal symptoms and three avoidance symptoms) at the level of a little bit.

In June 2003, SFC W was transferred to the Spinal Chord Rehabilitation Program at a VA Hospital. He was able to ambulate with the assistance of a walker, pain in his back and left leg was controlled with pain medicine, and his problems with a neurogenic bowel and bladder were well controlled with a daily bowel and bladder program. Additional Traumatic Brain Testing and Coumadin regulation was requested.

Soldiers are contacted either telephonically or at the time of a follow-up visit to WRAMC and are assessed for PTSD, Depression, Alcohol Usage, Somatic Complaints, Days of Poor Physical and/or Mental Health and Lost Productivity, and Satisfaction with Health Care.

SFC W could not be reached by phone until the 6-month PDHAT follow-up. At that time he met criteria for Major Depression and had symptoms consistent with criteria for PTSD at the moderate level. He reported that he had lost 20 days of productivity due to physical and mental health problems. In addition, he reported problems with pain, sleep, sexual functioning, and the fact that he will never be the same again. He is able to ambulate with the assistance of a walker within his home and uses a wheel chair for outside excursions. He continues with a bowel program. His

need to self-catheterize limits his visits outside the home. He is clinically followed at a local VA by Psychiatry, Neurology, Spinal Chord Program, and Physical Therapy. He reported taking between 25-35 pills a day, including Trazadone for sleep and sertraline 100 mgm po BID for treatment of Depression and PTSD. He has accepted his functional limitations and is trying to adapt to the changes in his lifestyle. His support system is fairly good, he has a very supportive wife, his Reserve Unit is in contact with him, and he has attended social functions in recognition of returning Reservists. A request for case management services was submitted to the VA Hospital to assist SFC W in understanding his medications, adapting to his functional limitations and understanding his long term prognosis because of his spinal chord injury, and working through his PTSD symptoms to include trauma bereavement. Legal Assistance at WRAMC also assisted him with a claim for personal property lost as a result of his deployment to Iraq.

Prior to his deployment to Iraq, SFC W worked as a truck driver for a transportation company, a job that he will not be able to return to. His Medical Board is being processed and he will then be eligible for both Army Medical Retirement and Veterans benefits.

Case 4

SGT P is a 24-year-old married AD USA E5 who sustained penetrating wounds to his Left Arm, Left Ribs, and Left Leg in an Improvised Explosive Devise attack while in Iraq. Initially his wounds were treated in Kuwait and he was MEDEVAC to a European military medical center where he underwent surgery to repair a fractured left ulna bone in the summer 2003.

SGT P was Air Evacuated and admitted to the General Surgery Service at a state side medical center. His recovery was uncomplicated and consisted of mostly rehabilitation and wound care. He was initially followed by General Surgery, Vascular Surgery, and Orthopedics and was then discharged to Inpatient Physical Medicine and Rehabilitation (PMR) Service. While on the PMR Service, he progressed to ambulating hospital distances using a lofstrand crutch and was moderately independent with Activity of Daily Living. His pain was well controlled and he was discharged on Percocet 1-2 tabs every 4-6 hours, Motrin Tabs 600 mgm 3x per day as needed, and Ambien 10 mgm every night for sleep.

SGT P was followed by the Preventive Medical Psychiatry Service in accordance with PMPS's Operation Iraqi Freedom Protocol. The PMPS staff initially met with him and offered support to set the milieu to establish a therapeutic alliance with him. His initial request was for assistance with contacting his Command as he had not communicated with them since his injury and felt cut-off from his Unit. During his first week in the hospital, Ambien 10 mgm po at bedtime was ordered to assist with sleep problems. He subsequently reported that Ambien was only minimally helping with his sleep problems and he was now experiencing nighttime "sweats." He denied experiencing any other arousal or intrusive symptoms and only endorsed limited avoidance of television news on OIF activities. PMPS staff discussed possible risks and benefits of starting Propranol 20 mgm nightly to limit sympathetic discharge activity. SGT P agreed and was started on Propranol 20 mgm at bedtime. Follow-up reports indicated that he was sleeping well and his autonomic hyperactivity had decreased. The use of pharmacotherapy interventions decreased his sleep disturbances and to be more open and responsive to psychotherapeutic interventions. PMPS staff also incorporated a combination of hypnotic and relaxation techniques to assist him with sleep and pain related problems. Cognitive Behavioral Therapy helped him understand how his traumatic experience may have altered his thoughts and interpretations of events and what effect

the altered perceptions had on his emotions and behaviors. PMPS staff also assisted him in working through feelings of anger and reinforcing his coping strategies, identifying his strengths and assets.

The initial Post-Deployment Health Assessment Tool was completed during SGT P's inpatient admission, approximately 16 days after his injury. At that time, he endorsed criteria for Major Depression and endorsed symptoms consistent with PTSD at the moderate level.

Two months after admission, SGT P was discharged from the hospital and placed on convalescent leave. He had follow-up appointments in the Orthopedic and Vascular Clinics, Physical Therapy, and Preventive Medical Psychiatry. He stayed at base hotel for the duration of his outpatient therapy.

PMPS staff followed SGT P on a regular basis during the course of the hospitalization and outpatient treatment, with visits ranging from 1-3 times per month. A combination of psychotherapy, hypnotherapy, and CBT interventions was provided. Ambien and propranol were not needed after the initial discharge medications were issued. He was able to regain control over the intrusive and arousal symptoms that he had been experiencing as a result of his deployment experience. Psychotherapeutic interventions assisted him in understanding the effect that his thoughts were having on his emotions and behavior and resulted in a substantial decrease in his endorsement of depressive symptoms (from 16 to 3 on the Pfizer, Prime MD Scale).

Soldiers are contacted either by telephone or in person at the time of follow-up and are assessed for PTSD, Depression, Alcohol Usage, Somatic Complaints, Days of Poor Physical and/or Mental Health, Lost Productivity, and Satisfaction with Health Care. At the 3-month PDHAT follow-up visit, SGT P endorsed a depressed mood but did not meet the full criteria for depression. He endorsed depressive symptoms at a level 12 (a score of 10 or above is of concern). PTSD symptoms were endorsed at a moderate level. Although, he reported 9 days of poor mental and physical health during the previous month, he only reported 2 days of lost productivity due to poor mental or physical health. He reported excellent satisfaction with his health care. At the 6-month PDHAT follow-up visit, he endorsed depressive symptoms at a level 3 and did not meet the criteria for depression. He endorsed mild intrusive symptoms but did not meet criteria for PTSD.

SGT P has returned to a light duty status while he continues to recover from his injuries.

Appendix B. VA/DoD Practice Guideline

The VA/DoD Practice Guideline may downloaded at http://www.oqp.med.va.gov/cpg/PTSD/PTSD_Base.htm and is located in PDF format on this CD.

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Appendix C. VA Documents on Service Provision

VA/DoD COLLABORATION ON RETURNING COMBAT VETERANS: GUIDANCE FOR VHA FACILITY POINTS OF CONTACT
September 2003

Background: The Department of Veterans Affairs (VA) is collaborating with the Department of Defense (DoD) and their Military Treatment Facilities (MTFs) to seamlessly transfer the health care of returning combat veterans from the MTF to a Veterans Health Administration (VHA) facility. Each VHA facility has selected a Point of Contact who will work closely with the VHA social workers serving as VHA/DoD Liaisons detailed to MTFs and Veterans Benefits Administration (VBA) representatives to assure a seamless transition and transfer of care. While this initiative pertains primarily to military personnel returning from Afghanistan (Operation Enduring Freedom) and Iraq (Operation Iraqi Freedom), it also includes active duty military personnel returning from other combat assignments.

VHA/DoD Liaisons:

- The Washington, D.C. VA Medical Center has assigned a full time social worker (Xiomara Telfer) to Walter Reed Army Medical Center and the National Naval Medical Center in Bethesda.
- The San Antonio VA Medical Center has assigned social worker James Lasater to liaison with Brooke Army Medical Center
- The VA Puget Sound VA Health Care System has assigned social worker Brooke Eggimann to liaison with Madigan Army Medical Center.
- The Augusta, Georgia VAMC has assigned social worker Deborah Wakefield to liaison with Eisenhower Army Medical Center.
- Supervisory social worker Jennifer Perez, the Point of Contact (POC) for the Washington, D.C. VA Medical Center, will serve as VHA/DoD Liaison for the remaining MTF's.

Roles and Functions of the VHA/DoD Liaison:

- The primary role of the VHA/DoD Liaisons is to assure the transfer of health care, both inpatient and outpatient, from the MTF to the appropriate VHA facility.
- While the provision of direct services may be necessary in some situations, it is not a prerequisite to the primary referral and linkage function. Onsite collaboration and coordination is, however, crucial.
- The liaisons will establish contact with DoD social workers, case managers and discharge planners to identify patients ready for discharge to VHA and to obtain clear referral information, including the VA/DoD Referral Form, Admission Sheet, and MTF Medical Records. The referral should clearly identify the patient's health care and psychosocial needs and requests for VHA health care services.
- The liaisons will collaborate with staff in their facility's Eligibility Office to initially enroll returning combat veterans at their facility as active duty, utilizing the

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referral information. Getting these combat veterans enrolled and in the computer system will ease transfer of care to the VHA treatment facility.

- Liaisons identify the VHA facility where care will be transferred. To assure ease of enrollment procedures, enrollment information will be transmitted via PDX from the liaison's facility to the identified receiving VHA facility.
- Liaisons identify and communicate with the Point of Contact (POC) at the receiving VHA facility and initiate referrals and linkages for transfers of care. They document all liaison activity in the Computerized Patient Record System (CPRS).
- Liaisons maintain contact with the VHA POC and with MTF staff, coordinating the transfer of care and discharge from the MTF.
- Liaisons will provide referral and outcome information to on all transfers of care from the MTF to VHA to Jennifer Perez, the POC for the Washington, D.C. VA Medical Center and the central POC for VA Central Office.

VHA Facility POC's: Each VHA facility has selected a POC, and many have identified alternate POC's. The role of these POC's is critical to the successful transfer of care from DoD to VHA. VHA is standardizing the functions of the facility POC's to assure that the care of all returning combat veterans is transferred seamlessly from DoD to VHA.

Roles and Functions of VHA Points of Contact (POC)

- The principal role of the VHA facility POC is to receive and expedite referrals and transfers of care from the VA/DoD Liaison and to assure that the appropriate linkage is made for the requested clinical follow-up services. Given the importance of this patient population, significant efforts must be made to expedite the transfer of care and provision of the VHA health care services identified.
- The POC confirms that returning combat veterans are enrolled at the treating VHA facility and arranges for assignment to a primary care provider.
- The POC coordinates initial transfer of care activities (i.e., arranging for an inpatient bed, assuring that outpatient appointments have been made, assuring the provision for necessary Durable Medical Equipment and prosthetic devices and supplies, etc.)
- The POC documents all activity in the Computerized Patient Record System (CPRS).
- The POC assures the transfer of the military medical record from the referring MTF and coordinates completion of all necessary paperwork for the transfer of care, including application for VHA medical benefits.
- The POC serves as the primary facility liaison with the referring VA/DoD Liaison on all information and coordination of activities.
- The POC alerts the VHA facility clinical case manager of the impending transfer of care of all returning combat veterans.
- The POC will immediately alert the appropriate VBA Case Manager to the combat veteran's transfer.

2

Case Managers for Combat Veterans: Each combat veteran will be assigned a case manager, usually a social worker or nurse.

Roles and Functions of VHA Combat Veteran Case Managers

- The principal role of VAMC Combat Veteran Case Managers is to provide ongoing case management services to returning combat veterans and their families over the course of time VHA health care services are being provided.
- The Case Manager makes contact with the combat veteran prior to transfer of health care from the MTF to provide his/her name and phone number and to explain the case manager role.
- The Case Manager makes similar contact with the combat veteran's immediate family and determines whether any family members will accompany the veteran. (If family members will accompany the veteran or visit during an inpatient stay, the case manager will help arrange lodging in a VHA Fisher House or in the local community.)
- The Case Manager will work closely with the combat veteran's interdisciplinary treatment team to assure good communication and treatment planning.
- The Case Manager will ask the VHA provider to contact the combat veteran's DoD provider at the MTF to discuss transfer of medical care.
- The VHA Case Manager will communicate and collaborate closely with the VBA Case Manager and will assist VBA in making contact with the veteran.
- The Case Manager will make referrals to community agencies for services not provided by VA and will coordinate all the care and services provided to the combat veteran by the VA and by non-VA agencies from the initial point of contact until the combat veteran no longer requires services.
- The Case Manager will identify mental health treatment needs and readjustment counseling needs and make referrals as appropriate to the VHA facility Mental Health program and/or to the local Vet Center.
- The Case Manager will communicate regularly with the MTF that referred the veteran.
- The Case Manager will actively participate in discharge planning if the combat veteran is admitted to the VHA facility, involving the veteran and family and keeping the MTF updated.

3

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In Reply Refer To: 133

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UNDER SECRETARY FOR HEALTH'S INFORMATION LETTER

PREPARING FOR THE RETURN OF WOMEN VETERANS FROM COMBAT THEATERS

1. This Information Letter provides guidance to facilities in planning and projecting special care needs for women veterans who have served in a combat theater.

2. Background

a. Women have been deployed (Active Duty, Reservists, and Coast Guard) in combat support positions, serving with distinction, as early as the 1960s, and continue to serve today in combat theaters such as Somalia, Haiti, Bosnia, Afghanistan, Kuwait, and Iraq.

b. Since 1973, when the draft ended, the percentage of active duty personnel who are women has increased dramatically from 1.6 percent in 1973, to 15 percent at the start of 2003. Today, over 210,000 women serve on active duty in the military services of the Department of Defense (Army, Navy, Marine Corps, and Air Force) and over 3,800 women serve in the active Coast Guard, part of the Department of Homeland Security in peacetime. The Reserve and National Guard components have an increasing percentage of women, who constitute 17.2 percent of current personnel at the beginning of Fiscal Year (FY) 2003.

c. The growing number of women in the armed forces means concomitant growth in the number and percentage of women veterans, enrollees, patients and Department of Veterans Affairs (VA) health care expenditures. In FY 2002, the number of women veteran enrollees and patients increased 10.8 percent and 6.6 percent respectively. The population of women veterans differs from that of male veterans. The average woman veteran is younger than her male counterpart and is more likely to belong to a minority group.

d. It is anticipated that many of the medical problems of men and women will be the same. Both groups are reporting symptoms of combat fatigue, diarrheal illnesses, skin irritation from dry air and sandstorms, and the constant threat of heat exhaustion and/or dehydration due to a lack of potable water.

e. VA facilities need to prepare for health issues that pose special problems for women. These issues may include but are not limited to:

(1) Unplanned pregnancy,

(2) Adverse reproductive outcomes,

(3) Sexually transmitted diseases resulting in chronic Pelvic Inflammatory Disease (PID) and/or infertility,

(4) Urinary tract and gynecologic infection resulting in chronic uro-gynecological conditions,

(5) Menstrual disorders,

(6) Fibromyalgia and chronic fatigue,

(7) Behavioral health sequelae resulting from prolonged separation from children and families,

(8) Employment re-entry concerns, and

(9) Military sexual trauma (MST).

3. Guidance. Facilities are encouraged to:

a. Evaluate the adequacy of gynecology and urology services available for women veterans in anticipation of gender-specific health issues.

b. Evaluate the adequacy of services for MST screening, counseling and treatment and the therapeutic environment in which these services are delivered. Evidence suggests that the after effects of MST can pose long-term health problems for women veterans.

c. Develop and widely disseminate educational literature, targeting women veterans. This literature should highlight the gender specific services offered, identify access sites and provide points-of-contact in your catchments area.

4. Resources

a. "A Promise Kept," a video produced by the Women Veterans Health Program (WVHP), was distributed to all VA Medical Centers in April 2003.

b. Veterans Health Initiative module on "A Guide to Gulf War Illnesses," published March, 2002.

c. Post-deployment Health Evaluation and Management may be found may be found through link at: www.oqp.med.va.gov/cpg/cpg.htm .

d. Summary of VA Benefits for National Guard and Reservist Personnel brochure (IB-164 May, 2003), an Information Bulletin, is being distributed to all Reservists and National Guard troops, and is available at:
http://www.hooah4health.com/environment/deployment/familymatters.

e. War Related Illness and Injury Centers (WRIISCs) brochure (IB 10-165 April, 2003), available at:
www.va.gov/WRIISC-DC and www.wri.med.va.gov.

f. Title 38 United States Code, Chapter 43, Part III, the Uniformed Services Employment and Reemployment Act (USERRA) of October 1994, and The Committee for Employer Support of the Guard and Reserve (ESGR), available at:
http://www.esgr.org.

g. Iraq War Clinician Guide, published in June 2003, addresses the unique needs of veterans of the war in Iraq, available at:
http://www.ncptsd.org/topics/war.html.

h. Environmental agents and VA benefits are available at:
http://www.appc1.va.gov/environagents.

5. References

a. Kang, H, MaGee, C, et al. "Pregnancy Outcomes Among U.S. Gulf War Veterans: A Population-Based Survey of 30,000 Veterans," Annals of Epidemiology. 11:504-511; 2001.

b. Manning, L, Wight, V, "Women in the Military," A Women in the Military Project Report for the Women's Research and Education Institute, 1989.

6. Inquiries. Questions regarding this Information Letter can be directed to Carole Turner, Director, Women Veterans Health Program, VA Central Office, 810 Vermont Avenue, NW, Washington, DC, or at 202-273-8577.

S/ Nevin M. Weaver for
Robert H. Roswell, M.D.
Under Secretary for Health

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DEPARTMENT OF VETERANS AFFAIRS
Veterans Health Administration
Washington DC 20420

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In Reply Refer To: 13

February 6, 2004

UNDER SECRETARY FOR HEALTH'S INFORMATION LETTER

CLINICAL REMINDER REGARDING VETERANS OF THE RECENT CONFLICTS IN AFGHANISTAN AND IRAQ

1. **Purpose.** This Under Secretary for Health's Information Letter provides guidance to Department of Veterans Affairs (VA) health care providers who are evaluating veterans of the recent military conflicts in Afghanistan and Iraq.

2. **Background**

a. Shortly after September 11, 2001, military personnel began deploying to Southwest Asia to liberate Afghanistan. In late 2002, additional military personnel were deployed to this region to liberate Iraq. Operation Enduring Freedom in Afghanistan and Operation Iraqi Freedom produced a new generation of war veterans who may be at increased risk of both medical and psychological illnesses due to complex deployment-related exposures. It is therefore important to screen these conflict veterans for unique health risks.

b. Because VA is in the forefront of electronic medical record keeping, computer-driven "clinical reminders" are an ideal approach to provide targeted health care to the veterans of recent conflicts in Southwest Asia. Clinical reminders are clinical decision support tools that assist health care providers in complying with recommended care. VA's Computerized Patient Record System (CPRS) supports automated clinical reminders that assist clinical decision-making and instruct providers about appropriate care by providing links to educational materials. Electronic clinical reminders additionally improve documentation and follow-up by allowing providers to easily view when certain tests or evaluations were performed, as well as to track and document when care has been delivered.

c. There are a number of benefits to creating nationally mandated clinical reminders. National reminders help standardize health care and ensure that experts have had input into how clinical care is delivered. Because of reporting mechanisms built into the CPRS clinical reminder system, national reminders facilitate system-wide assessment of performance and quality of care.

d. This information letter describes a newly developed national clinical reminder, "Afghan & Iraq Post-Deployment Screen," designed to aid VA health care providers who are evaluating veterans of the recent conflicts in Southwest Asia. This clinical reminder will assist in providing new combat veterans with ongoing, high-quality health care in an environment structured to their

unique needs and status. Although Iraqi Freedom veterans are eligible for the Gulf War Registry, clinical registries only assess veterans on the one occasion when they volunteer for a special examination. A much better approach is to ensure that all members of this unique group of veterans receive specialized care from the time they first present to a VA health care facility.

e. Veterans of recent military conflicts are being asked specifically about chronic, debilitating symptoms because these complaints were a major health problem for some veterans after the last Gulf War in 1991.

3. Guidance

a. **Identifying Veterans for the Afghanistan and Iraq Clinical Reminder.** Reminders are designed to apply to a given population and appear on a patient's CPRS screen, based on patient criteria found in a definable data field within CPRS. Once the Afghanistan and Iraq clinical reminder software patch is installed and the reminder is activated at a local facility, it will appear (pop-up) on the CPRS cover sheet for veterans presenting to a VA health care facility who served in the United States military after September 11, 2001, when these deployments began. Identified veterans will then be asked specifically whether they served on the ground, in nearby coastal waters, or in the air over Afghanistan and Iraq after September 11, 2001. If the veteran answers yes, the rest of the reminder dialogue will appear on the computer screen for completion by the health care provider.

b. **Preventing Duplication**

(1) Because of increasingly widespread use of electronic clinical reminders across VA, there is concern that continued implementation of new reminders will cause undue burden to health care providers. To prevent duplication and unnecessary work, a health factor will be available that allows this Afghanistan and Iraq clinical reminder to be completed just once in the lifetime of a veteran. Importantly, the "Afghan & Iraq Post-Deployment Screen" will satisfy current clinical reminders for depression, alcohol abuse, and Post-traumatic Stress Disorder (PTSD) until the scheduled interval lapses for re-administration of these reminders. Consequently, veterans will not be asked the same questions again soon after the completion of this clinical reminder.

(2) It was not possible to account for similar screening questions asked of veterans before this reminder comes into effect. However, this should be a rare problem because most veterans sent to Iraq or Afghanistan will be young troops who usually have not received VA health care. And for the veterans who have received VA health care in the past, this will have occurred at least 6 to 12 months previously, which is the usual length of deployment to these theaters of conflict.

c. **Resolving the "Afghan & Iraq Post-Deployment Screen"**

(1) Once a reminder pops-up on a computer screen in a VA health care facility, it needs to be resolved or will remain active. Reminders designate specific tasks or evaluations that need to be done or specific information that needs to be provided; and they designate what information, evaluation, or test results will turn off the reminder. Consequently, the reminder may trigger the

ordering of additional tests. Alternately, information provided as a result of the reminder may be sufficient to resolve it. This is the case for the Afghanistan and Iraq clinical reminder, which only involves specific screening questions. However, positive responses to these questions might direct the health care provider to perform a more extensive clinical evaluation or, in some cases, to order additional diagnostic tests.

(2) For the Afghanistan and Iraq clinical reminder, all questions in the reminder have to be answered before it is resolved. The questions in this reminder address long-term medical and psychological health risks among veterans of recent conflicts in Afghanistan and Iraq. Reminders are programmed so that when they are resolved, specific information from the reminder is automatically downloaded into a progress note.

d. **Activation.** The "Afghan & Iraq Post-Deployment Screen" was released on January 26, 2004, and needs to be installed in CPRS VA-wide by the end of February 2004. This modification of CPRS will enable VHA treatment facilities to reliably identify veterans of the recent conflicts in Afghanistan and Iraq and provide targeted health care.

e. **Screening Questions.** Veterans of recent military conflicts are being asked specifically about chronic, debilitating symptoms because these complaints were a major health problem for some veterans after the last Gulf War in 1991.

(1) The "Afghan & Iraq Post-Deployment Screen" begins with an introductory explanation and screening question to confirm the veteran's status as a participant of the recent conflicts in Southwest Asia (see Att. A).

(2) The reminder then screens for risk factors associated with the development of PTSD (see Att. B).

(3) The reminder next screens for risk factors associated with the development of depression (see Att. C).

(4) The reminder next screens for risk factors associated with the development of alcohol abuse (see Att. D).

(5) Finally, this clinical reminder screens for infectious diseases endemic to Southwest Asia and for chronic symptoms. This health problem is being targeted in this clinical reminder because infectious diseases, principally enteric infections, malaria, and leishmaniasis, can present after a veteran returns to the United States and even after separation from active duty. ***NOTE:*** *More information about relevant infectious diseases can be obtained in the VA Veterans Health Initiative teaching module, "Endemic Infectious Diseases of Southwest Asia," found at http://www.va.gov/vhi/.*

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f. **Updating Reminder.** The National Clinical Practice Guideline Council (NCGPC) assesses all national reminders annually to see if changes or improvements are warranted. It reviews any comments from the field that have been collected and collated over the course of the year. Suggested modifications may be addressed to the VHA Office of Public Health and Environmental Hazards (13) at 202-273-8579.

4. **Contact.** Questions regarding this information letter may be addressed to the Environmental Agents Service (131) at 202-273-8579.

S/ Robert H. Roswell, M.D.
Under Secretary for Health

Attachments

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ATTACHMENT A

INTRODUCTORY EXPLANATION AND SCREENING QUESTION TO CONFIRM THE VETERAN'S STATUS

The "Afghan & Iraq Post-Deployment Screen" begins with an introductory explanation and screening question to confirm the veteran's status as a participant of the recent conflicts in Southwest Asia:

Afghan & Iraq Post-Deployment Screen

This template is designed to help identify health problems that are uniquely related to military service in Afghanistan and Iraq during recent hazardous combat operations. The questions target infectious diseases, mental health problems, and chronic symptoms which may develop in some veterans of Operation Enduring Freedom and Operation Iraqi Freedom.

SOME WEB LINKS HAVE BEEN PROVIDED FOR REFERENCE.

Office of Quality & Performance: Clinical Practice Guidelines
Medically Unexplained Symptoms: Pain and Fatigue (VA-DOD Guideline)
Major Depressive Disorder (VA-DOD Guideline)
Clinical Care: Mental Health
Outlines in Clinical Medicine
Environmental Agents Service
(also links to Veterans Health Initiatives)

Did the veteran serve in Iraq or Afghanistan, either on the ground or in nearby coastal waters, or in the air above, after September 11, 2001?

__ No -- No service in or over Iraq or Afghanistan

__ Yes -- Service in or over Iraq or Afghanistan

(completion of screening required)

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ATTACHMENT B

SCREENING FOR RISK FACTORS ASSOCIATED WITH THE DEVELOPMENT OF POST-TRAUMATIC STRESS DISORDER (PTSD)

This reminder then screens for risk factors associated with the development of post-traumatic stress disorder (PTSD).

1. SCREEN FOR PTSD

answer all questions

Have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:

Have had any nightmares about it or thought about it when you did not want to? __ (No) __ (Yes)

Tried hard not to think about it; went out of your way to avoid situations that remind you of it? __ (No) __ (Yes)

Were constantly on guard, watchful, or easily startled?
__ (No) __ (Yes)

Felt numb or detached from others, activities, or your surroundings?
__ (No) __ (Yes)

RESULTS OF PTSD SCREENING
(a 'yes' answer to two or more of the above questions is a positive screen)

__ PTSD Screen Negative

__ PTSD Screen Positive

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ATTACHMENT C

SCREENING FOR RISK FACTORS ASSOCIATED WITH THE DEVELOPMENT OF DEPRESSION

This reminder, next screens for risk factors associated with the development of depression.

2. SCREEN FOR DEPRESSION

DEPRESSION SCREEN (2 questions screen)

1. During the past month, have you often been bothered by feeling down, depressed, or hopeless?

2. During the past month, have you often been bothered by little interest or pleasure in doing things?

A "Yes" response to either question is a POSITIVE screen for depression. Further evaluation is then needed.

__ Depression Screen Negative

__ Depression Screen Positive

C-1

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ATTACHMENT D

SCREENING FOR RISK FACTORS ASSOCIATED WITH THE DEVELOPMENT OF ALCOHOL ABUSE

This reminder, next screens for risk factors associated with the development of alcohol abuse.

3. SCREEN FOR ALCOHOL

In the past 12 months, has the patient had any drinks containing alcohol?

choose one

__ Yes (Perform AUDIT-C)

__ No -- no alcohol in the past 12 months

__ Patient declined to answer questions about alcohol use.

Example: The patient reports having consumed alcohol in the past year. An alcohol screening test (AUDIT-C) was positive (score = 3).

1. How often did you have a drink containing alcohol in the past year?
2. How many drinks containing alcohol did you have on a typical day when you were drinking in the past year?
3. How often did you have six or more drinks on one occasion in the past year?

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ATTACHMENT E

INFECTIOUS DISEASES ENDEMIC TO SOUTHWEST ASIA

Finally, this clinical reminder screens for infectious diseases endemic to Southwest Asia and for chronic symptoms. This health problem is being targeted in this clinical reminder because infectious diseases, principally enteric infections, malaria, and leishmaniasis can present after a veteran returns to the United States and even after separation from active duty. ***NOTE:*** *More information about relevant infectious diseases can be obtained in the VA Veterans Health Initiative teaching module, "Endemic Infectious Diseases of Southwest Asia," found at* http://www.va.gov/vhi/ .

4. SCREEN FOR INFECTIOUS DISEASES AND CHRONIC SYMPTOMS

answer all 4 questions

Do you have any problems with chronic diarrhea or other gastrointestinal complaints since serving in the area of conflict? __ (No) __ (Yes)

(If yes, the patient's stool should be evaluated for ova and parasites because of high rates of giardiasis and amebiasis in Southwest Asia).

Do you have any unexplained fevers? __ (No) __ (Yes)

(If yes, the patient should be evaluated for malaria and possibly visceral leishmania infection because of high rates of these diseases in Southwest Asia. Amoebic infection should again be considered.)

Do you have a persistent papular or nodular skin rash that began after deployment to Southwest Asia? __ (No) __ (Yes)

(If yes and an unusual rash or lesion is verified, the patient should be evaluated for cutaneous leishmaniasis.)

Have you had any physical symptoms, such as fatigue, headaches, Muscle and/or joint pains, forgetfulness, for three months or longer that have interfered with your normal daily activities at home or work?

__ (No) __ (Yes)

Appendix D. Assessment of Iraq War Veterans: Selecting Assessment Instruments and Interpreting Results

Eve Carlson, Ph.D.

The Assessment section of this Guide discussed general challenges to assessment of veterans returning from Iraq and delineated suggested domains to assess and issues to consider in assessing those domains. This section will focus on suggested instruments to use as part of an assessment to decide what services to offer veterans and to plan psychological treatment.

As indicated in the previous section, responses in the days and weeks following exposure to highly stressful events are highly variable across individuals and high levels of distress in the days and weeks following exposure do not reliably predict longer-term posttraumatic symptoms. Some, but not all, who meet criteria for Acute Stress Disorder two weeks after and event will later have PTSD, but some who do not meet criteria for ASD will also develop PTSD (Bryant & Harvey, 2002). Since no measures of early responses have been found to reliably predict longer-term responses and since most of those exposed to extreme stressors recover within a month, assessment with measures of specific domains is not recommended during this period. This section will make suggestions, therefore, about selecting measures to assess veterans who have been home one month or more.

Many of the domains discussed in the previous section can be adequately assessed during an interview without a specific self-report measure. These include current work functioning, current interpersonal functioning, recreation/self-care, physical functioning, and past distress and coping. For other areas, specific measures or questionnaires may be a useful way to gather detailed information about the veteran's current psychological functioning and past experiences. Domains and potential measures are discussed below along with characteristics of veterans to consider when choosing measures. Sources of information about choosing, administering, and interpreting the results of measures of trauma exposure and responses include: Briere (1997), Carlson (1997), Solomon et al. (1996), and Wilson and Keane (1996).

Psychological Symptoms

PTSD symptoms. For many veterans, a diagnostic label may not be needed and may not facilitate treatment. In some circumstances, applying such a label may be counterproductive and undesirable to the veteran. A brief measure of PTSD symptoms can, however, be useful to get an idea of current PTSD symptoms a veteran might be having and to monitor treatment progress. A wide variety of brief measures of PTSD symptoms are available, and information about these (including contact information to obtain measures) can be found at:

www.ncptsd.org/publications/assessment

Additional information about measures of PTSD can be found in Briere (1997), Carlson (1997), Solomon et al. (1996), and Wilson and Keane (1996).

For convenience, two brief measures are included in this appendix here: the Posttraumatic Checklist - Civilian (PCL-C) and the Screen for Posttraumatic Stress Symptoms (SPTSS). Both are measures that do not key symptoms to a particular event since exposure to multiple events is

common and it is not clear that people can assign symptoms to events with any accuracy or that symptoms are, in fact, uniquely associated with particular events. The PCL-C is recommended rather than the PCL-Military because it is important to assess veterans' responses to military and non-military traumatic events when assessing for treatment purposes. The SPTSS may be useful with veterans who have less formal education because it has a very low reading level. It may also be useful for veterans who are reluctant to report distress because it inquires about the frequency of symptoms rather than the degree of distress they cause.

If assignment of a diagnostic label is required or desired, the Clinician Administered PTSD Scale (CAPS) (Weathers, Keane, & Davidson, 2001) can be used. Detailed information about this structured interview and how to obtain it are available at:

http://www.ncptsd.org/publications/assessment/ncinstruments.html

Dissociation. Dissociative symptoms are very common in trauma survivors, and they may not be spontaneously reported. The Trauma-Related Dissociation Scale (Carlson & Waelde, 2000), a measure of dissociation, is included in this appendix.

Depression. Depression is a very common comorbid condition in those with posttraumatic disorders. It may be secondary to PTSD or associated with aspects of traumatic events such as losses. The Beck Depression Inventory (BDI) – Short Form is a common brief measure of depression and is included in the appendix (Beck & Steer, 2000). This measure is also available for computerized administration via DHCP at VA Medical Centers.

Traumatic grief. Screen for Complicated Grief is a brief measure of symptoms of traumatic grief and is included in this appendix. Further details about the construct this screen measures can be found in Section VI of this Guide.

Alcohol use. Substance use is a common problem for those with PTSD, particularly alcohol abuse and dependence. The AUDIT (Goldman, Brown, & Christiansen, 2000) is a screen for alcohol use that is included in this appendix.

Other domains to assess and suggested measures:

Anger. Anger is a frequent problem for trauma survivors and outbursts of anger is a symptom of PTSD. If a veteran reports problems with anger, detailed assessment of that area may be useful. The State-Trait Anger Expression Inventory (STAX-I) is measure of anger and how it is expressed (Spielberger, 1988). This measure may be useful to assess vets, although it is important to note that it is not ideal to assess recent, post-trauma anger because its trait form assesses both pre-trauma and post-trauma anger and its state form assesses feelings at the time of the assessment (which may not representative of the entire post-trauma period).

Guilt and shame. Guilt and shame are frequently issues for trauma survivors who feel distressed over what they did or did not do at the time of trauma. Kubany et al. (1995) have developed a measure of guilt that may be useful to assess those with clinical issues in that domain.

Relevant History

Exposure to potentially traumatic events. Because exposure to previous traumatic stressors may affect response to traumatic stressors experienced in the military, it is important to broadly assess exposure to traumatic stressors. The Trauma History Screen (Carlson, 2002), a brief assessment tool that can be used for that purpose, is included in this appendix.

Selected scales within the Deployment Risk and Resilience Inventory (DRRI; King, King, & Vogt, 2003) may be used as a vehicle to identify particular combat and other high magnitude and threatening experiences that were potentially traumatic. Because the level of non-traumatic stressors and the overall context in which exposure to traumatic stressors occurs may affect the response to high magnitude stressors, it is important to assess these elements. Several scales from the DRRI (e.g., concerns about life and family disruptions, difficult living and working environment, war-zone social support) may prove useful to gain a broader profile of the deployment experience. Copies of the individual DRRI measures, scoring guides, and a full manual describing instrument development may be obtained by contacting dawne.vogt@med.va.gov.

For women veterans. Because women who serve in the military may be exposed to a number of traumatic stressors that are not assessed in combat measures, specific assessment of military stressors is often helpful for women veterans. Life Stressors Checklist (Wolfe & Kimerling, 1997) is provided in this appendix for this purpose.

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Assessment Instruments
Iraq War Clinician Guide

Compiled by Eve Carlson, Ph.D.
National Center for PTSD, VA Palo Alto HCS

Posttraumatic Checklist - Civilian (PCL-C)

Screen for Posttraumatic Stress Symptoms (SPTSS)

Trauma-Related Dissociation Scale (TRDS)

Beck Depression Inventory – Short Form (BDI-SF)

Screen for Complicated Grief (SCG)

Alcohol Use Disorders Identification Test (AUDIT)

Trauma History Screen (THS)

Life Stressors Checklist (TSC)

PCL-C

INSTRUCTIONS: Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

		Not at all	A little bit	Moderately	Quite a bit	Extremely
1.	Repeated, disturbing *memories, thoughts,* or *images* of a stressful experience from the past?	1	2	3	4	5
2.	Repeated, disturbing *dreams* of a stressful experience from the past?	1	2	3	4	5
3.	Suddenly *acting* or *feeling* as if a stressful experience *were happening again* (as if you were reliving it)?	1	2	3	4	5
4.	Feeling *very upset* when *something reminded you* of a stressful experience from the past?	1	2	3	4	5
5.	Having *physical reactions* (e.g., heart pounding, trouble breathing, sweating) when *something reminded you* of a stressful experience from the past?	1	2	3	4	5
6.	Avoiding *thinking about* or *talking about* a stressful experience from the past or avoiding *having feelings* related to it?	1	2	3	4	5
7.	Avoiding *activities* or *situations* because *they reminded you* of a stressful experience from the past?	1	2	3	4	5
8.	Trouble *remembering important parts* of a stressful experience from the past?	1	2	3	4	5
9.	*Loss of interest* in activities that you used to enjoy?	1	2	3	4	5
10.	Feeling *distant* or *cut off* from other people?	1	2	3	4	5
11.	Feeling *emotionally numb* or being unable to have loving feelings for those close to you?	1	2	3	4	5
12.	Feeling as if your *future* will somehow be *cut short*?	1	2	3	4	5
13.	Trouble *falling* or *staying asleep*?	1	2	3	4	5
14.	Feeling *irritable* or having *angry outbursts*?	1	2	3	4	5
15.	Having *difficulty concentrating*?	1	2	3	4	5
16.	Being *"super-alert"* or watchful or on guard?	1	2	3	4	5
17.	Feeling *jumpy* or easily startled?	1	2	3	4	5

PCL-C for DSM-IV (11/1/94) Weathers, Litz, Huska, & Keane National Center for PTSD - Behavioral Science Division

SPTSS

IN THE BLANK SPACE BEFORE EACH QUESTION, PUT A NUMBER TO TELL HOW MUCH THAT THING HAS HAPPENED TO YOU DURING THE PAST TWO WEEKS. Use the scale below to decide which number to put in the blank space. Put "0" if you never had the experience during the past two weeks, and put "10" if it was always happening to you or happened every day during the past two weeks. If it happens sometimes, but not every day, put in one of the numbers between "0" and "10" to show how much.

0 1 2 3 4 5 6 7 8 9 10
(never) (always)

____ 1. I don't feel like doing things that I used to like doing.

____ 2. I can't remember much about bad things that have happened to me.

____ 3. I feel cut off and isolated from other people.

____ 4. I try not to think about things that remind me of something bad that happened to me.

____ 5. I feel numb: I don't feel emotions as strongly as I used to.

____ 6. I have trouble concentrating on things or paying attention to something for a long time.

____ 7. I have a hard time thinking about the future and believing that I'm going to live to old age.

____ 8. I feel very irritable and lose my temper.

____ 9. I avoid doing things or being in situations that might remind me of something terrible that happened to me in the past.

____ 10. I am very aware of my surroundings and nervous about what's going on around me.

____ 11. I find myself remembering bad things that happened to me over and over, even when I don't want to think about them.

____ 12. I get startled or surprised very easily and "jump" when I hear a sudden sound.

____ 13. I have bad dreams about terrible things that happened to me.

____ 14. I get very upset when something reminds me of something bad that happened to me.

____ 15. I have trouble getting to sleep or staying asleep.

____ 16. When something reminds me of something bad that happened to me, I feel shaky, sweaty, nervous and my heart beats really fast.

____ 17. I suddenly feel like I am back in the past, in a bad situation that I was once in, and it's like it was happening it all over again.

TRDS

(Carlson & Waelde, 1999)

For each statement below, circle one of the choices to show how many times each thing has happened to you in the past week.

	NOT AT ALL	ONCE OR TWICE	3-6 TIMES	7-10 TIMES	MORE THAN 10 TIMES
		(IN THE PAST WEEK)			
1. My body felt strange or unreal.	0	1-2	3-6	7-10	10+
2. Things around me seemed strange or unreal.	0	1-2	3-6	7-10	10+
3. I got reminded of something upsetting and then spaced out for a while.	0	1-2	3-6	7-10	10+
4. I had moments when I lost control and acted like I was back in an upsetting time in my past.	0	1-2	3-6	7-10	10+
5. I noticed that I couldn't remember the details of something upsetting that happened to me.	0	1-2	3-6	7-10	10+
6. Familiar places seemed strange or unreal.	0	1-2	3-6	7-10	10+
7. I felt like I was outside myself, watching myself do things.	0	1-2	3-6	7-10	10+
8. I heard something that I know really wasn't there.	0	1-2	3-6	7-10	10+
9. I got upset about something and can't remember what happened next.	0	1-2	3-6	7-10	10+
10. I felt like I was in a movie - like nothing that was happening was real.	0	1-2	3-6	7-10	10+
11. I didn't feel pain when I was hurt and should have felt something.	0	1-2	3-6	7-10	10+
12. A memory came back to me that was so strong that I lost track of what was going on around me.	0	1-2	3-6	7-10	10+
13. I found myself staring into space and thinking of nothing.	0	1-2	3-6	7-10	10+
14. I couldn't remember things that had happened during the day even when I tried to.	0	1-2	3-6	7-10	10+
15. I felt like I wasn't myself.	0	1-2	3-6	7-10	10+
16. I felt like I was in a daze and couldn't make sense of what was going on around me.	0	1-2	3-6	7-10	10+
17. I saw something that seemed real, but was not.	0	1-2	3-6	7-10	10+
18. I suddenly realized that I hadn't been paying attention to what was going on around me.	0	1-2	3-6	7-10	10+
19. I felt cut off from what was going on around me.	0	1-2	3-6	7-10	10+
20. Parts of my body seemed distorted - like they were bigger or smaller than usual.	0	1-2	3-6	7-10	10+
21. I reacted to people or situations as if I were back in an upsetting time in my past.	0	1-2	3-6	7-10	10+
22. I got so focused on something going on in my mind that I lost track of what was happening around me.	0	1-2	3-6	7-10	10+
23. I noticed there were gaps in my memory for things that happened to me that I should be able to remember.	0	1-2	3-6	7-10	10+
24. I smelled something that I know really wasn't there.	0	1-2	3-6	7-10	10+

BDI - Short Form (A. Beck)

Please read all of the statements in each group. Circle the number beside the statement that best describes the way you have been feeling in the PAST TWO WEEKS. If more than one statement is true, circle the numbers of all statements that are true.

0 I do not feel sad.
1 I feel sad or blue.
2 I am blue or sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it.

0 I am not particularly pessimistic or discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.

0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failure.
3 I feel that I am a complete failure as a person (parent, husband, wife).

0 I am not particularly dissatisfied.
1 I don't enjoy things the way I used to.
2 I don't get satisfaction out of anything anymore.
3 I am dissatisfied with everything.

0 I don't feel particularly guilty.
1 I feel bad or unworthy a good part of the time.
2 I feel quite guilty.
3 I feel as though I am very bad or worthless.

0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.

0 I make decisions about as well as ever.
1 I try to put off making decisions.
2 I have great difficulty in making decisions.
3 I can't make any decisions at all any more.

0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all any more.

0 I don't have any thoughts of harming myself.
1 I feel I would be better off dead.
2 I have definite plans about committing suicide.
3 I would kill myself if I had the chance.

0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people and have little feeling for them.
3 I have lost all of my interest in other people and don't care about them at all.

0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance and they make me look unattractive.
3 I feel that I am ugly or repulsive looking.

0 I can work about as well as before.
1 It takes extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

0 I don't get any more tired than usual
1 I get tired more easily than I used to.
2 I get tired from doing anything.
3 I get too tired to do anything.

Screen for Complicated Grief

Prigerson, Kasl, Maciejewski, Silverman, Jacobs, & Carlson

Please mark the box next to the answer that best describes how you have been feeling over the <u>past month</u>. The blanks refer to the deceased person over whom you are grieving.

1. I think about _____ so much that it can be hard for me to do the things I normally do.

Almost never (less than once a month) __
Rarely (monthly) __
Sometimes (weekly) __
Often (daily) __
Always (several times a day) __

2. I feel myself longing and yearning for _____.

No sense of longing and yearning __
Slight sense of longing and yearning __
Some sense __
Strong sense __
Overwhelming sense __

3. I feel disbelief over _____ 's death.

Almost never (less than once a month) __
Rarely (monthly) __
Sometimes (weekly) __
Often (daily) __
Always (several times a day) __

4. Ever since _____ died, I feel like I have lost the ability to care about other people or I feel distant from people I care about.

No trouble feeling close or connected to others __
Slight trouble feeling close or connected to others __
Some trouble feeling close or connected to others __
Much trouble feeling close or connected to others __
Very much trouble feeling close or connected to others __

5. I am bitter over _____ 's death.

No sense of bitterness __
A slight sense of bitterness __
Some sense __
A strong sense __
An overwhelming sense __

6. I feel lonely ever since _____ died.

No loneliness __
Feel slightly lonely __
Feel somewhat lonely __
Feel very lonely __
Feel overwhelmingly lonely __

7. It is hard for me to imagine life being fulfilling without _____.

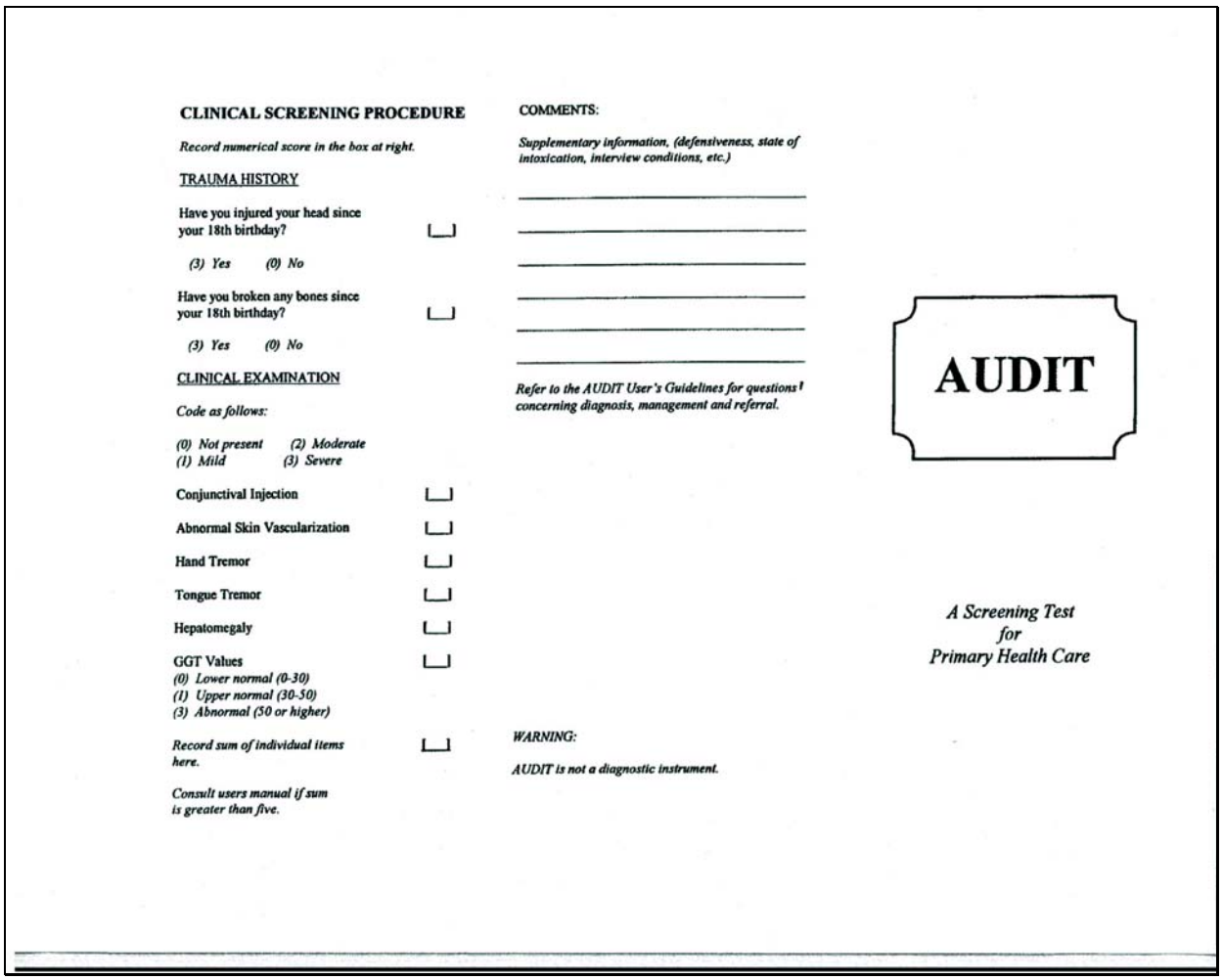
Not hard to imagine life being fulfilling __
Slightly hard to imagine life being fulfilling __
Somewhat hard __
Very hard __
Overwhelmingly hard __

8. I feel that a part of myself died along with _____.

Almost never (less than once a month) __
Rarely (monthly) __
Sometimes (weekly) __
Often (daily) __
Always (several times a day) __

9. I have lost my sense of security or safety since the death of _____.

No change in feelings of security __
A slight sense of security __
Some sense of security __
A strong sense of security __
An overwhelming sense of security __



CLINICAL SCREENING PROCEDURE

Record numerical score in the box at right.

TRAUMA HISTORY

Have you injured your head since your 18th birthday? ☐

(3) Yes (0) No

Have you broken any bones since your 18th birthday? ☐

(3) Yes (0) No

CLINICAL EXAMINATION

Code as follows:

(0) Not present (2) Moderate
(1) Mild (3) Severe

Conjunctival Injection ☐

Abnormal Skin Vascularization ☐

Hand Tremor ☐

Tongue Tremor ☐

Hepatomegaly ☐

GGT Values ☐
(0) Lower normal (0-30)
(1) Upper normal (30-50)
(3) Abnormal (50 or higher)

Record sum of individual items here. ☐

Consult users manual if sum is greater than five.

COMMENTS:

Supplementary information, (defensiveness, state of intoxication, interview conditions, etc.)

Refer to the AUDIT User's Guidelines for questions concerning diagnosis, management and referral.

WARNING:

AUDIT is not a diagnostic instrument.

AUDIT

A Screening Test for Primary Health Care

AUDIT

THE ALCOHOL USE DISORDERS IDENTIFICATION TEST

Audit was developed by the World Health Organization to identify persons whose alcohol consumption has become hazardous or harmful to their health. Persons at high risk include medical patients, accident victims, suicidal persons, drunk driving offenders, and armed forces personnel. Screening with AUDIT can be conducted in a variety of health care settings.

AUDIT is a brief structured interview that can be incorporated into a medical history. It contains questions about recent alcohol consumption, dependence symptoms and alcohol-related problems.

The optional Clinical Screening Procedure consists of two interview items, a brief physical examination and a laboratory test. It is designed to complement the AUDIT under conditions where additional clinical information is required.

REMEMBER:

**Read questions as written*
**Record answers carefully*
**Use the ten AUDIT questions first*

Begin the AUDIT by saying:* **"Now I am going to ask you some questions about your use of alcoholic beverages during the past year." *Explain what is meant by "alcoholic beverages" by using local examples of beer, wine, vodka, etc. Code answers in terms of "standard drinks."*

**Refer to the AUDIT guidelines for detailed instructions.*

AUDIT CORE

Place the correct answer number in the box.

1. How often do you have a drink containing alcohol? ☐

(0) Never (3) 2 to 3 times a week
(1) Monthly or less (4) 4 or more times a week
(2) 2 to 4 times a month

2. How many drinks containing alcohol do you have on a typical day when you are drinking? ☐

(0) 1 or 2 (2) 5 or 6 (4) 10 or more
(1) 3 or 4 (3) 7, 8, or 9

3. How often do you have six or more drinks on one occasion? ☐

(0) Never (2) Monthly (4) Daily or
(1) < monthly (3) Weekly almost daily

4. How often during the last year have you found that you were not able to stop drinking once you had started? ☐

(0) Never (2) Monthly (4) Daily or
(1) < monthly (3) Weekly almost daily

5. How often during the last year have you failed to do what was normally expected from you because of drinking? ☐

(0) Never (2) Monthly (4) Daily or
(1) < monthly (3) Weekly almost daily

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session? ☐

(0) Never (2) Monthly (4) Daily or
(1) < monthly (3) Weekly almost daily

7. How often during the last year have you had a feeling of guilt or remorse after drinking? ☐

(0) Never (2) Monthly (4) Daily or
(1) < monthly (3) Weekly almost daily

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking? ☐

(0) Never (2) Monthly (4) Daily or
(1) < monthly (3) Weekly almost daily

9. Have you or someone else been injured as a result of your drinking? ☐

(0) No (4) Yes, during
(2) Yes, but not the last year
in the last year

10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down? ☐

(0) No (4) Yes, during
(2) Yes, but not the last year
in the last year

Record total of specific items here. ☐

If total is 8 or greater, consult Users Manual.

Trauma History Screen

The events below may or may not have happened to you. Circle "YES" if that kind of thing has happened to you or circle "NO" if that kind of thing has not happened to you. **If you circle "YES" for any events**: put a number in the blank next to it to show how many times something like that happened.

				Number of times something like this happened
A.	A really bad car, boat, train, or airplane accident	NO	YES	____
B.	A really bad accident at work or home	NO	YES	____
C.	A hurricane, flood, earthquake, tornado, or fire	NO	YES	____
D.	Getting beat up or attacked - as a child	NO	YES	____
E.	Getting beat up or attacked - as an adult	NO	YES	____
F.	Forced sex - as a child	NO	YES	____
G.	Forced sex - as an adult	NO	YES	____
H.	Attack with a gun, knife, or weapon	NO	YES	____
I.	During military service - seeing something horrible or being badly scared	NO	YES	____
J.	Sudden death of close family or friend	NO	YES	____
K.	Seeing someone badly hurt or killed	NO	YES	____
L.	Some other event that scared you badly	NO	YES	____

Did any of these things really bother you emotionally? NO YES
If you answered "YES", fill out a box to tell about EVERY event that really bothered you.
There are more boxes on the other side of the page. If you run out of boxes, please ask for another page.

Letter from above for the type of event: ____ Your age when this happened: ____
Describe what happened:

When this happened, did anyone get hurt or killed? NO YES
When this happened, were you afraid that you or someone else might get hurt or killed? NO YES
When this happened, did you feel very afraid, helpless, or horrified? NO YES
When this happened, did you feel unreal, spaced out, disoriented, or strange? NO YES
After this happened, how long were you bothered by it? not at all / 1 week / 2-3 weeks / a month or more
At that time, how much did it bother you emotionally? not at all / a little / somewhat / much / very much

Letter from above for the type of event: ____ Your age when this happened: ____
Describe what happened:

When this happened, did anyone get hurt or killed? NO YES
When this happened, were you afraid that you or someone else might get hurt or killed? NO YES
When this happened, did you feel very afraid, helpless, or horrified? NO YES
When this happened, did you feel unreal, spaced out, disoriented, or strange? NO YES
After this happened, how long were you bothered by it? not at all / 1 week / 2-3 weeks / a month or more
At that time, how much did it bother you emotionally? not at all / a little / somewhat / much / very much

GO TO OTHER SIDE IF YOU MARKED "YES" FOR MORE EVENTS.

Letter from above for the type of event: ____ Your age when this happened: ____

Describe what happened:

When this happened, did anyone get hurt or killed? NO YES

When this happened, were you afraid that you or someone else might get hurt or killed? NO YES

When this happened, did you feel very afraid, helpless, or horrified? NO YES

When this happened, did you feel unreal, spaced out, disoriented, or strange? NO YES

After this happened, how long were you bothered by it? not at all / 1 week / 2-3 weeks / a month or more

At that time, how much did it bother you emotionally? not at all / a little / somewhat / much / very much

Letter from above for the type of event: ____ Your age when this happened: ____

Describe what happened:

When this happened, did anyone get hurt or killed? NO YES

When this happened, were you afraid that you or someone else might get hurt or killed? NO YES

When this happened, did you feel very afraid, helpless, or horrified? NO YES

When this happened, did you feel unreal, spaced out, disoriented, or strange? NO YES

After this happened, how long were you bothered by it? not at all / 1 week / 2-3 weeks / a month or more

At that time, how much did it bother you emotionally? not at all / a little / somewhat / much / very much

Letter from above for the type of event: ____ Your age when this happened: ____

Describe what happened:

When this happened, did anyone get hurt or killed? NO YES

When this happened, were you afraid that you or someone else might get hurt or killed? NO YES

When this happened, did you feel very afraid, helpless, or horrified? NO YES

When this happened, did you feel unreal, spaced out, disoriented, or strange? NO YES

After this happened, how long were you bothered by it? not at all / 1 week / 2-3 weeks / a month or more

At that time, how much did it bother you emotionally? not at all / a little / somewhat / much / very much

IF YOU NEED MORE BOXES TO FILL OUT, PLEASE ASK FOR ANOTHER SHEET.

LSC - R

READ THIS FIRST: Now we are going to ask you some questions about events in your life that are frightening, upsetting, or stressful to most people. Please think back over your whole life when you answer these questions. Some of these questions may be about upsetting events you don't usually talk about. Your answers are important, but you do not have to answer any questions that you do not want to. Thank you.

1. Have you ever been in a serious disaster (for example, an earthquake, hurricane, large fire, explosion)? **YES** **NO**

a. How old were you when this happened? _____
c. At the time of the event did you believe that ***you or someone else*** could be ***killed*** or seriously ***harmed***? YES NO
d. At the time of the event did you experience feelings of ***intense helplessness, fear, or horror***? YES NO
e. How much has this affected your life in the past year? **(1) not at all** **(2)** **(3) some** **(4)** **(5) extremely**

2. Have you ever seen a serious accident (for example, a bad car wreck or an on-the-job accident)? **YES** **NO**

a. How old were you when this happened? _____
c. At the time of the event did you believe that ***you or someone else*** could be ***killed*** or seriously ***harmed***? YES NO
d. At the time of the event did you experience feelings of ***intense helplessness, fear, or horror***? YES NO
e. How much has this affected your life in the past year? **(1) not at all** **(2)** **(3) some** **(4)** **(5) extremely**

3. Have you ever had a very serious accident or accident-related injury (for example, a bad car wreck or an on-the-job accident)? **YES** **NO**

a. How old were you when this happened? _____
c. At the time of the event did you believe that ***you or someone else*** could be ***killed*** or seriously ***harmed***? YES NO
d. At the time of the event did you experience feelings of ***intense helplessness, fear, or horror***? YES NO
e. How much has this affected your life in the past year? **(1) not at all** **(2)** **(3) some** **(4)** **(5) extremely**

4. Was a close family member ever sent to jail? **YES** **NO**

a. How old were you when this happened? _____ b. When it ended?_____
e. How much has this affected your life in the past year? **(1) not at all** **(2)** **(3) some** **(4)** **(5) extremely**

5. Have you ever been sent to jail? **YES** **NO**

a. How old were you when this happened? _____ [b. When it ended?_____]
e. How much has this affected your life in the past year? **(1) not at all** **(2)** **(3) some** **(4)** **(5) extremely**

6. Were you ever put in foster care or put up for adoption? **YES** **NO**

a. How old were you when this happened? _____ b. When it ended?_____
e. How much has this affected your life in the past year? **(1) not at all** **(2)** **(3) some** **(4)** **(5) extremely**

7. Did your parents ever separate or divorce while you were living with them? **YES** **NO**

a. How old were you when this happened? _____ b. When it ended?_____
e. How much has this affected your life in the past year? **(1) not at all** **(2)** **(3) some** **(4)** **(5) extremely**

8. Have you ever been separated or divorced? **YES** **NO**

a. How old were you when this happened? _____ b. When it ended?_____
e. How much has this affected your life in the past year? **(1) not at all** **(2)** **(3) some** **(4)** **(5) extremely**

9. Have you ever had serious money problems (for example, not enough money for food or place to live)? **YES** **NO**

a. How old were you when this happened? _____ b. When it ended?_____
e. How much has this affected your life in the past year? **(1) not at all** **(2)** **(3) some** **(4)** **(5) extremely**

10. Have you ever had a very serious physical or mental illness (for example, cancer, heart attack, serious operation, felt like killing yourself, hospitalized because of nerve problems)? YES NO

a. How old were you when this happened? _____ b. When it ended?_____
c. At the time of the event did you believe that *you or someone else* could be ***killed*** or seriously ***harmed***? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? **(1) not at all (2) (3) some (4) (5) extremely**

11. Have you ever been emotionally abused or neglected (for example, being frequently shamed, embarrassed, ignored, or repeatedly told that you were "no good")? YES NO

a. How old were you when this happened? _____ b. When it ended?_____
c. At the time of the event did you believe that *you or someone else* could be ***killed*** or seriously ***harmed***? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? **(1) not at all (2) (3) some (4) (5) extremely**

12. Have you ever been physically neglected (for example, not fed, not properly clothed, or left to take care of yourself when you were too young or ill)? YES NO

a. How old were you when this happened? _____ b. When it ended?_____
c. At the time of the event did you believe that *you or someone else* could be ***killed*** or seriously ***harmed***? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? **(1) not at all (2) (3) some (4) (5) extremely**

13. WOMEN ONLY: Have you ever had an abortion or miscarriage (lost your baby)? YES NO

a. How old were you when this happened? _____
c. At the time of the event did you believe that *you or someone else* could be ***killed*** or seriously ***harmed***? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? **(1) not at all (2) (3) some (4) (5) extremely**

14. Have you ever been separated from you child against your will (for example, the loss of custody or visitation or kidnapping)? YES NO

a. How old were you when this happened? _____ b. When it ended?_____
e. How much has this affected your life in the past year? **(1) not at all (2) (3) some (4) (5) extremely**

15. Has a baby or child of yours ever had a severe physical or mental handicap (for example, mentally retarded, birth defects, can't hear, see, walk)? YES NO

a. How old were you when this happened? _____ b. When it ended?_____
e. How much has this affected your life in the past year? **(1) not at all (2) (3) some (4) (5) extremely**

16. Have you ever been responsible for taking care of someone close to you (not your child) who had a severe physical or mental handicap (for example, cancer, stroke, AIDS, nerve problems, can't hear, see, walk)? YES NO

a. How old were you when this happened? _____ b. When it ended?_____
e. How much has this affected your life in the past year? **(1) not at all (2) (3) some (4) (5) extremely**

17. Has someone close to you died suddenly or unexpectedly (for example, sudden heart attack, murder or suicide)? YES NO

a. How old were you when this happened? _____
c. At the time of the event did you believe that *you or someone else* could be ***killed*** or seriously ***harmed***? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? **(1) not at all (2) (3) some (4) (5) extremely**

18. Has someone close to you died (do NOT include those who died suddenly or unexpectedly)? YES NO

a. How old were you when this happened? _____
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

19. When you were young (before age 16). did you ever see violence between family members (for example, hitting, kicking, slapping, punching)? YES NO

a. How old were you when this happened? _____ b. When it ended?_____
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

20. Have you ever seen a robbery, mugging, or attack taking place? YES NO

a. How old were you when this happened? _____
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

21. Have you ever been robbed, mugged, or physically attacked (not sexually) by someone you did not know? YES NO

a. How old were you when this happened? _____
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

22. *Before age 16*, were you ever abused or physically attacked (not sexually) by someone you knew (for example, a parent, boyfriend, or husband, hit, slapped, choked, burned, or beat you up)? YES NO

a. How old were you when this happened? _____ b. When it ended?_____
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

23. *After age 16*, were you ever abused or physically attacked (not sexually) by someone you knew (for example, a parent, boyfriend, or husband hit, slapped, choked, burned, or beat you up)? YES NO

a. How old were you when this happened? _____ [b. When it ended?_____]
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

24. Have you ever been bothered or harassed by sexual remarks, jokes, or demands for sexual favors by someone *at work or school* (for example, a coworker, a boss, a customer, another student, a teacher)? YES NO

a. How old were you when this happened? _____ b. When it ended?_____
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

25. *Before age 16*, were you ever *touched* or made to *touch someone else* in a sexual way because he/she forced you in some way or threatened to harm you if you didn't? **YES NO**

a. How old were you when this happened? _____ b. When it ended?_____
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

26. *After age 16*, were you ever *touched* or made to *touch someone else* in a sexual way because he/she forced you in some way or threatened to harm you if you didn't? **YES NO**

a. How old were you when this happened? _____ b. When it ended?_____
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

27. *Before age 16*, did you ever have sex (oral, anal, genital) when you didn't want to because someone forced you in some way or threatened to hurt you if you didn't? **YES NO**

a. How old were you when this happened? _____ b. When it ended?_____
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

28. *After age 16*, did you ever have sex (oral, anal, genital) when you didn't want to because someone forced you in some way or threatened to harm you if you didn't? **YES NO**

a. How old were you when this happened? _____ [b. When it ended?_____]
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

29. Are there any events we did not include that you would like to mention? **YES NO**

What was the event? _____

_____

a. How old were you when this happened? _____ b. When it ended?_____
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

30. Have any of the events mentioned above ever happened to someone close to you so that even though you didn't see it yourself, you were seriously upset by it? **YES NO**

What was the event? _____

_____

a. How old were you when this happened? _____ [b. When it ended?_____]
c. At the time of the event did you believe that *you or someone else* could be *killed* or seriously *harmed*? YES NO
d. At the time of the event did you experience feelings of *intense helplessness, fear, or horror*? YES NO
e. How much has this affected your life in the past year? (1) (2) (3) (4) (5)
not at all some extremely

Appendix E. Program Evaluation

Robert Rosenheck, M.D. and Alan Fontana, Ph.D.

Program Evaluation can play an important role in the development and maintenance of new programs by providing: (1) valuable feedback, not otherwise available to program developers, and (2) accountability, and therefore legitimacy, to higher-level administrators. It may thus be of value, as we begin to provide services to a new generation of war-zone veterans from the Iraq conflict, to implement program evaluation strategies early in the course of program development.

The strategies employed may vary substantially depending on the availability of data collection resources and the analytic skills and capabilities of staff in the involved clinicians' units. We review program evaluation methods at several levels of intensity that may be appropriate for clinical programs developed to address the as yet unknown psychological adjustment problems of returning veterans of the Iraq war.

At a minimum, statistics should be gathered on the numbers of veterans presenting for services, the dates of their initial request for help, the dates of their first contact, the total number of contacts and the dates of their final contact. With such basic data on access and continuity of care it is possible to identify problems in providing services in a timely manner or with premature termination – either of which could potentially signal unacceptability or ineffectiveness of the treatment regimen being offered.

A second level of program evaluation, that would also require only limited resources, is to conduct satisfaction surveys. It is possible to obtain standard satisfaction measures such as the Client Satisfaction Questionnaire (Attkisson & Greenfield, 1996) which has versions ranging from 8 to 30 items and can be administered either at a standard, fixed point in treatment, for example after one month, or at the time of termination. Such a questionnaire will allow assessment of whether veterans who terminate early were dissatisfied in specific ways with their treatment and whether those who completed treatment felt they had been well served.

A third level of assessment would require additional resources and analysis but would yield also a richer set of information. At this third level specific questionnaires would be administered to document the sociodemographic characteristics, military history, and clinical characteristics of patients when they enter treatment. Through the use of such measures it would be possible to: (1) obtain more detailed information on the status and needs of veterans being served, (2) compare them with other veterans who are being treated with PTSD, such as those reported in the Long Journey Home Series (Fontana et al., 2001), and (3) to link these data with satisfaction and continuity data as described above. Thus it would be possible to identify which kinds of veterans in particular are least satisfied with treatment or are most prone to early drop-out, and therefore whose treatment needs the most intensive attention.

The fourth level of program evaluation involves the collection of periodic outcome data in addition to base-line intake data. Forms similar to those used in the base-line assessment can be administered at follow-up, either at regular intervals such as at 4, 8 and 12 months after entry into outpatient treatment (Rosenheck et al., 1996), or at the time of conclusion of inpatient treatment, or both (Fontana & Rosenheck, 1997). Such data would allow one to determine the amount of improvement observed with the treatment in question, as well as to identify subgroups of veterans

for whom treatment is either especially effective or problematic and for whom new treatment modalities may need to be implemented or developed. The more intensive levels of program evaluation, while yielding the most useful information, also require the most extensive resources, especially in staff time to administer and collate the data, but also in terms of the analytic skills needed to make full use of the data. A set of PTSD evaluation forms for inpatient treatment is currently being used to evaluate specialized intensive VA PTSD programs and is available from the Northeast Program Evaluation Center. Another set of PTSD evaluation forms, appropriate for outpatient clinic use, is being developed by the Northeast Program Evaluation Center and the National Center for PTSD and other VA colleagues and current drafts could be made available to interested VA staff.

The Northeast Program Evaluation Center is happy to work with sites to identify the evaluation strategy most appropriate for them, to identify benchmark data from other VA program evaluations that can be used to compare data from these new service interventions, and to provide analytic consultation and support in making use of program evaluation as a tool for program improvement and performance monitoring.

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Early Intervention for Trauma: Current Status and Future Directions

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Although psychological debriefing (PD) represents the most common form of early intervention for recently traumatized people, there is little evidence supporting its continued use with individuals who experience severe trauma. This review identifies the core issues in early intervention that need to be addressed in resolving the debate over PD. It critiques the available evidence for PD and the early provision of cognitive-behavioral therapy (CBT). Based on available evidence, we propose that psychological first aid is an appropriate initial intervention, but that it does not serve a therapeutic or preventive function. When feasible, initial screening is required so that preventive interventions can be used for those individuals who may have difficulty recovering on their own. Evidence-based CBT approaches are indicated for people who are at risk of developing posttraumatic psychopathology. Guidelines for managing acutely traumatized people are suggested and standards are proposed to direct future research that may advance our understanding of the role of early intervention in facilitating adaptation to trauma.

Key words: **early intervention for trauma, psychological debriefing, secondary prevention of PTSD.** ***[Clin Psychol Sci Prac 9:112–134, 2002]***

Although there are cogent humanitarian reasons to provide mental health interventions to people soon after exposure to trauma (Wilson, Raphael, Meldrum, Bedosky, & Sigman, 2000), there is growing consensus that early intervention for trauma, generically called psychological debriefing (PD), does not prevent subsequent psychopathology (Bisson, McFarlane, & Rose, 2000; Gist & Woodall, 2000). Further, there is some evidence that PD may exacerbate subsequent symptoms (e.g., Bisson, Jenkins, Alexander, & Bannister, 1997). Even though there is insufficient evidence supporting its continued use, PD is routinely provided immediately after exposure to potentially traumatizing events (PTE; Mitchell & Everly, 1996; Raphael, Wilson, Meldrum, & McFarlane, 1996). This state of affairs is not surprising, considering the prevalence of trauma, the demand for efficient management of the extensive individual, corporate, and societal costs associated with chronic Posttraumatic Stress Disorder (PTSD), the financial interests of those who provide acute interventions, and the tendency for organizations and participants to perceive PD as useful (Deahl, Gillham, Thomas, Searle, & Srinivasan, 1994; Hobfoll, Spielberger, Breznitz, Figley, & van der Kolk, 1991; Raphael et al., 1996; Wilson et al., 2000).

In this context, our aim is to review the available evidence and to address a number of core questions pertaining to early intervention. Specifically, are there sufficient data from which to conclude that all early interventions are counterproductive? Is the Critical Incident Stress Debriefing (CISD) approach particularly problematic? Are some components of PD justified? Should psychological interventions only be provided to those who are at risk of developing psychopathology? Our goal is to consider if it is valid to conclude that early, brief preventive interventions for trauma are inappropriate, as recently recommended in the Cochrane Collaboration review of the randomized controlled trials (RCT) of one-session

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debriefing (Rose, Wessely, & Bisson, 1998, with a follow-up by Rose, Bisson, & Wessely, 2001; cf. Rose & Bisson, 1998), and to examine possible alternative approaches to preventing chronic PTSD. By secondary prevention we mean assisting individuals who have been exposed to trauma and have developed acute symptoms, so as to reduce their risk for chronic PTSD.

In their Cochrane review, Rose et al. (2001) concluded that there is no evidence for the efficacy of one-session PD provided soon after exposure to PTE and recommended that "[c]ompulsory debriefing of victims of trauma should cease." It should be noted, however, that the Cochrane reviews provide relatively circumscribed, brief, and global recommendations for practitioners. In contrast to the Cochrane reviews, we consider a broader conceptual approach to early intervention, provide more detailed methodological critiques of PD studies, and consider the evidence for early provision of cognitive-behavioral therapy (CBT). We also provide a more extensive set of recommendations and standards for future research on early intervention. Finally, we provide a summary of the risk factors for PTSD germane to early intervention and offer practical guidelines for managing people who are recently traumatized.

THE NEED FOR EARLY INTERVENTION

Although lifetime risk for exposure to PTE is extremely high (60%–90%, Breslau et al., 1998; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995), the prevalence of PTSD is relatively low. For example, approximately 8% of individuals in the National Comorbidity Survey had PTSD at some point across the lifespan, indexed to an event rated as "the most traumatic" (Kessler et al., 1995). Breslau et al. also found that approximately 9% of individuals exposed to any PTE report PTSD at some point across the lifespan. The prevalence estimates for PTSD vary considerably, due to differences in samples, sampling strategies, assessment methods, and the way that PTSD caseness is defined. Moreover, the prevalence of PTSD varies across different types of PTE, with sexual assault and exposure to violence being associated with the highest risk for PTSD (e.g., Breslau et al., 1998). Nevertheless, even the most conservative estimates of risk for PTSD reflect the tremendous mental health toll associated with trauma.

Prospective studies have shown that most trauma survivors display a range of PTSD reactions in the initial weeks after a traumatic event, but that most of these people adapt effectively within approximately three months. Those that fail to recover by this time are at risk for chronic PTSD (e.g., Blanchard et al., 1996; Riggs, Rothbaum, & Foa, 1995; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992; Koren, Arnon, & Klein, 1999). Further underscoring the risk for chronicity in PTSD, Kessler et al. (1995) found that one third of people with PTSD fail to recover after many years, in many cases after years of mental health treatment. These findings have several implications. First, the majority of people will be distressed after exposure to a PTE and assistance in coping and immediate adjustment may be indicated. Second, a smaller proportion of individuals exposed to PTE will have persistent problems that require therapeutic intervention. The following review of early intervention strategies recognizes these fundamental patterns in trauma response and accepts the premise that all distressed people may require and, in theory, benefit from assistance following trauma, only a small proportion will eventually require therapy for a pathological response. Unfortunately, in the PD literature, little attention has been paid to secondary prevention specifically for individuals who are at risk for chronic PTSD.

RISK FACTORS FOR PTSD

Exposure to PTE must be evidenced for PTSD, but is not, by itself, a sufficient cause of chronic PTSD. Attention has been focused on the pre-traumatic, peritraumatic, recovery environment, and posttrauma lifespan conditions that create risk for posttraumatic difficulties (Halligan & Yehuda, 2000; King, King, Foy, Keane, & Fairbank, 1999). The premise that exposure to trauma is the exclusive risk factor for PTSD, which underlies most PD models (e.g., Mitchell & Everly, 1996), has resulted in intervention efforts typically failing to address the role other risk factors may play in adjustment after exposure to PTE. For this reason, the "one-size-fits-all" framework of PD fails to acknowledge the personal and social resources that, in most cases, promote recovery (Bisson et al., 2000; Gist & Woodall, 2000). Effective management of those who suffer more than a transient stress response to trauma would be greatly facilitated by screening those who are at risk for chronic PTSD after exposure to PTE. Furthermore, there is increasing recognition that because of the complex array of vulnerability factors that contribute to the development of posttraumatic psychopathology, single-session interventions are unlikely to make substantive differences in long-term adjustment (Shalev, 2000).

In the PTSD field, risk factor research is in an early stage, conceptually and empirically. As a result, the extent to which risk variables can be used practically in early interventions is reduced considerably. For example, there is no distinction between risk indicators (variables that have been found to correlate with chronic PTSD) and risk mechanisms (risk factors or variables that suggest specific modes of mediation that are less susceptible to third variable and directionality concerns; Rutter, Pickles, Murray, & Eaves, 2001). Rather, the global term "risk factor" is typically employed and causal mechanisms remain unspecified. Although research has revealed several noteworthy risk indicators, few risk mechanisms have been explicated. Once future research identifies risk mechanisms, these variables will likely be specific targets for secondary prevention interventions. Nevertheless, at this stage, several risk indicators could legitimately be used to screen individuals exposed to PTE who are more likely to suffer long-term problems.

In this section, we review two risk indicators (prior exposure to trauma and acute stress disorder) and two potential risk mechanisms (social support and hyperarousal) that deserve special attention. Younger age and female gender have been shown to be risk indicators for chronic PTSD (e.g., Breslau et al., 1998; Kulka et al., 1988), however, these variables alone cannot be usefully employed to identify individuals who may uniquely benefit from early intervention. Intelligence is another example of a risk indicator found in the literature (e.g., Macklin et al., 1998). However, we cannot envision a scenario in which this variable could impact decision-making about who should receive early intervention. Of course, age, gender, and intelligence are factors that need to be taken into account in modifying the content and process of early interventions. We end this section by describing how resource losses represent an important set of risk mechanisms, which, to date, have not been sufficiently examined in early intervention research.

Prior Trauma

It has become axiomatic that prior exposure to PTE is a risk indicator for chronic PTSD stemming from a subsequent PTE (King et al., 1999; Stretch, Knudson, & Durand, 1998). In particular, a history of exposure to interpersonal violence, in childhood or adulthood, substantially increases the risk for chronic PTSD following exposure to any type of PTE (Bremner, Southwick, Brett, & Fontana, 1992; Breslau et al., 1998; Green et al., 2000; Nishith, Mechanic, & Resnick, 2000). Dougall, Herberman, Delahanty, Inslicht, and Baum (2000) hypothesized that prior trauma history sensitizes victims to the new stressor, thus potentiating its impact. They argued that evaluating trauma history is essential for improving early intervention efforts. There are no empirical data, however, detailing the effects of prior trauma history on response to psychosocial interventions for PTSD in general or early interventions in particular.

Acute Stress Disorder

Prior to DSM-IV (American Psychiatric Association, 1994), severe distress occurring in the month after a traumatic event was not regarded as a diagnosable clinical problem. Although this prevented the pathologizing of transient reactions, it hampered the identification of more severely traumatized individuals who might benefit from early interventions. To address this issue, DSM-IV introduced the diagnosis of acute stress disorder (ASD) to describe those acute reactions associated with an increased likelihood of developing chronic PTSD. A diagnosis of ASD is given when an individual experiences significantly distressing symptoms of re-experiencing, avoidance, and increased arousal within 2 days to 4 weeks of the trauma. The DSM-IV diagnosis of ASD requires that the victim report at least three of the following five symptoms labeled as indicators of dissociation: numbing, reduced awareness of surroundings, derealization, depersonalization, and dissociative amnesia. These requirements are based on some evidence found in previous studies that dissociative symptoms at the time of (or shortly after) the traumatic event predict the subsequent development of chronic PTSD (Bremner et al., 1992; Marmar, Weiss, Shchlenger, & Fairbank, 1994; Koopman, Classen, & Spiegel, 1994). Thus, the fundamental differences between PTSD and ASD involve the time elapsed since the trauma and the relative emphasis on dissociative symptoms in the ASD diagnosis.

Several longitudinal investigations of motor vehicle accident (MVA) survivors have documented the predictive utility of ASD in identifying those individuals who are likely to exhibit more enduring or persistent pathology. Harvey and Bryant (1998a) evaluated MVA survivors within 1 month of their accident for the presence of ASD, and then reevaluated this sample 6 months later for PTSD. At follow-up, 78% of those who met diagnostic criteria for ASD within 1 month of their accident met diagnostic

criteria for PTSD 6 months later. These researchers noted that 60% of victims who met all but the dissociative criteria for ASD also met diagnostic criteria for PTSD at 6 months, suggesting that the ASD emphasis on dissociative symptoms may result in significantly distressed survivors being overlooked by clinicians. These findings were replicated at a 2-year follow-up evaluation (Harvey & Bryant, 1999a). The strong relationship between ASD and the subsequent development of chronic PTSD has also been observed among MVA victims suffering mild traumatic brain injuries (Bryant & Harvey, 1998; Harvey & Bryant, 2000) as well as among sexual and physical assault victims (Brewin, Andrews, Rose, & Kirk, 1999). Brewin et al. (1999) noted that the most accurate and efficient prediction of PTSD in their sample of crime victims was afforded by a cutoff of three or more symptoms of reexperiencing or hyperarousal after trauma. Their findings also suggest that dissociative symptoms, while predictive of PTSD, fail to provide incremental validity beyond the core PTSD symptoms.

Bryant and Harvey (1997) assert that there is little empirical justification for the requirement of three dissociative symptoms to occur for the ASD diagnosis to be given. Although early studies documented significant associations between peritraumatic dissociation and PTSD, much of this research was retrospective in nature. Evidence that recall of acute stress symptoms is influenced by current mood indicates that symptom status at the time of evaluation could have influenced reports of prior dissociative symptoms (Harvey & Bryant, 2001). Accordingly, Bryant and Harvey advocate for consistency between ASD and PTSD diagnostic criteria because of the many individuals that fail to meet diagnostic criteria for ASD but ultimately meet criteria for PTSD despite the fact that their symptoms remain unchanged. In addition, Marshall, Spitzer, and Liebowitz (1999) note that there are numerous pretrauma and peritrauma vulnerability factors that predict dissociation, ASD, and subsequent PTSD equally well. Cardiovascular reactivity, prior history of Axis I disorder, prior history of Axis II disorder, depressive symptomatology, use of avoidance coping strategies, trait neuroticism, and history of prior traumatization have all been found to be significant predictors of subsequent ASD or PTSD diagnoses (Barton, Blanchard, & Hickling, 1996; Bryant, Harvey, Guthrie, & Moulds, 2000; Harvey & Bryant, 1998b; Harvey & Bryant, 1999b; McFarlane, 1988). Accordingly, Marshall and colleagues assert that it makes little sense to elevate one class of vulnerability factors (i.e., dissociative symptoms) above all others to the status of core diagnostic criteria. Allowing a PTSD diagnosis anytime after trauma when criteria are met would be the most parsimonious solution. They note that there are numerous bona fide medical conditions and mental disorders that resolve spontaneously over time. Accordingly, a "waiting period" of 30 days is inconsistent with general nosological principles. Despite the controversy over the ASD diagnosis, the evidence suggests that indexing specific reactions several weeks after a trauma can be helpful in identifying those who are most at risk of developing PTSD.

Social Support

An individual's recovery from trauma is facilitated by the availability of positive social supports and the inclination to use them to share the account of the trauma (Forbes & Roger, 1999; Foy, Sipprelle, Rueger, & Carroll, 1984; Harvey, Orbuch, Chwalisz, & Garwood, 1991; Keane, Scott, Chavoya, Lamparski, & Fairbank, 1985; King, King, Fairbank, Keane, & Adams, 1998; Martin, Rosen, Durand, Knudson, & Stretch, 2000; Pennebaker & O'Heeron, 1984). To date, early interventions have not sufficiently taken into account the social factors in the recovery environment that promote or hinder recovery from trauma. In order to be maximally effective, early interventions for trauma may need to evaluate systematically the breadth and depth of social supports in the recovery environment and the victim's learning history of using social supports under stressful circumstances. Further, early intervention may need to assist the individual with anticipating problems in using their support system. This may be particularly important in light of the fact that the psychological aftermath of trauma may significantly disrupt a person's capacity to use others to cope with and manage posttraumatic symptoms and daily demands (e.g., Riggs, Byrne, Weathers, & Litz, 1998; Solomon, Mikulincer, & Avitzur, 1988). In addition, preexisting conflict in significant relationships could negatively impact recovery, particularly in those who are motivated to use others to cope with the aftermath of severe stress (Major, Zubek, Cooper, & Cozzarelli, 1997). In order to regain a sense of equilibrium and coherence, some victims may need a period of respite from posttrauma demands, and they may initially need to be allowed to avoid discussing their trauma (Charlton & Thompson, 1996; Tarrier, Pil-

grim, & Sommerfield, 1999). Conflict in significant relationships may make it difficult for those individuals who need a period of disengagement to achieve this state without exacerbating relationship difficulties.

Hyperarousal

High degrees of psychophysiological arousal in the acute aftermath of trauma are known to be associated with increased risk for chronic PTSD (Yehuda, McFarlane, & Shalev, 1998). A series of studies by Shalev and colleagues examined cardiac activity prospectively in individuals exposed to PTE (Shalev, Freedman, Peri, Brandes, & Sahar, 1997). For example, Shalev et al. (1998) found that in a mixed group of trauma survivors evaluated in the emergency room, those individuals who had severe symptoms of PTSD one week after the event had higher initial mean heart-rates (measured in the emergency room) than those who did not develop PTSD. In addition, Shalev and colleagues found that PTSD prevalence rates 4 months later were best predicted by heart rate in the emergency room, after controlling for age, gender, trauma history, and immediate psychological response to the event. This finding has been replicated by Bryant et al. (2000).

A number of risk mechanisms have been proposed to account for hyperarousal's affect on risk for PTSD. Increased cardiac output in the immediate aftermath of exposure to trauma (e.g., when assessed in emergency rooms) is likely to be part of the unconditioned response to the trauma, the intensity of which varies across individuals (e.g., Orr, Meyerhoff, Edwards, & Pitman, 1998). Generally, arousal symptoms negatively impact individuals' attempts to return to daily routines and affects rest and sleep capacity, which further exacerbates levels of stress and arousal. In addition, basal increases in cardiac activity can be caused by poor coping with daily stress and anticipatory anxiety (e.g., McFall, Murburg, Ko, & Veith, 1990; Orr et al., 1998; Prins, Kaloupek, & Keane, 1995). This suggests that early interventions for trauma should target hyperarousal by training survivors in methods of anxiety and stress management. Although speculative, it is plausible that systematic reductions in hyperarousal in the days and weeks after a trauma could accomplish a number of habilitative goals: (a) effective arousal management can engender a sense of control over emotional experience at a time when there may be considerable affective lability, (b) learning adaptive means to manage arousal serves to reduce the risk for maladaptive behaviors used to cope with negative affect (e.g., substance use), (c) daily relaxation exercises promote self-care, which may restore a sense of safety and comfort often compromised by trauma, and (d) reduced arousal in the aftermath of exposure to trauma would serve to limit generalization of conditioning and higher order conditioning, which in theory would minimize chronic conditioned emotional reactivity and lessen motivation for avoidance behavior.

Posttraumatic Resources

A variety of personal and environmental factors create risk for enduring posttraumatic difficulties. Hobfoll, Dunahoo, and Monnier (1995) contend that trauma necessarily involves a loss of resources and that loss can occur on multiple ecological levels such as family, organization, and community. The Conservation of Resources (COR) theory is based on the premise that people strive to obtain and protect resources (Hobfoll, 1989). These resources can include material goods, life conditions (e.g., marriage or occupation), or personal resources (e.g., self-esteem or perceptions of competency). According to COR theory, stress ensues when there is a threatened or actual loss of resources. Traumatic events result in inordinate stress because the losses incurred are most closely related to one's survival, and the losses tend to be numerous and profound. In the case of natural disasters, for instance, victims often lose their homes, money, and social network. Hobfoll, Dunahoo, and Monnier (1995) assert that early posttraumatic interventions employed by psychologists have not been especially helpful because they attend exclusively to psychological variables to the exclusion of other domains of resource loss. Trauma survivors may not be in a position to benefit from traditional psychological interventions that target anxiety and affective symptoms, when they have legitimate concerns about physical well-being, safety, shelter, or significant financial problems. Accordingly, resolution of these issues may be a necessary precondition to an individual's capacity to benefit from early interventions addressing psychological variables following trauma.

Given the potentially deleterious impact of trauma across multiple domains of functioning, what do victims need in the immediate aftermath of trauma? Resnick, Acierno, Holmes, Dammeyer, and Kilpatrick (2000) recommend that safety planning and emergency stabilization should precede any efforts to address psychological or emotional sequelae. In particular, crime victims may need contact information for shelters, emergency housing, rape crisis services, as well as services to address pressing medi-

cal and legal issues. The presence of suicidal and homicidal ideation and significant substance abuse should be routinely assessed following traumatic exposure, as the risk for each of these increases significantly after a trauma, complicating the course of ASD/PTSD treatment (Resnick et al., 2000). The recommendations are in accord with Hobfoll et al.'s (1995) call for psychologists to attend to victims' resource losses in multiple domains.

DEBRIEFING

The provision of PD originated in the military. In World War I and World War II, commanders debriefed soldiers immediately after a significant battle. The expectation was that sharing personal stories about combat would improve morale and better prepare soldiers for future combat. Parallel to this, battlefield psychiatrists developed strategies to address the needs of soldiers who were incapacitated by acute combat stress, a condition labeled battle fatigue or combat stress reaction (see Solomon & Benbenishty, 1986). Frontline treatment in the war zone was provided using a framework of proximity, immediacy, and expectancy. That is, soldiers were treated near the battlefield, shortly after their problems were identified, and with the expectation that they would return to duty. In theory, providing treatment close to a soldier's unit was seen as particularly important because it helped to maintain group support and cohesion, as well as reduce stigma (see Jones & Hales, 1987). Interventions applied on the frontline have varied over time, but there is considerable uniformity in the modern military (Hall, Cipriano, & Bicknell, 1997). Typically, clinicians promote rest, consider pharmacological treatment to manage hyperarousal, and provide psycho-education about the effects of trauma. In addition, group discussion is provided, designed to facilitate soldiers' sharing of horrific encounters in the war-zone and to process their emotional experience with others similarly afflicted (Shalev, 1994, 2000). In the United States military, soldiers exposed to PTE are routinely provided front-line psychological "first-aid" in the form of informal event-processing interventions, pastoral counseling, and, if need be, triage to stepped-up care (McDuff & Johnson, 1992).

Critical Incident Stress Debriefing

Although the content, process, and goals of PD vary considerably, there are many commonalities and the CISD approach is the most recognized and used method (Mitchell & Everly, 1996). The CISD approach stems from the crisis intervention tradition. It is typically applied to emergency services personnel, individuals whose work entails risk for exposure to trauma (e.g., law enforcement personnel, emergency medical technicians, fire fighters, military personnel, and disaster workers such as The Red Cross). CISD may be attractive to workers in these occupations because of its emphasis on the PD not being psychotherapy. That is, CISD is presented not as a clinical intervention, but rather an opportunity for individuals to share their common normal response to extreme circumstances with CISD team members, at least one of whom is highly familiar with the culture of the work system. These factors have facilitated the pervasive and routine application of CISD in risky occupations such as the military, even in the face of insufficient evidence for its efficacy (see Deahl et al., 2000).

The CISD framework has been revised recently so that it is now considered part of a more comprehensive Critical Incident Stress Management (CISM) program (Everly & Mitchell, 2000). The CISM program is a series of interventions with high face validity designed to comprehensively address the needs of emergency service organizations and personnel. The CISM interventions are designed to psychologically prepare or prebrief individuals prior to dangerous work, meet the support needs of individuals during critical incidents (e.g., while Red Cross personnel are working with families who lost loved ones in a disaster), provide CISD as well as delayed interventions, consult with organizations and leaders, work with the families of those directly affected by trauma, and to facilitate referrals and follow-up interventions to address lingering stress disorders. However, there has been no controlled empirical study of the various components of CISM to date.

The cornerstone of CISM is CISD, which is a semi-structured group intervention with didactic and experiential components. The goals of CISD are: (a) to educate individuals about stress reactions and ways of coping adaptively with them, (b) to instill messages about the normality of reactions to PTE, (c) to promote emotional processing and sharing of the event, and (d) to provide information about, and opportunity for, further trauma-related intervention if it is requested by the participant. Individuals exposed to a PTE are invited, within days, to participate in a 3- to 4-hour session in which the incident is reviewed. Personnel are invited to attend a CISD regardless of the degree of their acute symptoms or functional impairment (e.g., Hokanson & Wirth, 2000). The

assumption of the CISD approach is that everyone exposed to a PTE is at risk for a stress reaction or PTSD and that everyone could benefit from an opportunity to share their experience and learn about trauma and adaptive coping. The model fails to incorporate epidemiological research that has shown that not everyone is equally at risk for PTSD after exposure to PTE. In addition, the CISD framework eschews formal assessment of symptoms and outcomes in order to emphasize the nonclinical nature of the intervention and to create confidence in the confidential nature of the group. Thus, participants in a CISD could be free from acute symptoms and have very little risk for chronic PTSD, or individuals could be experiencing severe ASD.

According to Mitchell and Everly (1996), successful PD is accomplished through a series of seven phases or stages. In terms of content, many of the stages share some of the same features as the stress management aspects of standard cognitive-behavioral treatment packages for PTSD as well—in broad terms, exposure therapy (e.g., Flack, Litz, & Keane, 1998).

A debriefing begins with an *introduction stage.* At this time, the facilitator's job is to explain what is going to happen during the debriefing and clarify any questions participants might have. Special emphasis is placed on confidentiality, which may be particularly important for individuals in a common work system who are concerned about that shared information will affect their advancement in the organization. The next stage is called the *fact phase.* During this time, participants are asked to describe the stressor and what happened during the event. Next, in the *thought phase,* the primary facilitator asks participants to describe their thoughts during the incident. This phase is intended to be a vehicle to the next phase, in which emotional reactions are shared. Focusing initially on thoughts rather than feelings allows participants to begin to talk about the events with some degree of distance and reduce defensive coping reactions. The following stage is the *reaction phase.* For the reaction phase, the focus shifts to participants' emotional responses during the event as well as what they are currently experiencing and the meaning they assign to these experiences. The facilitator attempts to normalize the experience as much as possible and assist individuals in reframing and integrating the experience into their view of themselves and the world. During the *symptoms phase,* the facilitator discusses typical stress reactions and answers questions concerning personal responses to the event. In the *teaching phase,* the debriefing team members attempt to find out what the participants know about stress reactions and stress management strategies and to clarify any points of misunderstanding. Finally, in the *re-entry phase,* the team sums up the debriefing and the referral process.

As can be seen in the previous description, a great deal needs to be covered in one meeting. Psychological debriefing is apparently designed to facilitate support-seeking and to prepare individuals for the challenges of recovering over time. In the published CISD manuals, there are explicit messages about PD being a necessary, but by no means sufficient, intervention for severely traumatized individuals who have lingering disturbing symptoms and problems after a trauma (these individuals are said to require individual follow-up treatment). Yet, the CISD literature also suggests that PD alone is a secondary prevention intervention (e.g., Mitchell & Everly, 1996). That is, attending a PD is enough to prevent the formation of PTSD and other trauma-linked disorders. In this context, the necessary and sufficient conditions for effective early intervention are unclear. Perhaps attendance at a CISD functions as a screening for participants who suffer severe symptoms (e.g., acute stress disorder) or who have poor coping resources (e.g., they are isolated), conditions that trigger referral for sustained intervention. If this is the case, it raises the possibility that some individuals are unduly taxed by a CISD and the need to screen individuals earlier in the process.

Other concerns about CISD center on how the intervention may exacerbate distress. When CISD is provided in a group format, attendees have varying degrees of familiarity with each other and the group is led by a team trained in CISD. The team includes formally trained mental health professionals as well as, in most cases, a lay person who works in the same field or someone familiar with individuals affected by the PTE. Although the idea of including peer support personnel seems sensible, this feature has been criticized strongly because it can, in theory, create dual-relationships and may make some attendees feel unsafe, which may be counter-therapeutic and possibly unethical (e.g., Gist & Woodall, 2000). Formally, the goal of including peer support personnel in a CISD team is to enhance the team's credibility and legitimacy in terms of particular work cultures. It is quite possible that this feature is very important in many work contexts, although it also seems likely that it constrains the extent to

which emotionally salient or inadvertently incriminating experiences are shared for some.

Another concern about how CISD is implemented is that if individuals are mandated or subtly coerced by their employers to attend a debriefing session, it raises the possibility that choice and control are wrested from some traumatized people, which is likely to create frustration, anger, and resentment, as well intensify the experience of victimization. It should be noted that the formal CISD literature emphasizes that debriefing attendance is voluntary. However, volunteer status may be affected by work cultures unbeknownst to CISD personnel. For example, overt and strong support from supervisors and administrators may impact decisions about participation (e.g., Gist & Woodall, 2000). A related criticism of CISD is that an individual who is reluctant to disclose personal information may feel stigmatized and pressured by the group's expectations. In this context, sharing of personal experiences may have harmful, rather than helpful, consequences (Young & Gerrity, 1994).

One of the confusing issues in the execution of CISD is the process whereby an individual (or group of individuals) is found to be appropriate for CISD. Again, formally, CISD is designed only for use with emergency service workers (fire fighters, rescue personnel, emergency room personnel, police officers, etc.), although the CISD training also describes CISD as appropriate for witnesses to critical events and bystanders who suddenly become helpers by virtue of their being in a particular place in a particular time. The literature emphasizes that direct victims of critical incidents, family members of those seriously injured or killed, and those seriously injured in trying to respond to an incident require more extensive treatment and should not attend a CISD. These so-called direct victims are handled in unspecified ways within the broader treatment framework of CISM. However, it is unclear whether those who practice CISD apply the intervention only to individuals secondarily exposed to trauma (Dyregrov, 1999). For example, following the terrorist attacks on the World Trade Center, thousands of office workers and other people directly involved in the incident were apparently provided with variants of CISD.

One of the particularly attractive features of the CISD framework is the special attention paid to the unique needs of workers at risk for exposure to others' direct trauma and suffering, targeting the intense strain and stress of emergency and disaster relief activity. It also responds to the need for organizations to address the needs of their workers and to maintain cohesion and morale. A cogent example would be the Red Cross workers responding to grief-stricken and horrified family members of victims of the terrorist attacks in New York City and at the Pentagon on September 11, 2001. The psychological burden of such work is considerable and the CISD framework has provided a systematic structure to address the emotional needs of helpers in organizations such as the Red Cross. However, some have argued that proponents of debriefing fail to recognize sufficiently the natural resiliency of emergency care workers and their capacity to find adaptive individualized and personal ways of managing their reactions to the stressful demands of their duties (e.g., Gist & Woodall, 2000).

In the CISD framework, the types of events that constitute critical incidents warranting CISD is unclear, and it is uncertain how, within a given occupation or work system, direct victims of trauma are actually screened. The manner in which the formal distinction between primary, or direct, and indirect exposure also remains uncertain. The use of an individual's role in the traumatic context as the sole inclusionary criterion for CISD may constitute an arbitrary distinction. For instance, emergency workers may be exposed to severe PTE directly and secondarily by virtue of observing others suffer greatly. Whether such individuals would be considered inappropriate candidates for CISD remains unclear.

The CISD model assumes that direct or primary victims are inappropriate for CISD because some measurable physical, cognitive, or emotional quality of the "victim" experience makes the CISD process insufficient or inappropriate. If that argument is to be accepted, then operationally defining what constitutes direct exposure becomes critical. It appears that the distinction between a primary and a secondary victim within the CISD framework hinges superficially on whether there is physical injury. This is inappropriate, given the vast literature about the long-term consequences of psychological trauma. We argue that attempts to categorically distinguish direct (primary) and indirect (secondary) victims will be difficult if the intervention is intended to address psychopathological responses. If early intervention is to afford individuals who do emotionally challenging emergency work an opportunity to maintain group cohesion, as well as share and receive information about adaptive coping, then focusing on emergency workers seems an appropriate

goal. On the other hand, if the intervention is to target pathological responses to trauma, then it does not appear justified to determine eligibility for early intervention in terms of one's type of involvement in the trauma. In the recent terrorist attack on the World Trade Centers, survivors who fled the building and the emergency workers who assisted the evacuation had much in common in terms of exposure to life-threat, although their roles, training, and mental preparation were different. In any case, the appropriate type of early intervention for specific posttrauma problems, the type of individual or group who can benefit from these interventions, and the relevance of one's role in a trauma are empirical issues that have yet to be resolved.

We suggest that it is more appropriate and defensible to evaluate (when feasible logistically) anyone exposed to PTE, regardless of work role or context, for the severity or magnitude of their exposure and their peritraumatic subjective emotional experience. There are a number of good screening measures that could assist in this effort (Litz, Miller, Ruef, & McTeague, 2002). If an assessment (when feasible) indicates that individuals require intensive intervention, those individuals should be provided with multisession interventions that have empirical support. We recognize that assessment and intervention with emergency workers requires special attention to the cultural and organizational features of those groups. This recognition should not be confused, however, with assumptions that psychopathological responses are qualitatively different in these individuals.

Research on Debriefing Effectiveness

Anecdotal accounts, unpublished studies, and a few uncontrolled peer-reviewed studies of PD suggest that it is an effective intervention (see Everly, Flannery, & Mitchell, 2000, for a review). However, until recently there was a dearth of randomized controlled trials (Rose et al., 2001). It is important to note that debriefing research is challenging for several reasons. It is impossible to predict the occurrence of PTE that require debriefing and thus extremely difficult to assess individuals prior to exposure. In addition, it is difficult to conduct randomized controlled trials; randomization has historically been considered unethical because it would mean withholding a potentially useful treatment from acutely distressed individuals. The concern about withholding a useful early intervention is changing in this research domain given recent findings of equivocal or negative results. However, the organizational and societal chaos that follows a major disaster, as seen in the aftermath of the September 11, 2001, calamity in the United States, hinders desirable experimental control over outcome evaluation.

Our intention in this section is to critically appraise peer-reviewed research that, at a minimum, randomly allocated participants to an active single-session PD or a no-intervention control group, a criterion also used by the latest Cochrane review of PD (Rose et al., 2001). Everly et al. (2000) recently reviewed a number of uncontrolled studies (and in some cases non-peer reviewed studies), which led them to conclude that there was empirical support for the efficacy of PD. In our opinion, none of the studies reviewed by Everly et al. (2000) are sufficiently internally valid to warrant this conclusion. By virtue of the fundamental problem of a lack of random assignment, there is no sufficiently valid evidence from uncontrolled or quasi-experimental studies of early intervention to suggest that the intervention promoted recovery to a greater degree than would have occurred with the passage of time. In addition, when self-selection determines participation, there is a possibility that individual differences (e.g., greater distress, higher motivation) may explain inclusion in PD. This limitation is compounded by the fact that the majority of studies reviewed by Everly et al. (2000) failed to assess individuals prior to the intervention; post-PD symptom ratings could reflect enduring pre-existing levels of distress. Finally, no study reviewed by Everly et al. (2000) employed independent assessment of outcome.

We critically review six peer-reviewed randomized controlled trials, all of which were included in Rose et al.'s (2001) Cochrane review of PD. In their review, Rose et al. (2001) included two studies that pre-date the advent of formalized approaches such as CISD and the formal diagnosis of PTSD, which we exclude because it is not clear what the interventions entailed, and their applicability as a test of PD is uncertain. In addition, unlike Rose et al. (2000), we elected to exclude one study that appeared not to entail putative exposure to PTE (i.e., miscarriage).

Most of the RCT have noteworthy positive features (see Table 1). All studies used standard, well-accepted, self-report outcome measures and several studies used state of the art structured clinical interviews to evaluate PTSD, which allowed for independent blind assessment of outcome (Bisson et al., 1997; Rose, Brewin, An-

Table 1. Randomized Controlled Trials of Psychological Debriefing

Study	Study Group	Conditions/*n*	Results	Limitations
Bisson, Jenkins, Alexander, & Bannister, 1997	Hospitalized burn victims	1. Individual or couples CISD (n = 57) 2. Assessment only control (n = 46)	Greater PTSD (IES and CAPS), anxiety (HADS), and depression (HADS) in CISD group at 13 months.	Limited information about intervention; CISD group reported higher initial symptoms, more severe burns, and greater PTE exposure despite random assignment.
Conlon, Fahy, & Conroy, 1999	Motor vehicle accident survivors	1. Psychological Debriefing (n = 18) 2. Assessment only control (n =22)	PTSD symptoms (IES and CAPS) decreased sharply for both groups, but there were no significant differences between groups at the 3-month follow-up assessment point.	Limited information about the nature of the debriefing; low power.
Deahl, Srinivasan, Jones, Thomas, Neblett, & Jolly, 2000	Peacekeepers serving in Bosnia	1. Debriefing (n = 54) 2. Assessment only control (n = 52)	Debriefed group had lower depression and anxiety scores (HADS), but nondebriefed had greater reductions in PTSD (IES) symptoms at 6-month follow-up. Greater alcohol problems in nondebriefed group.	Groups had very low baseline symptoms; likely floor effect.
Hobbs, Mayou, Harrison, & Warlock, 1996	Motor vehicle accident survivors	1. Psychological debriefing (n = 54) 2. Assessment only control (n = 52)	PD condition had worse outcomes on two BSI scales. No group differences on IES.	Differential attrition in groups; self-report only.
Mayou, Ehlers, & Hobbs, 2000	Motor vehicle accident survivors	3-year follow-up of the previous study	PD group had significantly worse outcomes (BSI symptoms, travel anxiety, overall functioning). No differences between groups on IES.	Significant attrition; initial differences between groups have influenced 3-year outcomes.
Rose, Brewin, Andrews, & Kirk, 1999	Physical and sexual assault victims	1. CISD (n = 54) 2. Psychoeducation only (n = 52) 3. Assessment only control (n = 51)	All groups improved, but no differences among groups on measures of PTSD (PSS and IES) or depression (BDI) at 6 or 11 months.	Very low response rate (157 out of 2,161).

Note: IES, Impact of Event Scale; CAPS, Clinician Administered PTSD Scale; PSS, Posttraumatic Stress Disorder Symptom Scale; HADS, Hospital Anxiety and Depression Scale; BSI, Brief Symptom Inventory.

drews, & Kirk, 1999). All studies had adequate follow-up evaluation of participants and one study reported results three years post-intervention (Mayou, Ehlers, & Hobbs, 2000). Finally, and most importantly, random allocation of participants allowed for a determination of whether participants who received PD improved beyond how they would have adapted on their own with the passage of time. In all instances the PD failed to promote change to a greater degree relative to no intervention.

We calculated an estimate of the direction and the magnitude of change in the severity of PTSD symptoms in five of the six studies reviewed in Table 1 (Deahl et al., 2000, failed to provide sufficient descriptive data to conduct this analysis). Change scores were expressed as mean changes in standard deviation units (*SDU*) from baseline to the last follow-up interval reported. Although the group receiving PD reported less severe symptoms at follow-up ($SDU = .45$), this was, on average, not different from any of the control groups ($SDU = .42$). Of course, these averages obscure individual trajectories of change, but these data are not surprising given the normative course of adaptation to trauma, and they underscore the need to pre-screen individuals at risk for having difficulty adapting on their own over time. We also calculated an average effect size estimate by weighting the effect sizes of the five individual studies by the sample sizes of that particular study. The mean effect size for PTSD measures was −.11 (Cohen's d). This indicates that participants receiving PD had slightly worse PTSD scores at follow-up (one-tenth a standard deviation) than those not receiv-

ing PD (90% confidence interval ranges from −.32 to +.10). Because the confidence interval includes zero, and because the effect size estimate is very small, it is premature to conclude that PD is detrimental or helpful in terms of secondary prevention of PTSD.

Taken as a whole, the set of studies revealed similar changes in PTSD symptoms at follow-up between the PD and control groups. Nevertheless, two of the more methodologically rigorous studies found that PD created a degree of PTSD symptom exacerbation over time. Bisson et al. (1997) found that 26% of the burn victims who were provided PD had PTSD at the 13-month follow-up interval according to the Clinician Administered PTSD Scale (CAPS; Blake et al., 1990), whereas only 9% of the control group endorsed sufficient symptoms to meet the diagnostic criteria for PTSD at follow-up. Also, the PD group reported significantly higher anxiety and depression symptoms on subscales of the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983) and Impact of Event Scale (IES; Horowitz, Wilner, & Alvarez, 1979) at the 13-month follow-up (3-month data were not reported). However, despite random assignment, participation in the intervention group was confounded with several risk factors. Intervention group participants had higher initial symptoms, more severe burn trauma, and were more likely to report pre-burn histories of exposure to PTE. Bisson et al. (1997) controlled for initial symptom levels in their analysis in an attempt to take into account these confounds and the results were unchanged. However, initial symptom level is not necessarily a good proxy for all three of the confounding factors or their interactions. It would have been revealing if the authors had conducted a post-hoc multivariate analysis of the predictors of change in symptom severity in order to examine the characteristics of the person (including the three potentially confounding factors), their experience of the stressor, or their experience of the intervention that might be associated with outcome.

Hobbs, Mayou, Harrison, and Warlock (1996) found that MVA victims administered PD within 2 days after their accident were no different at a 4-month follow-up interval from individuals given no intervention with respect to number of PTSD cases, PTSD symptom severity, and interview ratings of intrusive thoughts or travel anxiety. A threat to internal validity in this study was that 22% percent of the PD group could not be followed-up, in contrast to 6% of the no-treatment controls. The follow-up group may have been over-represented by those who fared worse from the PD. In their 3-year follow-up examination of the participants from Hobbs et al. (1996), Mayou, Ehlers, and Hobbs (2000) found that the group that received PD had significantly worse outcome 3 years later. Their BSI symptoms were worse, travel anxiety was worse, as were overall levels of functioning, and financial problems. Those MVA survivors with initially high intrusion and avoidance symptoms recovered without PD intervention, but those who received the intervention remained symptomatic. Unfortunately, only a little over half of the participants in the first study were assessed a second time, so it is unclear whether the follow-up sample was biased in some undetermined way. In addition, initial differences between the intervention and control groups prior to debriefing may have affected the 3-year outcome.

The Bisson et al. (1997) study is of note because it compared CISD to an information-only and no-intervention condition. This allowed for an examination of the differential impact of what could be considered the inactive, but perhaps sufficient, components of CISD (empathic contact with a professional, coupled with the provision of information about trauma and its impact, etc.). There were no differences between the three groups in rates of PTSD, severity of PTSD, or depression at follow-up, suggesting that providing PD to individuals exposed to PTE has no unique effect on outcome in victims of violent crime.

Few published studies have empirically examined the use of debriefing in the military, despite its frequent use in militaries across a diverse range of cultures (Adler & Bartone, 1999). Deahl et al. (2000) conducted the only RCT of soldiers provided PD in a group format, with mixed results. At the 6-month follow-up, Bosnia peacekeepers in the debriefed group had lower HADS scores than those in the nondebriefed group, but the nondebriefed soldiers reported a greater drop in IES scores from baseline. On the other hand, alcohol abuse problems were lessened over time in the debriefed group and not the control group. However, Deahl et al.'s (2000) findings are difficult to interpret because of a likely floor effect; at baseline, soldiers expressed very low symptoms. In addition, since commanding officers assigned soldiers to the study by virtue of availability, selection bias cannot be ruled out.

All studies employed CISD, or at least stated that they followed the basic tenets of CISD, with individuals (the

Bisson et al., 1997, study also used couples) who would be considered primary victims of trauma in the CISD scheme (e.g., burn victims, traffic accident survivors). However, no investigators explicated their rationale for intervening with individuals who would be excluded from CISD formally. It would have been preferable for investigators to contextualize their work in light of the recommendations of CISD, given that they are testing the efficacy of this specific approach. In our view, it is legitimate to evaluate whether CISD could be useful to individuals who experience severe trauma, especially given the popularity of CISD and its application to so-called primary victims. However, without sufficient background justification, these studies are at risk for being dismissed as inappropriate tests of the CISD model. Furthermore, proponents of CISD might argue that negative findings confirm the CISD principle that individual primary victims of trauma are inappropriate for PD (this is the main criticism of the Cochrane review). Clearly, controlled study of group-administered CISD to emergency services personnel exposed secondarily to trauma is needed to test the CISD model.

A number of studies suffered from participant selection that was likely biased in unspecified ways. For example, only 7% of the victims of violent crime contacted by Rose et al. (1997) consented to participate. The self-selected group of victims who agreed to participate may have been more willing to talk about their trauma and may have been less avoidant overall than the average victim. Thus, it remains an empirical question whether PD might be effective for reluctant and avoidant victims who may agree to participate in PD because organizations or hospitals recommend it as part of routine practice (Shalev, 1994). Theoretically, the PD process may facilitate change in these individuals because it reduces avoidance by suggesting experientially that approach behaviors (e.g., self-disclosing) can lead to favorable outcomes.

The timing of the interventions provided was also variable. For example, Rose et al. (1999), provided CISD, on average 21 days post-incident (range 9–31 days), which differs considerably from the standard practice of providing PD within days of a PTE (it also differs from the timing of PD in other RCT). However, it could be argued that it is more appropriate to delay PD in some contexts. For example, in the case of the Bisson et al. (1997) study where individuals were suffering from acute burn pain, it may have been more appropriate to delay the PD until acute pain is managed effectively. It is also unclear whether burn patients are appropriate for a single session of any early intervention, given the physiological and psychological burden of burns (Weinberg et al., 2000).

Although most of the participants who received PD reported that they experienced it as very helpful, perceived helpfulness was not associated with positive change in psychological status. Although this pattern could reflect the influence of demand characteristics, it is also possible that early professional contact may make people feel validated about their suffering and result in positive evaluations about PD. The nonspecific beneficial elements of respectful listening and validation may have a positive influence, but this has not been measured in studies of PD to date.

Several studies that revealed symptom exacerbation concluded that PD might be inappropriate because it involves emotional processing of a trauma prematurely and without sufficient time for follow-up therapeutic processing (e.g., Bisson et al., 1997). This conclusion appears premature, however, because there is a lack of information about the extent of negative affect produced by the PD and there is no treatment fidelity data to evaluate the specific content of PD interventions. Another flaw of these studies is their failure to index the extent to which participants perceive PD as an imposition, which could exacerbate distress. However, in one study, it was found that those who chose to receive a PD reported higher exposure to the stressor, more severe initial symptoms, and a greater willingness to talk about their experience than those who opted out of PD (Fullerton, Ursano, Vance, & Wang, 2000). Finally, some individuals may report more symptoms after PD because the experience enhances their awareness of internal experiences and symptoms, therefore sensitizing them to report more intense or frequent trauma-related symptoms, but perhaps not more functional impairment (Neria & Solomon, 1999; Rose et al., 2001). Future studies should evaluate areas of functional impairment, as well as symptomatology.

It is possible that a one-time PD is insufficient and individuals need more sustained intervention. However, the results of one recent study suggest that multiple debriefing sessions may not in fact be effective. Carlier, Voerman, and Gersons (2000) provided three debriefing sessions (at 24 hours, 1 month, and 3 months post-incident) to police officers in the Netherlands exposed to trauma and found that PD had no impact. These researchers also found that

1 week post-incident, debriefed subjects reported more PTSD symptoms than nondebriefed subjects, which is consistent with several studies (e.g., Bisson et al., 1997). Even if PD is applied over several occasions, it may fail to pay sufficient attention to assisting group members in preparing for the challenges they face in the coming weeks and months. Nevertheless, determining the optimal number of sessions and the necessity for follow-up, in order to enhance maintenance, are empirical questions for future research.

The timing of providing PD has not been systematically studied. While Mitchell and Everly (1996) argue that PD is most effective when conducted very soon after a critical incident, this empirical question has not been explicitly tested. Several authors have suggested that CISD may exacerbate symptoms because the trauma is confronted too early, which is disruptive rather than healing (Gist & Woodall, 2000; Shalev, 2000). It may be that for some people exposed to some types of traumas, a period of rest and relative withdrawal is what is needed. In this context, PD may be experienced as an imposition and may be overwhelming for some if it is provided too early.

Conclusions

Single-session PD, when applied to individuals with moderate to severe exposure to PTE who are not prescreened for risk factors or suitability for active intervention, is not useful in reducing PTSD symptoms to a greater extent than would occur with the passage of time. Although it is premature to conclude unequivocally that PD hinders recovery from trauma (and researchers have yet to explicate the cause(s) of symptom exacerbation), there is sufficient evidence that the indiscriminant use of single-session PD with individuals is inappropriate. However, much more research is needed to examine: (a) the optimal time-frame to provide early intervention, (b) the process of change, (c) the specific change agents, (d) the type of post-intervention behaviors that promote recovery and maintenance of change, and (e) the optimal mode and method of screening for various types of PTE (e.g., mass disaster, victims of violence presenting at emergency rooms). Although we recommend that interventions be devised to treat only those individuals who are not likely to recover over time on their own, more research is needed to determine which risk indicators and risk mechanisms are optimal. In addition, researchers and clinicians should be vigilant about the possibility that early identification of individuals could inadvertently produce negative iatrogenic effects (e.g., stigmatization, self-fulfilling prophecy[1]).

The application of PD to groups of emergency services personnel has yet to be examined with a RCT. However, the roles of the peacekeepers who were provided group PD in the Deahl et al. (2000) study are similar to those of emergency services personnel; peacekeepers are typically well-trained and chiefly exposed to others' suffering and the aftermath of violence (Litz, 1996). There is initial evidence that PD provided for groups of individuals with a shared background and experience and low to moderate stressor exposure does not serve to reduce stress symptoms. On the other hand, group PD appears to facilitate more adaptive coping (e.g., less use of alcohol). More research is needed to examine the efficacy of group PD for other emergency care providers, especially in the context of exposure to severe PTE.

COGNITIVE-BEHAVIORAL THERAPY AS EARLY INTERVENTION

Recent investigations of cognitive-behavioral therapy (CBT) for recently traumatized individuals have demonstrated promising results in preventing the development of chronic psychopathology following trauma. In this section, we describe in detail one pilot study and two RCTs of multisession secondary prevention of PTSD. Our intention is not only to critically evaluate the research methodology, but also to provide a detailed description of the assessment and intervention strategies employed and contrast them to the PD approach.

Foa, Hearst-Ikeda, and Perry (1995) compared the symptom course of ten female victims of rape or aggravated assault who received a four-session cognitive-behavioral intervention shortly after their assault with that of ten assessment-only control victims. All participants were matched on symptom severity, type and severity of assault, demographic characteristics, and time since the assault. This individually-administered intervention consisted of educating participants about common reactions to assault, relaxation training, imaginal and in vivo exposure, and cognitive restructuring. During the first session, victims were educated about common posttraumatic reactions and they were asked to list avoided activities and situations. The second session began by providing victims with a rationale for exposure therapy followed by relaxation training. The relaxation training was audiotaped and

victims were encouraged to use this tape to practice relaxation techniques at home. Next, imaginal exposure was conducted as victims were instructed to relive the assault by closing their eyes, vividly imagining the event and describing it aloud in present tense. This narrative was also audiotaped and victims were encouraged to use this tape to repeat imaginal exposure daily. During the narrative, the therapist attended to maladaptive beliefs that the victim mentioned regarding perceived incompetence and the dangerousness of the world. The remainder of the session was devoted to cognitive restructuring as maladaptive beliefs that emerged during the victim's trauma narrative were challenged. In addition to imaginal exposure homework, victims were encouraged to begin confronting some of their avoided situations and activities. The third session consisted of imaginal exposure and cognitive restructuring, and once again, victims were encouraged to repeat imaginal and in vivo exposure exercises daily on their own. Victims were also instructed to monitor negative thoughts, feelings and cognitive distortions using a daily diary. The fourth and final session again consisted of imaginal exposure to the assault followed by cognitive restructuring.

Two months after the assault, victims receiving CBT reported experiencing significantly fewer symptoms of PTSD than did assessment control participants. At a 5.5-month follow-up assessment, participants in the treatment condition reported significantly fewer symptoms of depression, although there were no differences between groups with respect to PTSD symptoms. Effect size analyses indicated that the difference in PTSD scores between the two groups at the 5.5-month follow-up was relatively large, but because of the small sample size, the lack of a statistically significant difference likely resulted from low statistical power. Moreover, the control group in this investigation experienced significant symptom remission that also may have contributed to the lack of a statistically significant difference in PTSD symptoms at the 5.5-month follow-up. Nevertheless, the large reductions in PTSD symptoms at post-treatment coupled with significantly reduced depressive symptomatology at the 5.5-month follow-up suggests that additional study of CBT in secondary prevention interventions for trauma is indicated.

Bryant, Harvey, Dang, Sackville, and Basten (1998) also report a successful CBT program for recently traumatized individuals. This intervention specifically targeted individuals with ASD, and accordingly their study provided a more direct test of the efficacy of brief CBT in preventing PTSD. Moreover, because control participants received supportive counseling, it was possible to evaluate the extent to which treatment promoted improvement above and beyond that resulting from nonspecific therapeutic factors. Participants were survivors of motor vehicle accidents or industrial accidents who were randomly assigned to either CBT or supportive counseling. Both interventions consisted of 5 1.5-hour weekly individual therapy sessions. Similar to the Foa et al. (1995) intervention, CBT included education about common posttraumatic reactions, relaxation training, imaginal exposure to the traumatic event, graded in vivo exposure, and cognitive restructuring. Each of the last 4 sessions included 40 minutes of imaginal exposure and participants were encouraged to engage in imaginal exposure daily between treatment sessions. By contrast, the supportive counseling condition included trauma education and more general problem-solving training in the context of an unconditionally supportive relationship.

At post-treatment, and at 6-month follow-up, significantly fewer participants in the cognitive-behavioral treatment group met diagnostic criteria for PTSD compared to supportive counseling control participants. Similarly, those in the cognitive-behavioral treatment group reported significantly fewer symptoms of PTSD at post-treatment and 6-month follow-up, and significantly fewer symptoms of depression at the 6-month follow-up than did participants in the supportive counseling condition.

In a subsequent study that dismantled the components of CBT, Bryant and colleagues randomly allocated 45 civilian trauma survivors with ASD to 5 sessions of (a) CBT (prolonged exposure, cognitive therapy, anxiety management), (b) prolonged exposure combined with cognitive therapy, or (c) supportive counseling (Bryant, Sackville, Dang, Moulds, & Guthrie, 1999). This study found that at a 6-month follow-up, PTSD was observed in approximately 20% of both active treatment groups, compared to 67% of those receiving supportive counseling.

The brief cognitive-behavioral interventions described by Foa et al. (1995) and Bryant et al. (1998) represent encouraging attempts to prevent the development of chronic posttraumatic pathology in recent trauma victims. These interventions share many features with psychological debriefing. For example, they both include an education component designed to inform trauma victims about

common posttraumatic reactions and sequelae, and both attempt to teach coping skills for managing symptoms of stress and anxiety.

Given the similarity between psychological debriefing and cognitive-behavioral interventions, what may account for the apparent differences in treatment efficacy? Perhaps the most prominent reason that CBT appears to be more efficacious is the greater emphasis on repeated imaginal reliving of the traumatic event and graded in vivo exposure of avoided trauma-reminiscent situations. In their review of the psychological debriefing literature, Bisson et al. (2000) suggest that one-session intense exposure to trauma memories that characterizes most debriefing approaches might be counter-therapeutic because it may heighten arousal and distress without allowing sufficient time for extinction or resolution of intensely negative posttraumatic affect. The results of the cognitive-behavioral interventions described previously would seem to refute the notion that early exposure per se is counter-therapeutic. Rather, the hasty and incomplete exposure to trauma memories that typifies traditional psychological debriefing approaches may be potentially harmful.

The CBT approaches of Foa et al. (1995) and Bryant et al. (1998) also included considerable attention to cognitive restructuring. There is considerable evidence that acute pathological trauma responses are characterized by catastrophic cognitive styles (Smith & Bryant, 2000; Warda & Bryant, 1998). There is increasing evidence from treatment studies of PTSD that cognitive restructuring is effective in reducing symptoms (Tarrier et al., 1999). The inclusion of cognitive restructuring over repeated sessions in the early provision of CBT is an important difference between current PD approaches and structured CBT.

Cognitive-behavioral interventions also differ from previous debriefing efforts with respect to timing and duration of the intervention. Specifically, it has generally been suggested that debriefing victims as soon as possible following the traumatic event will produce maximal benefit. Although this suggestion is intuitively appealing, we are unaware of any data supporting this possibility. It may be the case that victims are too distraught in the very early aftermath of a trauma to fully attend to or otherwise process potentially helpful interventions. Indeed, the interventions developed by Foa and colleagues (1995) and Bryant et al. (1998) were administered an average of ten or more days after the trauma occurred. Moreover, the interventions, though brief, consisted of four or five weekly sessions and both encouraged extensive daily homework as an integral feature of treatment. Given the profoundly deleterious effects that can ensue following trauma, it may be the case that single-session interventions are simply insufficient to adequately address such powerful experiences among individuals who experience chronic or severe posttraumatic pathology.

Considering the multiple differences (e.g., prolonged exposure, cognitive restructuring, delayed intervention, or multiple session treatment) between CBT and PD, it is not possible to specify which factors——alone or in combination—are responsible for CBT promoting better posttraumatic adjustment. Future research efforts should be designed to elucidate which specific components of CBT are the necessary and sufficient factors in achieving positive change following recent traumatic exposure. It will also be necessary to replicate the findings of Foa et al. (1995) and Bryant et al. (1998) with larger samples comprised of different types of trauma victims to evaluate the generality of these findings.

FUTURE RESEARCH

This review has highlighted that current research on early intervention for PTSD is flawed by a range of methodological limitations. Although a good deal of posttrauma research is complicated by factors that impede controlled experimental design, there is a need for research to adopt rigorous methodological principles in evaluating early intervention of any kind. Following recent trends in evaluating treatment outcomes in PTSD (Foa & Meadows, 1997), we suggest that the following principles should be adopted for early intervention research.

Randomized Allocation. Although random allocation to treatment groups is difficult following trauma, this is an essential step that future research must take if outcome studies are to lead to meaningful inferences.

Standardized Treatment. It is imperative that early interventions, including PD, be delivered in a standardized manner. It is important that treatment manuals be used to increase the standardization of interventions offered to all participants who are intended to receive specific interventions.

Treatment Integrity/Quality Checks. A major flaw of existing PD research is the lack of treatment fidelity checks. Inferences about existing research are difficult because there is ambiguity about the exact nature and quality of the interventions provided. Future early intervention research should record all sessions and have independent experts rate the integrity of the intervention to ensure that it is providing what it is intending to provide and the quality of the intervention provided.

Independent and Long-Term Assessments. All assessments must be conducted by qualified clinicians that are blind to the treatment condition of participants. Further, these assessments should be conducted prior to and following the intervention, as well as over a number of follow-up periods to index the long-term effects of early intervention.

Reliable Assessment Measures Across Varied Domains. It is critical that early intervention research employ standardized assessment tools that possess sound psychometric properties, are sensitive to change, and include clinician-administered interviews. Outcomes should be evaluated categorically (e.g., PTSD caseness) and continuously (e.g., PTSD severity). Although most people adapt to trauma on their own over time, it is an empirical question whether early interventions can assist people to improve more quickly than they would on their own. Consequently, interventions should also be geared toward assisting individuals in speeding the rate of recovery, as opposed to strictly leading to statistically significant reductions in the mean severity of PTSD symptoms over time and lower prevalence rates (e.g., Kenardy et al., 1996).

Future research should also employ process measures to index motivational, cognitive, affective, and coping factors that may mediate change as a result of early intervention. There is a need to index factors beyond psychopathology because it is possible that the benefits of early intervention approaches are in the domains of organizational morale and coping rather than psychological disorder.

Special attention should be paid to systematically evaluating areas of functional impairment (work, self-care, quality of life), which do not necessarily change in step with PTSD symptoms. Finally, it is important that early intervention studies evaluate systematically the outcomes that may be affected by exposure to PTE, even in the absence of significant PTSD symptomatology (e.g., marital satisfaction, alcohol use, depression, or anger problems).

Standard Timing. Considering the course of posttraumatic adaptation in the initial period after the event, early intervention research should ensure that all assessments and interventions are conducted at standardized times to ensure that comparable periods of time have elapsed since the traumatic event for all participants.

Although some have speculated that it is inappropriate and counter-therapeutic to intervene too early with trauma victims, this is an unaddressed empirical question. To address this issue, timing of interventions should be systematically manipulated in future research. For example, studies could randomly assign individuals to early (approximately 2–5 days posttrauma) and later (2–3 weeks posttrauma) groups.

Contextual Factors. It is important that future early intervention research standardizes the context across all participants in outcome studies. For example, it is important that organizational or cultural factors within the group that is being studied are carefully controlled in the design of the study. For example, in the military context, it is possible that leadership differences between military units, differences in attitudes to problem reporting or counseling, or variability in the amount of ongoing stressors that personnel will be exposed to may influence outcomes. These factors need to be identified and researchers need to take care that they do not confound inferences from outcome studies.

Evaluation of the Process of Change, Longitudinally. A focal criticism of PD is that it fosters too much emotional-processing of a trauma in a time-constrained and unsafe context. In theory, this would produce sensitization rather than extinction of conditioned negative affect and arousal, as well as prompt the survivor to conclude that avoidance may be a better option than sharing painful memories of the trauma, which would be particularly counter-therapeutic. No study to date, however, has evaluated negative affect and arousal before and after early intervention. It is also unknown whether some participants experience the treatment as an imposition, which could undermine control and exacerbate symptoms. For

example, the demand for sharing and disclosure could be more than anticipated or desired by participants. Future research studies should evaluate these important process and outcome variables over time (e.g., at least a year after the intervention).

Evaluating Individual Differences. Some trauma survivors may feel imposed upon by peers or significant others to share their trauma experiences, preferring to avoid emotional self-disclosure, not necessarily due to exposure to PTE, but as a result of predisposition or personality characteristics. In a group of individuals exposed to similar PTE, some will be so uncomfortable about self-disclosing and hearing others' experiences that they may be resentful of and inhibited by an early intervention, especially when it is held in groups. Other individuals may be so emotionally reactive to the process of sharing stories about the trauma that they feel overwhelmed, which can take up limited group resources or cause resentment. Some people may be predisposed to expect others to be a useful source of support and guidance under stressful conditions, while others may more likely prefer to work problems out on their own. These latter individuals are likely to feel imposed upon and irritated by an early intervention, particularly a group experience. Future research should measure these individual difference factors.

PRACTICE RECOMMENDATIONS

Based on the previous review of empirical research and the complex conceptual issues surrounding early intervention, the available evidence suggests the practice guidelines presented in this section. We emphasize that because there are problems in the extant research, and many unanswered empirical questions that require investigation, several of our recommendations are speculative and require empirical validation, most notably the recommendation about psychological first aid. Nevertheless, we thought it would be useful to offer a set of parsimonious clinical guidelines and heuristics, based on available evidence.

Psychological First Aid

At this point in time, there is no evidence that global intervention for all trauma survivors will serve a function in preventing subsequent psychopathology. There is consensus, however, that providing comfort, information, support, and meeting people's immediate practical and emotional needs play useful roles in one's immediate coping with a highly stressful event. Moreover, the evidence that debriefing may lead to less subsequent alcohol abuse (Deahl et al., 2000) suggests that coping styles may be enhanced by this early intervention. However, since there is no empirical support that debriefing prevents PTSD, and there is a possibility that it may increase symptoms over time for some individuals, the most appropriate early intervention should be termed psychological first aid. This intervention should be conceptualized as supportive and non-interventionist, but definitely not as a therapy or treatment. This position recognizes that most people do not suffer from PTSD in the immediate days after an event; rather the majority of people will have transient stress reactions that will remit with time. This approach has historical parallels with formal military debriefing (for a review, see Shalev, 2000). The content of this approach includes group support, the opportunity for people to discuss their experiences if they feel the need to, a review of events that transpired, and emphasis that all people involved were equal participants. Inherent in this early intervention is the mandate that advice, interpretation, or other directive interventions are not to be provided.

Handouts or flyers that describe trauma, what to expect, and where to get help, should also be made available routinely. Individuals should be given an array of intervention options, rather than the prescriptive approach often recommended by organizations (e.g., CISD only). Individuals who choose not to participate in groups should be given the opportunity to meet with individual therapists with trauma expertise and experience. Those survivors not interested in any formal intervention should be asked if they care to discuss their thoughts and feelings about the event and urged (if possible) to voice their ideas about the personal implications of the experience to significant others when they feel most comfortable doing so. The goal is not to maximize emotional-processing of horrific events, as in exposure therapy, but rather to respond to the acute need that arises in many to share their experience, while at the same time respecting those who do not wish to discuss what happened.

Initial Screening

The evidence that the minority of people who will have persistent posttraumatic difficulties are characterized by a range of vulnerability factors points to the utility of initially screening trauma survivors for the presence of these

risk factors. Very early in the aftermath of trauma (hours, days) a screen is not intended for diagnostic purposes but rather to flag those individuals who may require special attention because they are statistically more likely to develop problems as time progresses. If feasible, clinicians should inquire briefly and respectfully about prior trauma (e.g., "Has anything like this ever happened to you before?"), history of severe psychological problems, inadequate social supports and ongoing stressors, and exposure to particularly grotesque aspects of the event, including fatalities or salient harm. The approach we recommend stands in contrast to the "one-size-fits-all" nature of PD because it acknowledges there are individual differences in coping style, symptom severity, co-morbidity, past trauma, and additional life stress (see Raphael, Meldrum, & McFarlane, 1995).

However, even brief screening is sometimes difficult to conduct logistically in the immediate aftermath of trauma. In addition, some events are so enormous in their magnitude and impact that it is appropriate to infer that anyone present has sufficient exposure and initial symptoms requiring first aid and referral, if requested. In this context, formal screening would run the risk of being terribly out of place and intrusive. For example, it would be prudent to offer early intervention to anyone who was at "ground zero" at the World Trade Center on September 11, 2001, and witnessed the horrors of that day directly.

Initial Assessment

The evidence that only a minority of people will suffer long-term PTSD indicates that therapy attention should focus on those who will develop this condition and other posttraumatic psychiatric disorders. We suggest that identifying these people immediately after the traumatic event is premature because it is difficult at this point to disentangle those who have a transient stress reaction and those who will have persistent problems. The prevailing view is that identifying people through formal assessment prior to one or two weeks after the event is problematic because there seems to be much settling of stress reactions in that time. For example, research on civilians involved in the Gulf War indicates that many people who suffered immediate stress symptoms several days after the trauma, including dissociation and anxiety, displayed remission of these reactions in the subsequent weeks (Solomon, Laor, Weiler, & Muller, 1993). We suggest that identifying people at least one week after the event can be useful. It is wise to consider those survivors who display significant posttraumatic stress responses, with and without dissociation. Therefore, using the current ASD criteria is limiting because of its emphasis on dissociation. Similarly, at this stage, identifying those who are displaying signs of other anxiety problems, depression, substance abuse, and other conditions is indicated. A variety of psychometrically sound, brief self-report measures are available for these purposes (see Litz et al., 2002).

Provide Informed Consent

Individuals who conduct psychological debriefing, psychological first-aid, or more extensive multisession interventions, should obtain the informed consent of participants (Gist & Woodall, 2000). Individuals should be informed about the credentials of the therapists who provide early interventions, and the relationship between the intervention providers and employers should be clarified. Participation in early interventions should be voluntary. While we recognize that there are work systems and organizations whose culture makes mandatory participation in some form of early intervention acceptable (e.g., the military), and that this can improve morale and well-being in the work-place after exposure to trauma, it appears that the costs of mandatory attendance outweigh the benefits for the individual.

Early Intervention

It appears that there is sufficient empirical evidence to recommend that PD not be provided to individuals immediately after trauma. In our opinion, one-session one-on-one meetings between trauma survivors and professionals are appropriate if they: (a) are an occasion to assess the need for sustained treatment, (b) provide psychological first aid, and (c) provide education about trauma and information about treatment resources. At this point, there is sufficient evidence to suggest that one-session individual interventions should not be used for trauma-processing (e.g., exposure therapy). Since CISD is most often provided to groups of similarly exposed individuals in work systems and organizations, and there have been no well-controlled studies of CISD provided to groups, careful randomized controlled trials of CISD are needed in the group context before firm recommendations can be made.

Since PD is fully accepted as standard practice for emergency service personnel and well-received by group

members and organizations, it is hard to find fault in its application in a mass disaster such as the terrorist attacks on the Twin Towers in New York and the Pentagon in Washington on September 11, 2001. Formal debriefing may serve to maintain morale and cohesion in the face of devastation, rather than serve to prevent chronic PTSD, as professed in the formal literature. In general, it may be that PD provides an opportunity for individuals in a homogenous group to feel validated, empowered, and destigmatized by their organization and their peers, and that the group-based approach contributes to better functioning in the work environment after a high stress incident. It appears that the form and content of PD needs to be structured, however, in ways different from those prescribed by CISD.

In terms of secondary prevention of PTSD, based on successful treatment studies using CBT, we suggest that providing education, anxiety management, exposure, cognitive restructuring, and relapse prevention strategies appears to the most justified approach to adopt at this time. This intervention should be provided over successive weeks and should include considerable homework to ensure that anxiety management, exposure, and cognitive restructuring is practiced daily. In suggesting this approach, however, we caution against early provision of CBT as a panacea for all posttraumatic psychopathology. Bryant et al. (1999) reported that 20% of their participants dropped out of treatment, and these participants reported more severe posttraumatic stress initially. It is important to recognize that a proportion of acutely traumatized participants may not be suited for early exposure-based therapy. Bryant et al. (1999) suggest that it may not be wise to proceed with exposure for people with unresolved prior traumas, excessive anxiety, borderline or psychotic features, substance abuse, highly dissociative reactions, strong suicidal ideation, or demanding ongoing stressors. These people can be managed with other therapy techniques in the acute trauma phase and may be offered more directive therapy as time proceeds. It is important to recognize that many people prosper from receiving delayed treatment rather than early intervention.

Special Attention to Using Existing Social Supports

Early interventions for trauma should be designed to increase social support among trauma victims, as this has been found to reduce the likelihood of chronic posttraumatic psychopathology (Hobfoll et al., 1995). Given that avoidant coping strategies have been shown to be predictive of ASD and PTSD (e.g., Harvey & Bryant, 1998b; McFarlane, 1988), interventions designed to reduce victims' propensity to avoid trauma-relevant thoughts and cues through their existing intimate relationships should be particularly promising. Because severe distress is a common reaction to the uncontrollable or unpredictable nature of traumatic events, early intervention efforts should promote posttrauma interpersonal behavior that enhances victims' global perceptions of personal agency, self-efficacy in specific roles, and the experience of control. To accomplish these goals, clinicians can offer psychoeducation and specific recommendations for action and practice based on an ideographic assessment of social support. Future research is needed to devise and test specific creative interventions designed to enhance social support in trauma survivors. Early interventions should also foster accurate expectations and planning about returning to normal routines, which could provide predictable contingent rewards to instill the experience of control and predictability disrupted by the trauma. Of course, this needs to be carefully balanced by the need of some to temporarily withdraw from interpersonal demands to achieve homeostasis and regain a sense of choice and control.

SUMMARY

This review highlights the merits of early identification and early intervention for recently traumatized people. We suggest that there is a danger of "throwing the baby out with the bath water" by summarizing the PD debate solely in terms of the effectiveness of PD. Many empirical questions pertaining to PD have not been subjected to scrutiny. By applying stricter scientific standards to this issue, we suggest that evidence-based answers can be derived that identify the components that are most useful in assisting individuals and organizations with the short-term and long-term consequences of exposure to trauma.

NOTE

1. We thank an anonymous reviewer for making this point.

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Appendix G

Effective Brief Therapies

A Clinician's Guide

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8

CHAPTER

Posttraumatic Stress Disorder

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Effective Brief Therapies: A Clinician's Guide

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 IIdisorders, 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. Etrating 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 justdy 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 sigruficantlyrecovered 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 important13 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 RECIDMSM

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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CME

Pharmacotherapy for PTSD

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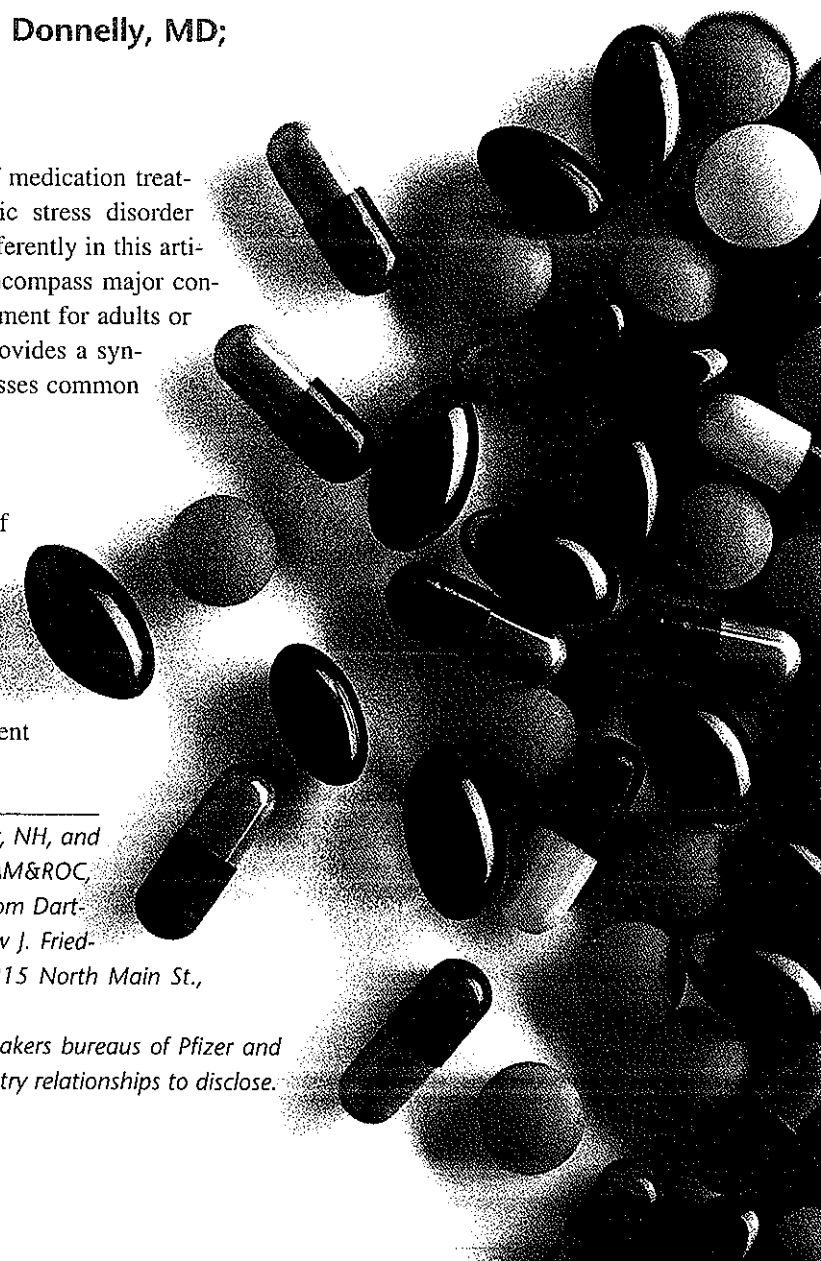

Since each us has previously published reviews of medication treatment for adults and children with posttraumatic stress disorder (PTSD),[1-3] we approach the subject somewhat differently in this article. We ask and answer 11 questions that we believe encompass major concerns of prescribing psychiatrists about medication treatment for adults or children with PTSD. We hope that this presentation provides a synthesis of research literature in a form that directly addresses common clinical decisions.

When Do You Use Medication for PTSD?

There is no simple rule that determines the choice of medication use in PTSD. Rather, medication should be considered an option among several potential therapeutic interventions including cognitive behavioral therapy, psycho-education, supportive therapy, and family therapy. Decisions to use medications are appropriately tailored to individual patient needs and influenced by patient concerns and preferences.

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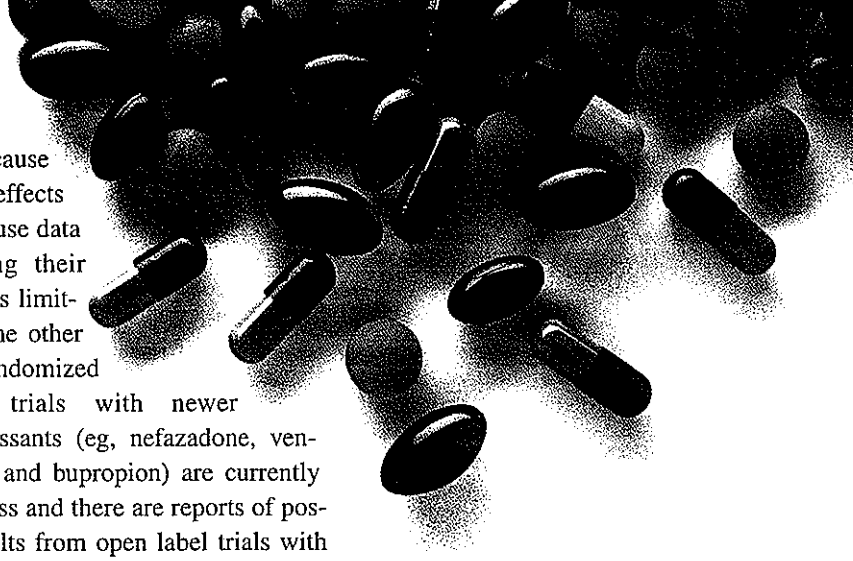


Accordingly, the acceptability of pharmacotherapy and alternative treatment modalities to the patient is one criterion on which to base decisions to prescribe medication. Another might be the presence of significantly severe comorbid psychiatric conditions that are responsive to medications that also treat PTSD. Medication might also be favored as a first line choice when the intensity of PTSD and/or comorbid depression or anxiety symptoms are interfering with a patient's ability to engage in, or tolerate, a psychotherapeutic intervention. Medication treatment may also be indicated when there is no access to competent PTSD-focused psychotherapy and when symptoms persist beyond a reasonable course of treatment.

In What Medications Can We Have Confidence?

At present two medications, the selective serotonin reuptake inhibitors (SSRIs) sertraline and paroxetine, have received approval from the US Food and Drug Administration as indicated treatments for PTSD. Favorable results with other SSRIs such as fluoxetine, fluvoxamine, and citalopram have also been reported. In addition to their broad-spectrum capacity to reduce the severity of all three PTSD symptom clusters, SSRIs have other beneficial properties such as efficacy against disorders frequently comorbid with PTSD (eg, depression, panic disorder, social phobia, and obsessive-compulsive disorder), enhancement of global function, reduction of associated symptoms (eg, suicidality, aggressivity, impulsivity), and a low profile of side effects. Selective serotonin reuptake inhibitors are clearly first line treatment for PTSD.[2,3]

Older antidepressants (eg, tricyclic antidepressants [TCAs] and monoamine oxidase inhibitors [MAOIs]) have also proven to be effective treatments for PTSD but are less preferred by clinicians because of side effects and because data supporting their efficacy is limited. On the other hand, randomized clinical trials with newer antidepressants (eg, nefazadone, venlafaxine, and bupropion) are currently in progress and there are reports of positive results from open label trials with these agents.[4]

Other classes of medications have not been tested as definitively as the aforementioned antidepressants, although there are both theoretical and empirical reasons to consider anti-adrenergic agents (eg, clonidine, propranolol, guanfacine, and prazosin), anticonvulsants/mood stabilizers (eg, carbamazepine, valproate, lamotrigine, and gabapentin), and atypical antipsychotic agents (eg, risperidone and olanzapine).[2,3]

It must be emphasized that benzodiazepines do not appear to have specific efficacy for PTSD symptoms,[5] although they can improve sleep and improve generalized anxiety.

Research on medication for children with PTSD is quite limited (for review see Donnelley and Amaya-Jackson[1]). Children present unique challenges in that their PTSD may be comorbid with attention-deficit/hyperactivity disorder, school phobia, illicit drug use. and other externalizing, disruptive, or oppositional defiant disorders. Often, it is the disruptive behavior, aggressiveness, or impulsive acting out in children with PTSD that is the chief treatment target. Helping children to gain better self-control through treatment of these externalizing behavioral symptoms with stimulants (dextroamphetamine or methylphenidate), alpha-2 agonists (clonidine or guanfacine), or the antidepressant bupropion, is often a precursor to the treatment of their PTSD per se. As discussed below, children merit special consideration in the pharmacologic management of PTSD and often require the use of multiple medications.

Do Medications Have a Role In Alleviating Acute Traumatic Distress and Preventing PTSD?

We are at a preliminary stage in research on acute pharmacotherapy as an early intervention for acutely traumatized individuals, with very little scientific information to guide us.

It is reasonable to postulate that antidepressant medications, for which there is demonstrated efficacy in PTSD (see below), could be useful in an early stage of the disorder. The only published data concerns the treatment of children with acute stress disorder related to burn injuries in which 83% of the 12 cases treated with imipramine responded favorably, in comparison to only 38% of the 13 cases who received chloral hydrate.[6]

Although one might expect that benzodiazepines would ameliorate acute traumatic distress, this was not demonstrated in the published controlled study of this question which involved alprazolam and clonazepam.[7]

Based on findings linking noradrenergic activity to fear-enhanced memory, Pitman and colleagues conducted a placebo-controlled trial of propranolol administered to emergency department patients.[8] Propranolol intervention ex-

hibited a beneficial trend, although most statistical comparisons were nonsignificant. However, it is interesting that early propranolol treatment significantly reduced physiological reactivity to trauma stimuli among the patients who received this medication shortly after their acute traumatization.

What Is the Best Way to Monitor Clinical Response and to Determine an Adequate Response to Treatment?

Strictly speaking, clinical response is best monitored with instruments that measure PTSD symptom severity. There is a wide choice of both self-rating scales and structured clinical interviews that may be used with both adults and children. Selection of a given instrument will depend on the balance between time available, patient compliance, clinical concerns, and scientific necessity.

For rigorous research protocols, we recommend more labor-intensive structured interviews such as the Clinician Administered PTSD Scale (CAPS)[9] or PTSD Symptom Scale Interview (PSS-I)[10] for adults or CAPS for Children (CAPS-C)[11] that provide greater completeness and accuracy in exchange for the extra effort. There are also a number of reliable and valid self-rating questionnaires for measuring PTSD symptom severity that have good psychometric properties.[11-13]

Since PTSD is usually associated with comorbid diagnoses and impaired functional status, it is not uncommon to monitor other psychopathological indices along with PTSD per se. It has become state of the art for treatment trials for PTSD to define optimal outcomes in terms of reduced severity of anxiety and depression in addition to PTSD per se, global improvement, and to include measurement of general function and quality of life.

What Are the Major Considerations Regarding Medication Tolerability for PTSD Patients?

Medication tolerability affects adherence to pharmacotherapy over the course of treatment. Favorable tolerability findings from the recent large scale studies that led to Food and Drug Administration approval for sertraline and paroxetine are not surprising in view of the now well-established safety and side effect profile of the SSRI medication class. Multicenter studies have shown variable rates of side effects such as asthenia, diarrhea, abnormal ejaculation, impotence, nausea, dry mouth, insomnia, and somnolence.[14-17] These side effects are often mild and transient and do not typically necessitate discontinuation of treatment. While recent large multi-site trials have provided more extensive information on SSRI tolerability in PTSD patients, clinicians should consider tolerability issues for other medications used in PTSD treatment.[2] For example, TCAs can produce anticholinergic effects, orthostatic hypotension, and prolong cardiac conduction. Monoamine oxidase inhibitors necessitate dietary and medication restrictions to avoid hypertensive crisis. Antiadrenergic agents can lower blood pressure and anticonvulsants can produce gastrointestinal and hematological problems. Atypical antipsychotic agents, while free of the neurological toxicity of conventional neuroleptics, still have the potential to cause sedation and, variably, weight gain and problems with glucose regulation.

It is important that the outset to define realistic goals for treatment that are both desirable and obtainable.

There may be ways in which specific tolerability issues for psychiatric medications interact with the diagnosis of PTSD. For example, the sexual side effects of SSRIs may serve as barriers to sexual intimacy within the context of PTSD-related emotional numbing and diminished closeness with others. It is important that clinicians inform patients of these potential side effects and assess the status of sexual functioning on an ongoing basis. Another tolerability concern is the propensity for SSRIs and other antidepressants to produce activation side effects which may exacerbate PTSD-related arousal symptoms. It is therefore prudent to adopt the strategy of "starting low and going slow" with potentially activating medications because they may exacerbate or produce physical restlessness and insomnia during the course of treatment.

What's the Next Step When the Response to First Line Medications Is Inadequate?

It is important at the outset to define realistic goals for treatment that are both desirable and obtainable.[18] Although clinical trials tend to emphasize reduction in PTSD symptom severity, it may be that the management of suicidal behavior, substance misuse, social isolation, and comorbid psychopathology is the first order of business, and improvements in global function and quality of life the ultimate goal.

When treatment goals are achieved, medication should be continued for a reasonable interval (see question below). When treatment has been completely ineffective or has produced intolerable side effects it should be discontinued. A more typical scenario is when an adequate clinical trial of a medication has been partially successful but improvement falls far short of treatment

goals and the clinician is faced with the decision of whether to switch from or add to the initial medication. If further improvement is achieved after adding a medication, it is important to determine ultimately whether the improvement was related to the second medication alone or the combination. Such determinations are aided by gradually reducing the initial medication with the patient's consent while monitoring clinical status. Due to the diffuse nature and frequent partial responsiveness of symptoms that present with PTSD, and what appears to be frequent use of medication combinations, periodic evaluation of ongoing efficacy is of paramount importance.

While recent trials have established SSRIs as first line medications for PTSD, there is little empirical research to guide choices for second line interventions, and it seems reasonable to consider the unique psychopathology of an individual patient to guide these decisions. The following recommendations are based primarily on theoretical considerations and clinical experience for second line interventions (some of which have previously been proposed elsewhere[1,19]), assuming that initial treatment was an SSRI:

Patients who are excessively aroused, hyperreactive, or having dissociative episodes might benefit from antiadrenergic agents (eg, clonidine, guanfacine, propranolol, or prazosin).

Fearful hypervigilant, paranoid, and psychotic patients might benefit from atypical antipsychotic agents.

- Patients with comorbid major depression might benefit from TCAs, MAOIs, nefazadone, venlafaxine, or bupropion.
- Patients who had an excellent clinical response to SSRI treatment but experienced intolerable side effects might benefit from discontinuing the SSRI and switching to nefazadone (because of its 5-HT2 receptor antagonism).
- Labile, impulsive, and/or aggressive patients might benefit from anticonvulsant/mood stabilizers or atypical antipsychotic agents.
- Children and adolescents with impulsive, externalizing behavioral disorders such as ADHD and ODD may benefit from treatment with stimulants, clonidine or bupropion.
- Children with sleep onset anxiety and, or traumatic nightmares may benefit from imipramine.

How Should the Presence of Comorbid Disorders Influence Medication Choices?

There is a high likelihood that at least one other psychiatric condition will be present along with PTSD.[20] The presence of such associated disorders will often influence the choice of medication selected to treat PTSD. Comorbid conditions, such as depression or anxiety, or specific trauma related symptoms, such as insomnia, may suggest a wide variety of treatment options for clinicians to consider for initial medication intervention.

Relapse rates were quite low in the subgroup that achieved initial remission status quickly.

As a general principle, broad-spectrum agents such as SSRIs are a good first choice. Selective serotonin reuptake inhibitors have efficacy in treating both the core symptoms of PTSD and conditions such as the anxiety disorders and depression which commonly co-occur with PTSD. These agents also improve social and occupational functioning as well as an individual's perception of improved quality of life.[14-16] Although SSRIs are generally effective for a broad spectrum of problems, clinicians should systematically monitor for the persistence of symptoms not responsive to these agents. For example, despite significant improvements in core PTSD symptoms in one study using sertraline, little improvement was seen in patients' comorbid anxiety and depressive symptoms.[15] This finding demonstrates the value of continuous symptom monitoring and shows that residual or comorbid symptoms may require a different medication to augment effective SSRI treatment for PTSD.

How Long Do You Continue Medications for PTSD?

Evidence from treatment research for other disorders indicates that long-term medication use prevents relapse of a number of chronic psychiatric disorders. A recent report on continuation treatment for PTSD with the SSRI sertraline suggests that this may also be the case for PTSD.[21] In this study, PTSD patients who had had a successful response to sertraline after 36 weeks of treatment were randomized to either sertraline or placebo groups for an additional 28 weeks of pharmacotherapy. Patients in the sertraline continuation group exhibited a relapse rate of only 5% in contrast to the 26% relapse rate observed among patients who had been switched from sertraline to placebo. This study shows that for some patients, sustaining medication treatment for 64 weeks produced a lower relapse rate than when similar treatment was provided for a shorter period of time. It is noteworthy that relapse rates were quite low in the subgroup that achieved initial remission status quickly (within 4 weeks of starting sertraline treatment). Therefore, treatment duration exceeding 1 year may thus be beneficial in many cases but individuals who exhibit robust or

rapid responses should be given consideration for shorter durations of medication treatment.

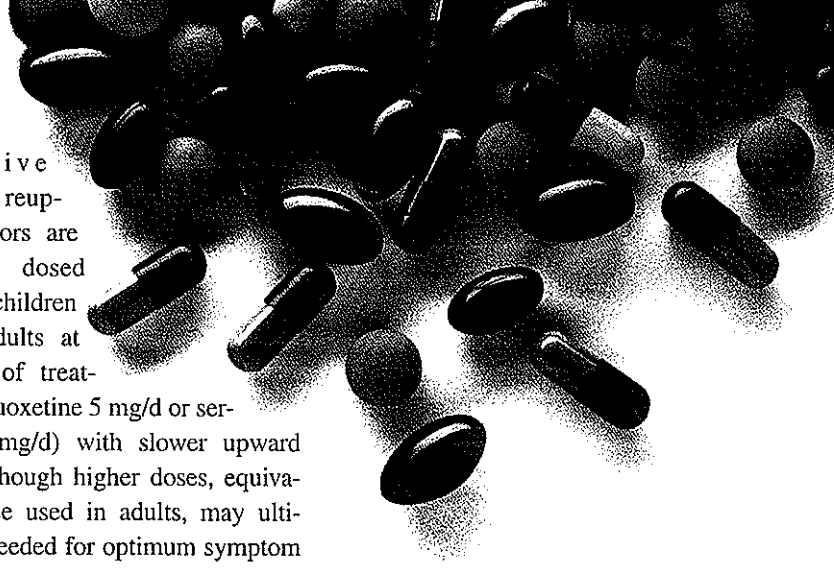
Are There Special Considerations for Treating Children and Adolescents?

In terms of pharmacologic treatment, children are not simply small adults. Medications may have different efficacy, side-effect profiles, and may be metabolized differently in children versus adults.[22] Also, there is far less empirical evidence to guide clinical practice in childhood versus adult PTSD. Although 15 open-label trials have been carried out, there have been no randomized controlled trials of medication use in children with PTSD.

It should be emphasized that the initial treatment of choice for pediatric PTSD is probably cognitive behavioral therapy with play-based components for young children. To date, it appears less risky than medication treatment and has more supportive evidence favoring its use.[23,24]

However, medication use is sometimes warranted when severe agitation, disruptive aggression, or depression limits the behavioral functioning of the child. Medication may serve to stabilize debilitating symptoms allowing children to more effectively engage traumatic material in therapy and to cope better with life stressors.

Several uncontrolled trials with children report that agents such as SSRIs,[25] mood stabilizers,[26] and anti-adrenergic agents[27,28] can be effective in reducing PTSD symptom severity in youth. For example, in one of the best studies in children to date Seedat et al.[25] reported the effectiveness of the SSRI citalopram in a 12-week open-label trial in eight adolescents with moderate to severe PTSD. Subjects in their trial exhibited a 38% reduction in PTSD symptoms at the end of treatment.



Selective serotonin reuptake inhibitors are typically dosed lower for children than for adults at the outset of treatment (eg, fluoxetine 5 mg/d or sertraline 25 mg/d) with slower upward titration, although higher doses, equivalent to those used in adults, may ultimately be needed for optimum symptom control. The stimulants (methylphenidate, dextroamphetamine, mixed dextroamphetamine salts) and α-2 agonists (clonidine and guanfacine) that target specific externalizing behavior disorders common in children with PTSD, such as attention-deficit/hyperactivity disorder and oppositional defiant disorder, may need to be used along with other agents that treat core PTSD symptoms.

How and When Do You Integrate Medication Treatment With Psychotherapy?

Although all published PTSD treatment research has focused on monotherapy (eg, treatment with either a single medication or a single psychotherapeutic approach), most patients who are prescribed medication in clinical practice also receive a psychosocial intervention. There is no empirical evidence comparing monotherapy to combined treatments; therefore it is not known whether there is added benefit from combining treatments.

Without empirical evidence to guide us, a systematic approach where only one treatment component is changed at a time can be helpful for determining the need for combined approaches. If the initial therapeutic approach (medication or psychotherapy) is completely successful, there is no need for an additional treatment. If the initial treatment is completely unsuccessful, it should be discontinued so something else can be tried.

If, however, the initial treatment is partially successful following an adequate therapeutic trial, the optimal approach may be to maintain the initial treatment (eg, medication) and add a second (eg, cognitive behavioral therapy). If combined treatment produces complete remission of PTSD-related problems, it is worthwhile to determine whether both treatments are needed to maintain this clinical improvement.

Where Do We Go From Here?

We are on the threshold of a very exciting period in the development and testing of pharmacotherapeutic agents for PTSD. Without exception, every medication that has been discussed in this article was originally developed as treatment for some other psychiatric or medical disorder and later tested with PTSD patients. Most of these medications were initially developed and marketed for treating depression (eg, SSRIs, TCAs, MAOIs, etc.) although anticonvulsants/mood stabilizers, anxiolytics, antiadrenergic agents, and atypical antipsychotics have also been mentioned.

Our expanding scientific understanding of the pathophysiology of PTSD continues to suggest novel targets for pharmacological interventions. These include corticotropin-releasing-factor antagonists, neuropeptide Y agonists, selective serotonergic agents (eg, 5-HT1A agonists), selective opioid agents,

substance P antagonists, glutamatergic modulators, and brain-derived neurotropic factor enhancers.[29]

In short, we can look forward to a future in which PTSD pharmacotherapy will employ medications that have been specifically designed and selected to treat the unique patterns of psychobiological abnormalities associated with PTSD.

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POST-TRAUMATIC STRESS DISORDER IN THE MILITARY VETERAN

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Before the formalization of post-traumatic stress disorder (PTSD) as a diagnosis in 1980, war-related psychiatric syndromes were known under a variety of names, including *shell shock, traumatic war neurosis,* and *combat exhaustion.* Whatever the label, it is clear that these labels referred to a condition much like what we now recognize as PTSD. For example, Kardiner and Spiegel[20] described a chronic traumatic war neurosis that involved preoccupation with the traumatic stressor, nightmares, irritability, increased startle responsiveness, a tendency to angry outbursts, and general impairment of functioning.

Futterman and Pumpian-Mindlin[17] reported a 10% prevalence of traumatic war neurosis in a series of 200 psychiatric patients seen in 1950. They noted as significant the fact that many of the men had not sought treatment even 5 years after the war. Follow-up studies of World War II veterans continued into the 1950s, when veterans of the Korean War were included as a comparison group in some studies. Investigators continued to observe significant symptoms in veterans up to 20 years postcombat. Archibald et al[1] found World War II combat veterans with "gross stress syndrome" to have severe problems such as increased startle, sleep disturbance, and avoidance of activities reminiscent of combat. A follow-up of these men that included Korean War veterans showed the same symptom profile and relatively more symptoms than in noncombat psychiatric patients or in combat controls.[2]

PTSD is a long-term reaction to war-zone exposure. Briefer reactions to combat stress are known by a variety of names,[29] although *combat stress reaction* (CSR) seems to be the most common. CSRs may be brief, lasting only a few hours or even a few minutes, or may persist for several weeks. Solomon[39] describes six symptom clusters: psychic numbing, anxiety reactions, guilt about functioning,

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depressive reactions, and psychotic-like states. Formal diagnostic criteria, however, do not exist.

CSRs may not necessarily share many features with PTSD, but they are strongly predictive of subsequent PTSD. Among Israeli soldiers who fought in the 1982 Lebanon War, PTSD prevalence was dramatically higher among those who had sustained a CSR compared with soldiers who had not.[39] In the CSR group, prevalence estimates were 62% 1 year after the war, 56% 2 years after, and 43% 3 years after; 1-, 2-, and 3-year estimates for the non-CSR group, which was comparable to the CSR group in both demographic background and war-zone exposure, were 14%, 17%, and 10%.

PREVALENCE

Estimates of PTSD prevalence among military veterans vary markedly as a function of the sample and methods used, even in the same war cohort. Few studies of military veterans have used the rigorous sampling methods necessary to derive epidemiologically sound prevalence estimates.

Vietnam and Vietnam-Era Veterans

The most methodologically adequate study of PTSD in the Vietnam cohort estimated the current prevalence in male Vietnam veterans to be just over 15%.[22] This study, known as the National Vietnam Veterans Readjustment Study (NVVRS), also estimated the current prevalence of PTSD in female Vietnam veterans to be 8.5%; current estimates for veterans who served outside of the Vietnam theater were 2.5% in men and 1.1% in women. Current PTSD was dramatically higher in men and women with high war-zone exposure: 35.8% in men and 17.5% in women. Lifetime PTSD among Vietnam veterans was estimated to be 30.9% in men and 26.9% in women.

In the NVVRS, current PTSD was higher among blacks (27.9%) and Hispanics (20.6%), than among whites (13.7%). Because individuals exposed to high war zone stress were much more likely to develop PTSD than those exposed to low or moderate stress and because black and Hispanic veterans were much more likely to have had higher war-zone exposure, it was necessary to control for this variable. It also was necessary to control for predisposing factors that might confound ethnicity (such as childhood and family background factors, premilitary factors, and military factors). When this multivariate analysis was performed, the increased prevalence among blacks was explained by their greater amount of combat exposure relative to whites; in contrast, the difference between whites and Hispanics was only partially explained by increased exposure among Hispanics.

An important aspect of Kulka et al's[22] study is that they estimated the prevalence of partial PTSD, a subdiagnostic constellation of symptoms that was associated with significant impairment, e.g., having the sufficient number of B (re-experiencing) and D (hyperarousal) symptoms, an insufficient number of C (avoidance/numbing) symptoms, and comorbid alcohol abuse or dependence (which might by interpreted as related to the C symptom cluster) (as per DSM-III-R). Among male theater veterans, lifetime and current prevalence of partial PTSD were 22.5% and 11.1%; comparable estimates for female theater veterans were 21.2% and 7.8%. Kulka et al note that the combined full and partial lifetime

prevalence estimates suggest that more than half of male (53.4%) and almost half of female (48.1%) Vietnam veterans have experienced clinically significant symptoms in relation to their war-zone experiences.

Other War Cohorts

After the formalization of PTSD as a diagnosis, isolated case reports began calling attention to the fact that some veterans of wars before Vietnam had PTSD. Larger studies of older war cohorts began appearing in the mid-1980s, and more recent data show remarkable similarity between World War II and Vietnam veterans in their psychophysiologic reactivity to stimuli reminiscent of their war trauma.[31] The prevalence of PTSD in older veterans, however, is unknown because no study has used a sample representative of the larger population. Estimates from community samples are low—roughly 2% for current PTSD.[28, 43] In patients hospitalized for medical illness, Blake et al[4] found the prevalence of current PTSD in World War II and Korean War veterans who had never sought psychiatric treatment to be 9% and 7%. Among those who had previously sought psychiatric treatment, 37% of the World War II veterans and 80% of the Korean War veterans had current PTSD. Rosen et al[32] found that 54% of a group of psychiatric patients who had been in combat during World War II met criteria for PTSD. The prevalence of current PTSD was 27%.

Data show evidence of PTSD in American men and women who served in the Persian Gulf (Wolfe J: unpublished data, 1993). A few days after return to the United States, the prevalence of current PTSD in men was 3.2% and in women 9.6%. Approximately 18 months later, these figures increased to 9.4% and 19.8%. This study is important because it demonstrates that PTSD may occur in military personnel who had relatively brief war-zone exposure, even following a successful war that received much popular support.

PSYCHIATRIC AND PSYCHOSOCIAL CORRELATES

PTSD in the military veteran is frequently associated with other psychiatric disorders, especially major depressive disorder and alcohol and substance use disorders. Kulka et al[22] reported that male Vietnam veterans with PTSD were more likely than theater veterans without PTSD to have a history of lifetime dysthymia and of lifetime and current major depressive episode, panic disorder, obsessive disorder, generalized anxiety disorder, alcohol abuse/dependence, substance abuse/dependence, and antisocial personality disorder. Female veterans with PTSD were similar to their male counterparts except that they did not differ from female veterans without PTSD in the prevalence of current obsessive-compulsive disorder, current alcohol abuse/dependence, and lifetime substance abuse/dependence; figures for current substance abuse and both lifetime and current antisocial personality disorder were not analyzed because of sample size limitations.[22]

The temporal relationship between PTSD and other comorbid disorders may differ as a function of war cohort. Davidson et al[9] reported that age of onset for PTSD was similar in both World War II and Vietnam veterans, but relatively more Vietnam veterans had a psychiatric diagnosis that predated their experiences in combat.

Military veterans with PTSD also may experience functional impairment, especially, we suspect, if the course of their disorder is chronic. Kulka et al[22] found that both male and female Vietnam veterans with PTSD were less likely to

be married and had more divorces, more marital problems, and more occupational instability than Vietnam veterans without PTSD. In addition, PTSD in the men was associated with increased social maladjustment: Thirty-five percent were homeless or vagrant, 25% had committed 13 or more acts of violence during the previous year, and 50% had been arrested or jailed more than once since the age of 18.

Some patients with PTSD are severely, chronically incapacitated. Similar to individuals with other persistent mental disorders, such as schizophrenia, their social functioning is markedly restricted. They often rely heavily on public housing, community support, and public mental health services. The severity of PTSD may result in repeated hospitalizations over the years and may require ongoing outpatient treatment.[16]

RISK AND PROTECTIVE FACTORS

Not all people who are exposed to a traumatic event go on to develop PTSD. It is now generally recognized that both the likelihood of ever developing PTSD and the likelihood of developing chronic PTSD depend on pretraumatic and post-traumatic factors as well as on features of the trauma itself. In one study that examined predictors of lifetime PTSD, premilitary factors accounted for 9% of the variance, military factors 19%, and postmilitary factors 12%.[19]

Premilitary Factors

Who a person is before entering the military influences both the nature of military experiences and his or her reactions to those experiences. The risk of PTSD is increased by younger age of entry into the military, less premilitary education, prior psychiatric disorder, and childhood behavior problems.[19, 22] Normal personality characteristics also may play a role. Using premilitary Minnesota Multiphasic Personality Inventory (MMPI) scores, we found that risk of PTSD was increased by normal range elevations on several scales, especially Psychopathic Deviate and Masculinity-Femininity.[34] An interesting study of twins who were either Vietnam or Vietnam-era veterans found that genetic factors accounted for 30% of PTSD symptom liability, even after controlling for amount of war-zone exposure.[46] Negative environmental factors in childhood, however, such as physical abuse, economic deprivation, and parental mental disorder, also increase the risk of PTSD following war-zone exposure.[7, 22] Given such findings, it is reasonable to think that sexual and emotional abuse in childhood also would increase the risk of PTSD in veterans.

Military Factors

A high amount of war-zone exposure dramatically increases one's risk of PTSD. (War-zone exposure refers here not only to actual combat, but also to its results as experienced by individuals who deal with injury and death, such as medical or graves registration personnel. In female veterans, war-zone exposure additionally may involve sexual harassment and assault.[48]) Male Vietnam veterans with high war-zone exposure are seven times more likely than veterans with low or moderate exposure to have current PTSD; female veterans with high war-

zone exposure are four times more likely than their less exposed counterparts to have current PTSD.[22]

In addition to *amount* of war-zone exposure, *type* of exposure is an important risk factor for PTSD. Being wounded or injured increases the risk of current PTSD twofold to threefold in both male and female veterans.[22] Exposure to atrocities also increases the risk of PTSD, even when amount of other war-zone experiences is taken into account.[19] An especially traumatic event in the war zone is being imprisoned by the enemy. One study of World War II veterans who had been prisoners of war in the Pacific theater found that 78% had lifetime PTSD and 70% had current PTSD; in contrast, World War II veterans with high war-zone exposure were much less likely to have lifetime (29%) or current (18%) PTSD.[44]

Postmilitary Factors

An important predictor of PTSD is the nature of the post-traumatic environment. In male Vietnam veterans, poor social support both at homecoming and at present is associated with increased risk of PTSD.[19] Another significant postmilitary factor is a veteran's coping skills,[49] although coping deficits may be relatively specific to war-related stressors (i.e., memories) and not to everyday stressors.[12]

SPECIAL POPULATIONS

Most research on PTSD in war veterans has been conducted in Western industrialized nations (United States, Europe, Israel, and Australia). With few exceptions,[10, 22] most studies have focused on white male veterans. Far less research has addressed the matter of PTSD among female, ethnic minority, or physically disabled veterans. The only studies on the impact of war-zone stress on people from non-Western or traditional ethnocultural backgrounds have focused on civilian or refugee cohorts exposed to military violence[25] and therefore are outside the scope of this article.

The most extensive research on PTSD in female military personnel has focused on female Vietnam theater veterans. Most of these women were nurses, although some served in intelligence, security, supply, clerical, and air traffic control positions. Although they did not function as combatants, many female Vietnam theater veterans had high levels of exposure to war-zone trauma, especially nurses, who were often exposed to a constant stream of combat casualties 12 hours a day, 6 days a week for 12 months. The NVVRS showed that patterns of PTSD association with risk factors were generally similar for male and female Vietnam veterans.[22] The women, on average, however, differed from men in that they tended to be white, older, better educated, and more likely to have the rank of officer. In addition, some female veterans also experienced sexual harassment and assault.[48] The adverse, traumatic impact of sexual assault on the military experience of women has only begun to receive the attention it deserves. It certainly appears to contribute substantially to the development of PTSD among female military personnel.

Turning to data on veterans of the Persian Gulf War, cited earlier, women reported more PTSD symptoms than men at 5 days and 18 months after their return to the United States. It is unclear whether the higher prevalence among female veterans reflects sexual trauma in addition to other war-zone stressors or it reflects a greater tendency for women to endorse PTSD symptoms on questionnaires.

There has been relatively little attention focused on PTSD among nonwhite military veterans,[25] although Egendorf et al[10] addressed post-Vietnam psychological problems among black veterans, and Kulka et al[22] rigorously measured PTSD in black and Hispanic subsamples of Vietnam theater and Vietnam-era veterans and civilians.[22] Little is known about PTSD among American Indian, Asian American, Native Alaskan, Native Hawaiian, or Pacific Islander military veterans, although research on this matter is in progress. Preliminary findings on Vietnam theater veterans from the Sioux nation indicate high rates of PTSD (S Manson: personal communication, 1993). The NVVRS data reviewed previously showed increased prevalence among black and Hispanic veterans relative to whites—a difference that could not be completely explained by increased war-zone exposure among the nonwhite minorities. There are a number of factors that might contribute to any additional risk for PTSD among nonwhite American military personnel. These include negative environmental factors in childhood, limited economic opportunities, racism in the military and at home, overidentification with the nonwhite enemy, exacerbation of traumatic stress by institutional racism, a bicultural identity, and nonmembership in the majority culture.[25] Although it is obviously of great importance to investigate possible associations between ethnocultural factors and PTSD prevalence rates, it is necessary to do so with ethnoculturally sensitive instruments. Marsella et al[25] have argued that future research of this nature must use cross-cultural and medical anthropologic research strategies.

More than 300,000 Americans were wounded in Vietnam, more than half required hospitalization, and approximately one quarter (more than 75,000) became seriously disabled. Thanks to efficient evacuation procedures and modern medical technology, many survived who would not have lived in previous wars. A price for this survival was a 300% higher rate of amputations or of crippling wounds to the lower extremities than occurred during World War II.[36] People with chronic physical disabilities resulting from war-zone injuries have the higher rates of PTSD, as stated earlier.[22] They are particularly vulnerable to unremitting PTSD. The persistent pain, disfigurement, and physical impairment from which they suffer serve as constant reminders of the traumatic event(s) that created these problems. In this regard, the physical disability itself is a trauma-related stimulus that constantly stirs the pot of intrusion, avoidant/numbing, and arousal symptoms. Treatment of such individuals is complicated and often disappointing because it must address physical and PTSD problems simultaneously.

COURSE OF ILLNESS

The fact that lifetime prevalence estimates of PTSD exceed current estimates indicates that some individuals experience reduction of symptoms, if not recovery, over time. Stating that a significant number of individuals who once had PTSD no longer meet diagnostic criteria, however, does not mean that such individuals are free of symptoms. Although recovery does occur, many individuals continue to suffer from *partial PTSD*. These individuals fall short of a minimum of six symptoms. In many cases, however, these residual symptoms may seriously impair marital, familial, vocational, or social functioning.

Longitudinal studies show that the course of PTSD is quite variable. Although some trauma survivors may become free of most or all PTSD symptoms, others may develop a persistent mental disorder marked by relapses and remissions in which patients are severely, chronically incapacitated.[6, 16] Between these

two extremes are a number of disease patterns. Blank[6] has concluded that acute, delayed, chronic, and intermittent or recurrent forms of PTSD have been well documented. Op den Velde et al[30] described three life-span developmental courses among World War II Dutch resistance fighters: a subacute form that gradually becomes chronic, a delayed form with onset 5 to 35 years after the end of World War II, and an intermittent subtype with relapses and remissions.

Individuals who appear to have recovered completely from PTSD may relapse when subsequently exposed to stimuli and situations that resemble the initial trauma. Solomon's[39] studies have emphasized the vulnerability of Israeli combat veterans to reactivation of PTSD symptoms if they had previously exhibited combat stress reactions. Solomon and colleagues observed reactivation of PTSD among asymptomatic veterans of the 1967 Yom Kippur War when re-exposed to the war-zone stress of the 1982 Lebanon War. An example of reactivation of PTSD among American veterans occurred during the Persian Gulf War, when there was a marked increase in PTSD symptoms among male and female Vietnam veterans apparently in response to the massive array of war-related stimuli that flooded American print and broadcast media.[18, 47] PTSD also may recur following life events associated with aging, such as retirement.[1, 11]

Finally, it is worth noting that people with PTSD often find it difficult to cope with the vicissitudes and ordinary hassles of life. Interpersonal conflicts, parenting problems, vocational setbacks, and the like may sometimes produce reactivation or exacerbation of PTSD symptoms. The mechanism for such a well-known clinical phenomenon may be that hassle-provoked autonomic arousal precipitates trauma-related symptoms through response generalization.

PREVENTION

Of course, the best primary prevention for war-related PTSD is the prevention of war. Many psychiatrists view such work as beyond their professional purview, although some have stated that social action is a responsibility of psychiatric professionals. For example, Friedman[13] has argued that from a public health perspective, prevention of war (and other traumas) is a valid professional concern. Another primary preventive method is to screen out carefully military recruits who are at greatest risk for developing PTSD. Such a strategy is unlikely to succeed for reasons outlined by Oei et al.[29] A third strategy is a psychoeducational approach to basic training that would equip new military recruits with tools for coping with anticipated war-zone stressors.[29] This could be called a stress inoculation approach.

Secondary prevention, the minimizing of long-term psychological sequelae following war-zone exposure, consists of interventions based on the treatment principles of proximity, immediacy, expectancy, and simplicity.[3, 26] Salmon[33] first delineated these principles during World War I, and they have proved successful in reducing the number of psychological casualties, at least in the short-term. Soldiers are treated close to the frontline, quite soon after initial symptoms appear. Caregivers communicate the message that they are having a normal and temporary reaction and should be able to resume their duties after a brief period of rest and support. They are given opportunities to discuss the traumatic experiences in daily group critical incident stress debriefing sessions.[27] Because of the principle of positive expectancy and the desire to normalize the soldier's responses, pharmacotherapy is often avoided during frontline treatment of acute CSRs. Under appropriate conditions, however, pharmacotherapy can be used effectively for recently evacuated military casualties.[15] In a thought-provoking

article, Camp[8] outlines the ethical dilemmas for military psychiatrists who believe that their responsibilities to the military are sometimes in conflict with their responsibilities to the individual patient.

Military personnel who do not respond to the front-echelon treatment should be offered critical incident stress debriefing in a group context if this has not yet occurred. Careful psychiatric assessment (including ruling out physical causes for the psychiatric symptoms) is best carried out during an initial drug-free interval. Once the diagnosis is established, pharmacotherapy may be initiated as appropriate to the diagnosis. There are theoretical reasons to believe that early treatment with appropriate drugs may prevent some of the long-term sequelae of exposure to trauma, including the later development of PTSD.[15]

TREATMENT

Treatment of PTSD nearly always should include psychotherapy (group or individual or both), pharmacotherapy, peer group participation, and family therapy. Although most treatment for PTSD occurs in an outpatient setting, there also is a place for the use of both short-term hospitalization during periods of crisis and longer term inpatient programs for intensive treatment and rehabilitation. In addition, treatment of alcohol or other substance abuse or dependence is often a prominent need for many veterans with PTSD.

Modes of psychotherapy that have been used to treat war zone–related PTSD can be broadly divided into psychodynamic treatments and cognitive-behavioral treatments.[24] Common to both types of treatment is the encouragement of exposure to the traumatic memories and the associated physiologic and affective responses (often called abreaction in dynamic models and prolonged exposure in cognitive-behavioral models), coupled with attempts to integrate the traumatic experience into one's life story or cognitive schemas. Scurfield[35] in reviewing several models of recovery defined five common essential treatment principles in all the psychotherapies reviewed, including: (1) establishing a therapeutic alliance; (2) providing education about stress responses and the recovery from trauma; (3) providing help with anxiety management and reduction; (4) facilitating the re-experiencing of the trauma in a tolerable, safe manner; and (5) helping with integration of the traumatic events.

In fact, few treatments for PTSD in military veterans (or other trauma survivors) have been rigorously evaluated. We are aware of only eight randomized, controlled trials of treatment for military veterans. These include four drug trials and four trials of cognitive or behavioral treatments.[38] The cognitive behavioral treatments tested include prolonged exposure, relaxation techniques, and desensitization techniques. The psychotropic medications that have been assessed in this population are phenelzine, imipramine, desipramine, and amitriptyline. In general, successful treatment reduces the intrusion/re-experiencing and hyperarousal symptoms of PTSD and is less successful with avoidant/numbing symptoms. Psychotherapy and pharmacotherapy of PTSD are reviewed elsewhere in this issue.

An additional option for American Vietnam veterans is treatment at a veterans' center. These are community-based centers that emphasize peer counseling, group therapy, community involvement, and family treatment and education.[5] Questions of moral pain,[23] including guilt over acts of omission and commission, and existential questions, resulting from the experience of participating in combat and other traumatic war-zone events, are perhaps best addressed in the context of peer groups and best ameliorated through active engagement in the community.

As already noted, military personnel with PTSD often have comorbid substance-abuse problems. Neurobiologic factors that are characteristic of chronic PTSD may increase a PTSD patient's risk for alcoholism or substance abuse.[14] In addition, the adrenergic hyperarousal associated with withdrawal from abused substances may exacerbate PTSD symptoms. Furthermore, the dual diagnosis literature strongly suggests that the best treatment outcomes result when two coprimary illnesses are treated simultaneously. For all these reasons, Kofoed et al[21] argue that PTSD and substance abuse/dependence must be treated simultaneously when they co-occur.

Before leaving the topic of treatment, mention must be made of longer term, institutional treatment of PTSD. There are specialized inpatient treatment units at several VA hospitals in the United States. The programs are designed to help veterans focus on intensive, trauma-related therapy as well as rehabilitation therapy. The Israel Defense Forces Medical Corps developed a variation on this type of institutional care, the pilot test of which is known as the Koach Project.[40] The program borrowed heavily from the principles of treatment of acute combat stress reactions in that positive expectancy and similarity of the treatment setting to the traumatic setting were emphasized. Although psychometric outcome data failed to demonstrate the program's efficacy, the approach is worthy of further study.[42]

PHYSICAL HEALTH

Literature suggesting that exposure to combat trauma may alter the body's normal physiology and health dates back to reports on cardiovascular abnormalities among Civil War veterans. Over the years, these problems have been variously labeled *soldier's heart, Da Costa's syndrome, irritable heart, effort syndrome,* and *neurocirculatory asthenia.*[14] Studies have confirmed that exposure to war-zone stress is associated with poorer health and more chronic medical problems in diverse strata of the veteran population, e.g., male and female Vietnam veterans,[22] male Australian World War II prisoners of war.[45]

Despite this extensive literature, there is little research that has addressed the question whether PTSD rather than traumatic exposure per se is associated with poor health among military veterans. In the NVVRS, both male and female Vietnam veterans with current PTSD reported more physical health problems, poorer health status, and more medical service utilization.[22] After controlling for war-zone exposure, Wolfe et al[50] found among 109 female Vietnam theater veterans that higher PTSD scores were associated with increased likelihood of neurologic, cardiovascular, gastrointestinal, gynecologic, dermatologic, and ophthalmologic/otolaryngologic complaints. Israeli combat veterans with PTSD had higher rates of somatic complaints than a non-PTSD comparison group.[41] When tested on a treadmill, Israeli combat veterans with PTSD exhibited low effort tolerance and decreased cardiac reserve.[37] Finally, preliminary data collected by Wolfe and colleagues (Wolfe J: unpublished data, 1993) on veterans of Operation Desert Storm indicate a strong association between PTSD and health. Eighteen months after their return from the Persian Gulf, almost 75% of the men and 94% of the women with PTSD reported that their health had worsened since their return. The most frequent complaints were general aches and pains, headaches, and lack of energy.

There are a number of ways by which PTSD might increase the risk of poor health or adverse health complaints. Physiologic and neurobiologic alterations

associated with PTSD[14] (see also the article by Southwick et al in this issue) might increase biologic susceptibility to cardiovascular, gastrointestinal, endocrine, autoimmune, and other medical disorders. Adverse health behaviors (smoking, drinking, eating disorders, sexual behavior) associated with PTSD might affect health risk. Comorbid depression, anxiety disorders, and alcoholism/substance abuse might increase disease susceptibility, and heightened vigilance or perceptions of autonomic changes might increase rates of health complaints.

SALUTARY EFFECTS OF WAR-ZONE EXPOSURE

The significant problems associated with PTSD among military veterans have overshadowed the fact that some veterans who have extensive combat exposure are well adjusted and high functioning.[34, 49] Moreover, war-zone exposure can have potentially salutary effects, although these effects may not be observed immediately after war and may not involve all aspects of function. For example, Elder and Clipp[11] studied personality change from adolescence to midlife in male Korean War and World War II veterans. Veterans with heavy combat exposure had the greatest gains in resilience and decreases in helplessness relative to less-exposed veterans but at a price—the heavy exposure group also had the most painful memories and emotional distress.

SUMMARY

1. Military personnel exposed to war-zone trauma are at risk for developing PTSD. Those at greatest risk are those exposed to the highest levels of war-zone stress, those wounded in action, those incarcerated as prisoners of war, and those who manifest acute war-zone reactions, such as CSR.
2. In addition to problems directly attributable to PTSD symptoms per se, individuals with this disorder frequently suffer from other comorbid psychiatric disorders, such as depression, other anxiety disorders, and alcohol or substance abuse/dependence. The resulting constellation of psychiatric symptoms frequently impairs marital, vocational, and social function.
3. The likelihood of developing chronic PTSD depends on premilitary and postmilitary factors in addition to features of the trauma itself. Premilitary factors include negative environmental factors in childhood, economic deprivation, family psychiatric history, age of entry into the military, premilitary educational attainment, and personality characteristics. Postmilitary factors include social support and the veteran's coping skills.
4. Among American military personnel, there are three populations at risk for unique problems that may amplify the psychological impact of war-zone stress. They are women whose war-zone experiences may be complicated by sexual assault and harassment; nonwhite ethnic minority individuals whose premilitary, postmilitary, and military experience is affected by the many manifestations of racism; and those with war-related physical disabilities, whose PTSD and medical problems often exacerbate each other.
5. The longitudinal course of PTSD is quite variable. Some trauma survivors may achieve complete recovery, whereas others may develop a persistent mental disorder in which they are severely and chronically incapacitated. Other patterns include delayed, chronic, and intermittent PTSD.

6. Theoretically primary preventive measures might include prevention of war or screening out vulnerable military recruits. In practice, primary preventive measures have included psychoeducational and inoculation approaches. Secondary prevention has been attempted through critical incident stress debriefing administered according to the principles of proximity, immediacy, expectancy, and simplicity. Tertiary prevention has included psychotherapy, pharmacotherapy, dual diagnosis approaches, peer counseling, and inpatient treatment. Few treatments have been rigorously evaluated.
7. There are both theoretical reasons and empirical findings to suggest that military veterans with PTSD are at greater risk for more physical health problems, poorer health status, and more medical service usage. Much more research is needed on this matter.
8. Despite the potential adverse impact of war-zone exposure on mental and physical health, there is also evidence that trauma can sometimes have salutary effects on personality and overall function.

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Transition Assistance Information for Enduring Freedom and Iraqi Freedom Veterans

The Department of Veterans Affairs (VA) has maintained an active Transition Assistance Program and Disabled Transition Assistance Program (TAP/DTAP) throughout the United States and around the world. Since the implementation of TAP/DTAP through the original legislation (P.L. 101-237) and the legislation which expanded TAP/DTAP (P.L. 101-510) VA has provided benefit information to separating service members and their families.

VA encourages all separating service members to contact their respective Transition Centers to determine when the VA Transition Assistance Briefings are scheduled. These briefings provide information which will help you make the transition to civilian life easier by identifying many of the VA benefits available to you. You may find the locations of the briefing sites through the Department of Defense transition portal web site. When the site comes up, click on the "At Your Service" link. Click on the Military Services Transition Assistance Locations link to locate the center nearest you. **(http://www.dodtransportal.org/dav/lsnmedia/LSN/dodtransportal/)**

Links to Other Information

- **National Center for PTSD** - The mission of the National Center for PTSD (Post Traumatic Stress Disorder) is to advance the clinical care and social welfare of Americas veterans through research, education, and training in the science, diagnosis, and treatment of PTSD and stress-related disorders. **(www.ncptsd.org)**

- **PTSD Specific to OEF/IF Veterans** - Information for clinicians, veterans and family members. **(www.ncptsd.org/topics/war.html)**

- **Army Review Boards Agency** - Discharge review and correction to military records such as the DD 214. **(https://secureweb.hqda.pentagon.mil/ACTS_Online/gui/Login.aspx?ReturnUrl=%2fACTS_Online%2fgui%2flanding.aspx)**

- **GOV Benefits.Gov** - This Federal Government web site contains links to many Federal and State benefits programs. You can search by Federal agency, State, or category of program. **(www.govbenefits.gov)**

WARZONE-RELATED STRESS REACTIONS: WHAT VETERANS NEED TO KNOW
A National Center for PTSD Fact Sheet

Julia M. Whealin, Ph.D.

Traumas are events in which a person has the feeling that he or she may die or be seriously injured or harmed, or events in which he or she witnesses such things happening to others or sees their effects. Traumatic events are of course common in the war zone, but they are common in the civilian world too, so that in addition to war zone experiences, many military personnel will have experienced one or more traumatic events in their civilian lives.

When they are happening, traumas often create feelings of intense fear, helplessness, or horror for those who experience them. In the days and weeks that follow, they often create longer-lasting stress reactions that can be surprising, distressing, and difficult to understand. By understanding their traumatic stress re-actions better, Iraq War veterans can become less fearful of them and better able to cope with them. While reviewing the list of effects of trauma below, keep in mind several facts about trauma and its effects:

- It is very common to have problems following exposure to war or other trauma. But traumatic stress reactions often become less frequent or distressing as time passes, even without treatment.
- Veterans with PTSD often worry that they are going crazy. This is not true. Rather, what is happening is that they are experiencing a set of common symptoms and problems that are connected with trauma.
- Problems that result from trauma are not a sign of personal weakness. Many mentally and physically healthy people experience stress reactions that are distressing and interfere with their daily life at times.
- If traumatic stress reactions continue to cause problems for more than a few weeks or months, treatment can help reduce them.

Traumatic war experiences may cause many of the following kinds of (often temporary) reactions in veterans:

Unwanted remembering or "re-experiencing." Difficulty in controlling distressing memories of war is experienced by almost all trauma survivors. Although these memories are upsetting, on the positive side, these memories mean that a person has a chance to make sense of what has happened in order to gain mastery over the event. The experience of these memories can include: *unwanted distressing memories as images or other thoughts*; *feeling like the trauma is happening again* ("flashbacks"); *dreams and night-mares*; and *distress and physical reactions* (e.g., heart pounding, shaking) when reminded of the trauma.

Physical activation or "arousal." The body's "fight-or-flight" reaction to a life-threatening situation continues long after the event itself. It is upsetting to have your body feel like it is over-reacting or out of control. Again, on the positive side, these fight-or-flight reactions help prepare a person in a dangerous situation for quick response and emergency action. Signs of continuing physical activation, so common following participation in war, can include: *difficulty falling or staying asleep*; *irritability, anger, and rage*; *difficulty concentrating; remaining constantly on the lookout for*

danger ("hypervigilance"); *being startled easily, for example, when hearing a loud noise* ("exaggerated startle response"); and *anxiety and panic*.

Shutting down: Emotional numbing. When overwhelmed by strong emotions, the body and mind sometimes react by shutting down and becoming numb. The veteran may, as a result, have difficulty in experiencing loving feelings or feeling some emotions, especially when upset by traumatic memories. Like many of the other reactions to trauma, this emotional numbing reaction is not something the veteran is doing on purpose.

Active avoidance of trauma-related thoughts and feelings. Painful memories and physical sensations of fear and activation can be frightening, so it is only natural to try and find ways to prevent them from happening. One way that most veterans try is to avoid anything – people, places, conversations, thoughts, emotions and feelings, physical sensations – that might act as a reminder of the trauma. This can be very helpful if it is used once in a while (e.g., avoiding upsetting news or television programs). But when it is used too much it can have two big negative effects. First, avoidance can reduce veterans' abilities to live their lives and enjoy themselves, because they can become isolated and limited in where they can go and what they can do. Second, avoiding thinking and feeling emotions connected with the trauma may reduce veterans' abilities to recover from it. It is through thinking about what happened, and particularly through talking about it with trusted others, that survivors may best deal with what has happened. By constantly avoiding thoughts, feelings, and discussions about the trauma, this potentially helpful process can be short-circuited.

Depression. Most persons who have been traumatized experience depression. Feelings of depression then lead a person to think very negatively and feel hopeless. There is a sense of having lost things: one's previous self ("I'm not the same person I was"), sense of optimism and hope, self-esteem, and self-confidence. With time, and sometimes with the help of counseling, the trauma survivor can regain self-esteem, self-confidence, and hope. It is important to let others know about feelings of depression, and of course about any suicidal thoughts and feelings that are sometimes part of feeling depressed.

Self-blame, guilt, and shame. Many veterans, in trying to make sense of their traumatic war experiences, blame themselves or feel guilty in some way. They may feel bad about some thing(s) they did or didn't do in the war zone. Feelings of guilt or self-blame cause much distress, and can prevent a person from reaching out for help. Therefore, even thought it is hard, it is very important to talk about guilt feelings with a counselor or doctor.

Interpersonal effects. The many changes noted above can affect relationships with other people. Trauma may cause difficulties between a veteran and his or her partner, family, friends, or co-workers. The veteran who is experiencing high levels of irritability and anger may now have more conflicts with others and handle them less well. Particularly in close relationships, the emotional numbing and feelings of disconnection from others that are common after traumatic events may create distress and drive a wedge between the survivor and his or her family or close friends. Avoidance of different kinds of social activities by the survivor may frustrate family members. Sometimes, this avoidance results in social isolation that hurts relationships. Some kinds of traumatic experiences (e.g., sexual assault) can make it hard to trust other people. Friends and family may respond in ways that worsen the problem rather than help recovery. They may have difficulty understanding, become angry with the veteran, communicate poorly, and/or fail to provide support.

Becoming more aware of trauma reactions and how to cope with them can help survivors reduce the harm they cause to relationships. Just as the veteran needs to learn about trauma and its effects, so other people who are important to him or her will need to learn more. Partners and families need to participate in treatment. By learning more about traumatic stress, friends and family members can often become more understanding of the veteran and feel more able to help.

Physical symptoms and health problems. Because many traumas result in physical injury, pain is often part of the experience of survivors. This physical pain often causes emotional distress, because in addition to the fact that it hurts, it also reminds them of their trauma. Because traumas stress the body, they can sometimes affect physical health, and stress-related physical symptoms (e.g., headaches, nausea, skin problems) may be experienced. The veteran with PTSD will need to care for his or her health, seek medical care when appropriate, and inform the doctor or nurse about his traumas, in order to limit the effects of the trauma.

DEPRESSION
A NATIONAL CENTER FOR PTSD FACT SHEET

Jennifer Gregg, Ph.D.

Depression is a common problem in which severe and long lasting feelings of sadness or other problems get in the way of a person's ability to function. In any given year, as many as 18.8 million American adults—9.5% of the adult population—experience some type of depression. Unlike a blue mood that comes and goes, depression is a persistent problem that affects the way a person eats and sleeps, thinks about things, and feels about him- or herself.

What are the Symptoms of Depression?

The symptoms of depression can vary quite a bit, but most people who experience depression feel down or sad more days than not, or find that things in their life no longer seem enjoyable or interesting. Additionally, people with depression may notice changes in their sleeping, eating, concentration, or feelings about themselves, and may find themselves feeling hopeless. These symptoms typically last for at least 2 weeks without letting up.

What Causes Depression?

Depression has many causes. Difficulty coping with painful experiences or losses contributes to depression. People returning from a war zone often experience painful memories, feelings of guilt, or regret about their war experiences, or have a tough time readjusting back to normal life. Trouble coping with these feelings and experiences can lead to depression. Some types of depression run in families, and depression is often associated with chemical imbalances and other changes in the brain.

How is Depression Treated?

There are many treatment options for depression. An evaluation should be done by a healthcare professional to help determine which type of treatment is best for an individual. Typically, milder forms of depression are treated by psychotherapy, and more severe depression is treated with medications or a combination of psychotherapy and medication. Your doctor can help you determine which treatment is best for you.

Psychotherapy. There are a number of types of psychotherapy (or talk therapy) that are used to treat depression. These treatments may involve just a few sessions, or may last 10-20 weeks or longer. Psychotherapy treatments tend to focus on helping patients learn about their problems and resolve them, through working with a therapist and learning new patterns of behavior to help decrease depression. Two of the main types of psychotherapy for depression are interpersonal therapy and cognitive-behavioral therapy. Interpersonal therapy focuses on the patient's relationships with other people, and how these relationships may cause and maintain depression. Cognitive-behavioral treatments help patients change negative styles of thinking and acting that can lead to depression.

Medication. In addition to psychotherapy, there are several types of antidepressant medications used to treat depression. These include selective serotonin reuptake inhibitors (SSRIs), tricyclics, and monoamine oxidase inhibitors (MAOIs). The newer medications for treating depression, such as the SSRIs, generally have fewer side effects than older types of medications. A healthcare provider may try more than one type of medication, or may increase the dosage, to find a treatment that works. Improvements in symptoms of depression typically occur after the medication is taken regularly for 3 to 4 weeks, although in some medications it may take as long as 8 weeks for the full effect to occur.

Antidepressant medications are typically safe and effective. They help patients feel less depressed and generally do not make people feel "drugged" or different during their daily lives. The side effects of depression medications vary depending on the medication, and can include dry mouth, constipation, bladder problems, sexual problems, blurred vision, dizziness, drowsiness, headache, nausea, nervousness, or insomnia. Because of side effects or because they begin feeling better, patients are often tempted to stop taking their medication too soon. Some medications must be stopped slowly to give your body time to readjust to not having the medication. Never stop taking an antidepressant without consulting your doctor.

What Can I Do about Feelings of Depression?

Depression can make a person feel exhausted, worthless, helpless, hopeless, and sad. These feelings can make you feel as though you are never going to feel better, or that you should just give up. It is important to realize that these negative thoughts and feelings are part of depression, and often fade as treatment begins working. In the meantime, here is a list of things to try to improve your mood:

- Talk with your doctor or healthcare provider
- Talk with family and friends, and let them help you
- Participate in activities that make you feel better, or that you used to enjoy before you began feeling depressed
- Set realistic goals for yourself
- Engage in mild exercise
- Try to be with others and get support from them
- Break up goals and tasks into smaller, more reachable ones

Where Can I Find More Information About Depression?

National Institute of Mental Health Depression Fact Sheet:
www.nimh.nih.gov/publicat/depression.cfm

National Alliance for the Mentally Ill: www.nami.org

National Center for Post-Traumatic Stress Disorder: www.ncptsd.org

STRESS, TRAUMA, AND ALCOHOL AND DRUG USE
A NATIONAL CENTER FOR PTSD FACT SHEET

Robyn D. Walser, Ph.D.

Drinking to Reduce Stress

Many military personnel experience stress related to their deployment, service, and return home. These quite natural stress reactions can range from mild to severe and may be either short-lived or persist for a very long time. One common approach to managing stress that seems a simple and easy solution is use of alcohol or drugs. Military personnel, like civilians, may use alcohol and drugs as a way to relax or reduce anxiety and other bad feelings. In some cases, alcohol and drugs are not only used to decrease stress but also to manage severe symptoms that can arise from a traumatic experience in the warzone. You might find yourself drinking or using drugs for a variety of reasons when under stress or after trauma, including to:

- Help yourself sleep
- Relax
- Decrease emotional pain
- "Drown" your worries
- Escape present difficulties
- "Shake off" stress
- Decrease sadness
- Help yourself be around others
- Increase pleasurable experience
- Keep upsetting memories from coming to mind
- Calm anxiety

Becoming Dependent on Alcohol/Drugs

Initially, alcohol and drugs may seem to make things better. They may help you sleep, forget problems, or feel more relaxed. But any short-term benefit can turn sour fast. In the long run, using alcohol and drugs to cope with stress will cause a whole new set of very serious problems, as well as worsening the original problems that lead you to drink or use. Alcohol and drug abuse can cause problems with your family life, health, mental well-being, relationships, finances, employment, spirituality, and sense of self-worth.

Think about family impact as an example. It's difficult to create good relationships when you are regularly drunk or high. Being intoxicated decreases intimacy and creates an inability to communicate well. Family members can feel rejected by someone who is always under the influence. In addition, witnessing someone's behavior while under the influence can be distressing. Children may not understand the aggressive behavior, the shutting down, or the hiding out that can occur along with substance use. The fallout from an accident or an arrest can have a long-lasting impact on a family. Alcohol and drug problems are dangerous for loved ones, because they are often linked with family violence and driving while intoxicated.

When is Use of Alcohol a Problem?

It is often hard to decide whether alcohol or drug use is becoming a problem. It can happen gradually, and sometimes can be hard to notice by the person who is using. Here are things that people sometimes say to themselves to convince themselves that they do not have a problem. Do you recognize any?

- "I just drink beer (wine)"
- "I don't use hard drugs"
- "I'm not an alcoholic"
- "I gave it up for 3 weeks last year"
- "I don't drink every day"
- "I've never missed a day of work"
- "I don't need help, I can handle it myself"

Alcohol or drug use can be considered a problem when it causes difficulties, even in minor ways. Here are some questions that you can ask yourself to see if you are developing a problem:

Have friends or family members commented on how much or how often you drink?

Have you have found yourself feeling guilty about your drinking or drug use?

Have you found yourself drinking (using) more over time?

Have you tried to cut down your alcohol (drug) use?

Does your drinking (using drugs) ever affect your ability to fulfill personal obligations such as parenting or work?

Do you drink (use) in situations that are physically dangerous such as driving or operating machinery while under the influence?

Have you found that you need more alcohol (drug) to get the same effect?

If you find that you are answering "yes" to one or more of these questions, perhaps it is time to re-evaluate your use, cut back, and seek help from friends, family, or a professional.

What to Do if Alcohol or Drugs are Causing Problems

If you think that that alcohol (drug) use has become (or is becoming) a problem for you, there are number of things that you can do. First, recognize that you are not alone and that others are available to lend support. Second, find help. Getting help is the most useful tool in decreasing or stopping problem drinking or drug use, even if you have doubts about being able to quit or if you are feeling guilt about the problem. Call your health provider, contact a physician or therapist, call your local VA hospital, or contact your local Alcoholic's Anonymous for guidance in your recovery. These contacts can help you on the road to the life you want.

Listed below are some useful websites if you are looking for more information about alcohol and drug use or about how to get help.

Alcohol and Drug Abuse Information and Resources: http://www.alcoholanddrugabuse.com/

National Institute on Alcohol Abuse and Alcoholism: Frequently Asked Questions: http://www.niaaa.nij.gov/faq/faq.htm

Substance Abuse Treatment Facility Locator: http://findtreatment.samhsa.gov/

Alcoholics Anonymous Homepage: http://www.alcoholics-anonymous.org/

What If I Have Sleep Problems?
A National Center for PTSD Fact Sheet

Julia M. Whealin, Ph.D.

Many people who have been deployed for combat or peacekeeping experience sleep problems, for various reasons. Some individuals may suffer from nightmares related to the deployment, and wake up feeling terrified. Others may feel the need to stay awake to protect themselves from danger. For example, some service members who have been in combat feel a need to "stand guard" at night, rather than sleep. Individuals may also have poor sleep habits that lead to insomnia, such as extended napping or an irregular sleep schedule.

What Can I Do If I am Having Sleep Problems?

We are creatures of habit. Our sleep habits can either make sleeping easier or more difficult. The following 10 suggestions have been shown to help reduce sleep problems:

1. **Keep bed only for sleep** – Do not watch TV, talk on the phone, review work, study, or solve problems while in bed. Go to bed only when you are drowsy and ready for sleep.
2. **If you don't fall asleep within 30 minutes, get up** – Go to another room and do something relaxing until you feel drowsy.
3. **"Wind down" before bedtime** – Do something calming, like light reading, listening to soothing music, praying, taking a warm bath, doing a crossword puzzle, or playing an enjoyable computer game before bedtime.
4. **Have a regular bedtime and rising time** – Go to sleep and wake up at the same time every day.
5. **Limit naps** – A mid-day nap as short as 10 minutes can improve mood and mental performance. However, limit your nap to 15 minutes and don't take it later than 4pm, or the nap may interfere with your sleep cycle.
6. **Increase regular exercise** – Just not too close to bedtime.
7. **Decrease stimulants** – Avoid smoking, or drinking coffee or soda with caffeine in the afternoon or evening.
8. **Decrease alcohol** – Because alcohol causes mid-night awakenings, have no more than one serving of alcohol with dinner. Of course if you are in recovery from alcohol abuse, it is important to avoid alcohol entirely.
9. **Inspect your bedroom environment** – Is your bedroom dark and free of noise? Is your bed comfortable? Is the temperature comfortable? Do you feel safe and serene in your bedroom? If not, you can add images that are calming—a picture of your children, pet, an outdoor scene, a poem, or a prayer—to your room.
10. **Get help** – There are treatments that can help your sleep problems. If you continue to have sleep problems, see a trained sleep specialist to help identify what is the best treatment for you.

What If I Am Having Nightmares?

After a traumatic event, many people experience nightmares. For some, nightmares may continue to repeat for a long period of time. During nightmares, you may feel like you are "reliving" the event, with the same fear, helplessness, or rage experienced during the original trauma. Nightmares are not a sign that you are "going crazy." They are a way of working through a trauma.

Some people try to avoid nightmares, by using drugs or alcohol, or by avoiding sleep altogether. These "solutions" only lead to new problems, such as substance dependence and sleep deprivation. When you wake up from a nightmare, leave the bedroom and go to another room to get your bearings. It may take a while to re-orient yourself to the present. Do something relaxing. If possible, reach out to someone who supports you. If you live with others, discuss the fact that you are having nightmares. Discuss ways in which you might want to handle the situation and share this handout with them. A small percentage of sufferers act out their nightmare in their sleep. You may want to rearrange your bedroom so that you are safe. If you share your bed with a partner, you may need to make sure he/she is not in harm's way.

How Are Sleep Problems Treated?

There are effective treatments for sleep problems. Choosing one that is right for you will depend on the situation. Medications are available for quick, short-term relief of insomnia and nightmares. Some medications can be addictive, however, so check with your doctor to find out which is best for you.

Some "talk therapies" will help bring about long-term relief of sleep problems. "Cognitive Behavioral Therapy" targets your beliefs and behaviors that can make sleep problems worse. "Sleep Hygiene" Therapy helps people develop habits that can improve sleep. Breathing and relaxation therapies also may be used to help reduce muscle tension and promote sleep.

Therapies to treat nightmares are also available. For example, "Imagery Rehearsal Therapy" focuses upon helping people change the endings of their nightmares, while they are awake, so the dream is no longer upsetting. This therapy has been shown to reduce nightmares in survivors of combat and sexual assault.

Where Can I Find More Information About Sleep Problems?

National Center for Post-Traumatic Stress Disorder: www.ncptsd.org

National Alliance for the Mentally Ill:http://www.nami.org/Content/ContentGroups/Helpline1/Sleep_Disorders.htm

Stanford University Center for Excellence in the Diagnosis and Treatment of Sleep Disorders: http://www.med.stanford.edu/school/psychiatry/coe/

COPING WITH TRAUMATIC STRESS REACTIONS
A National Center for PTSD Fact Sheet

Pamela Swales, Ph.D.

Importance of Active Coping

When veterans take direct action to cope with their stress reactions and trauma-related problems, they put themselves in a position of power and start to be less helpless.

- Active coping means recognizing and accepting the impact of trauma on your life, and taking direct coping action to improve things.
- It means actively coping even when there is no crisis; coping is an attitude of mind and a habit that must be strengthened.

Understanding the Recovery Process

Knowing how recovery happens puts you in more control of the recovery process.

- Recovery is an ongoing daily gradual process. It doesn't happen through being suddenly "cured."
- Some amount of continuing reactions is normal and reflects a normal body and mind. Healing doesn't mean forgetting traumatic war experiences or having no emotional pain when thinking about them.
- Healing may mean fewer symptoms and less disturbing symptoms, greater confidence in ability to cope with your memories and reactions, and improved ability to manage emotions.

Coping with Traumatic Stress Reactions: Ways that DON'T Help

- Using drugs and alcohol as ways to reduce anxiety or relax, stop thinking about war experiences, or go to sleep. Alcohol and drug use cause more problems than they cure.
- Keeping away from other people. Social isolation means loss of support, friendship, and closeness with others, and more time to worry or feel hopeless and alone.
- Dropping out of pleasurable or recreational activities. This leads to less opportunity to feel good and feel a sense of achievement.
- Using anger to control others. Anger helps keep other people away and may keep bad emotions away temporarily, but it also keeps away positive connections and help from loved ones.
- Trying to constantly avoid people, places, or thoughts that are reminders of the traumatic event. Avoidance of thinking about trauma or seeking treatment doesn't keep away distress, and it prevents progress on coping with stress reactions.
- Working all the time to try and avoid distressing memories of the trauma (the "workaholic").

Coping with Traumatic Stress Reactions: Ways that CAN Help

There are many ways you can cope with posttraumatic stress. Here are some things you can do if you have any of the following symptoms:

Unwanted distressing memories, images or thoughts

- Remind yourself that they are just that—memories.

- Remind yourself that it's natural to have some sorts of memories of the events(s).
- Talk to someone you trust about them.
- Remember that although reminders of trauma can feel overwhelming, they often lessen over time.

Sudden feelings of anxiety or panic

These are a common part of traumatic stress reactions, and include sensations of your heart pounding and feeling lightheaded or "spacey" (often due to rapid breathing). If this happens, remember that:

- These reactions are not dangerous. If you had them while exercising, they would not worry you.
- It is the addition of inaccurate frightening thoughts (e.g., I'm going to die, I'm having a heart attack, I will lose control) that makes them especially upsetting.
- Slowing down your breathing may help.
- The sensations will pass soon and you can still "go about your business" after they decrease.

Each time you think in these positive ways about your arousal/anxious reactions, you will be helping them to happen less frequently. Practice will make it easier to cope.

Feeling like the trauma is happening again ("Flashbacks")

- Keep your eyes open. Look around you and notice where you are.
- Talk to yourself. Remind yourself where you are, what year you're in, and that you are safe. Trauma happened in the past, and you are in the present.
- Get up and move around. Have a drink of water, and wash your hands.
- Call someone you trust and tell them what's been happening.
- Remind yourself that this is quite common traumatic stress reaction.
- Tell your counselor or doctor what happened to you.

Trauma-related dreams and nightmares

- If you awaken from a nightmare in a "panic," remind yourself that you are reacting to a dream and that's why you are anxious/aroused…and not because there is real danger now.
- Consider getting up out of bed, "regrouping," and orienting yourself.
- Engage in a pleasant, calming activity (e.g., listen to soothing music).
- Talk to someone if possible.
- Talk to your doctor about your nightmares; certain medications can be helpful.

Difficulty falling or staying asleep

- Keep to a regular bedtime schedule.
- Avoid strenuous exercise within a few hours of going to bed.
- Avoid using your sleeping area for anything other than sleeping or sexual intimacies.
- Avoid alcohol, tobacco, and caffeine. These harm your ability to sleep.
- Do not lie in bed thinking or worrying. Get up and enjoy something soothing or pleasant; reading a calming book, drink a glass of warm milk, do a quiet hobby.

Irritability, anger, and rage

- Take a "time out" to cool off or to think things over. Walk away from the situation.
- Get in the habit of using daily exercise as a friend. Exercise reduces body tension and helps get the "anger out" in a positive and productive way.

- Remember that anger doesn't work. It actually increases your stress and can cause health problems.
- Talk to your counselor or doctor about your anger. Take classes in "anger management."
- If you blow up at your family or friend, find time as soon as you are able to talk to them about it. Let them know how you feel, and what you are doing to cope with your reactions.

Difficulty concentrating

- Slow down. Give yourself time to "focus" on what it is you need to learn or do.
- Write things down. Making "to do" lists may be helpful.
- Break task down into small do-able "chunks."
- Plan a realistic number of events or tasks for each day.
- Perhaps you may be depressed; many who are do have trouble concentrating. Again, this is something you can discuss with your counselor, doctor, or someone close to you.

Having difficulty feeling or expressing positive emotions

- Remember that this is a common reaction to trauma, that you are not doing this on purpose, and that you should not feel guilty for something you do not want to happen and cannot control.
- Make sure to regularly participate in activities that you enjoy or used to enjoy. Sometimes, these activities can re-kindle feelings of pleasure.
- Take steps to communicate caring to loved-ones in little ways: write a card, leave a small gift, phone and say hello.

Final Word

Experiment with these ways of coping to find which ones are helpful to you. Practice them, because, like other skills, they work better with practice. Talk to your counselor or doctor about them. Reach out to people in VA, Vet Centers, your family, and your community that can help. You're not alone.

WARZONE-RELATED STRESS REACTIONS: WHAT FAMILIES NEED TO KNOW
A National Center for PTSD Fact Sheet

Julia M. Whealin, Ph.D.

Military personnel in war zones frequently have serious reactions to their traumatic war experiences. Sometimes the reactions continue after they return home. Ongoing reactions to war zone fear, horror, or helplessness connected with posttraumatic stress and can include:

Nightmares or difficulty sleeping
Unwanted distressing memories or thoughts
Anxiety and panic
Irritability and anger
Emotional numbing or loss of interest in activities or people
Problem alcohol or drug use to cope with stress reactions

How Traumatic Stress Reactions Can Affect Families

Stress reactions in a returning war veteran may interfere with the ability to trust and be emotionally close to others. As a result, families may feel emotionally cut off from the service member. The veteran may feel irritable and have difficulty with communication, making him/her hard to get along with. He or she may experience a loss of interest in family social activities. The veteran may lose interest in sex and feel distant from his or her spouse. Traumatized war veterans often feel that something terrible may happen "out of the blue" and can become preoccupied with trying to keep themselves and family members safe.

Just as war veterans are often afraid to address what happened to them, family members also may avoid talking about the trauma or related problems. They may avoid talking because they want to spare the veteran further pain, or because they are afraid of his or her reaction. Family members may feel hurt, alienated, or discouraged because the veteran has not overcome the effects of the trauma and may become angry or feel distant from the veteran.

The Important Role of Families in Recovery

The primary source of support for the returning soldier is likely to be his or her family. Families can help the veteran avoid withdrawal from others. Families can provide companionship and a sense of belonging, which can help counter feelings of separateness and difference from other people. They can provide practical and emotional support for coping with life stressors.

If the veteran agrees, it is important for family members to participate in treatment. It is also important to talk about how the post-trauma stress is affecting the family and what the family can do about it. Adult family members should also let their loved ones know that they are willing to listen if the service member would like to talk about war experiences. Family members should talk with treatment providers about how they can help in the recovery effort.

What Happens in Treatment for PTSD

Treatment for PTSD focuses upon helping the veteran reduce fear and anxiety, gain control over

traumatic stress reactions, make sense of traumatic experiences, and function better at work and in the family. A standard course of treatment may include:

- Assessment and development of an individual treatment plan.
- Education of veterans and their families about posttraumatic stress and its effects.
- Training in relaxation methods, to help reduce physical arousal/tension.
- Practical instruction in skills for coping with anger, stress, and ongoing problems.
- Discussion of feelings of anger or guilt, which are common among survivors of war trauma.
- Detailed discussion to help change distressing beliefs about self and others (e.g., self-blame).
- If appropriate, careful, repeated discussions of the trauma (exposure therapy) to help the service member reduce the fear associated with trauma memories.
- Medication to reduce anxiety, depression, or insomnia.
- Group support from other veterans, often felt to be the most valued treatment experience.

Mental health professionals in VA Medical Centers and community clinics and Readjustment Counseling Service Vet Centers have a long tradition of working with family members of veterans with PTSD. Educational classes for families and couples counseling may be available. Family members can encourage the veteran to seek education and counseling, but should not try to force their loved one to get help. Family members should consider getting help for themselves, whether or not their loved one is getting treatment.

Self-Care Suggestions for Families

- Become educated about PTSD.
- Take time to listen to all family members and show them that you care.
- Spend time with other people. Coping is easier with support from caring others, including extended family, friends, church, or other community groups.
- Join or develop a support group.
- Take care of yourself. Family members frequently devote themselves totally to those they care for, and in the process, neglect their own needs. Watch your diet, exercise, and get plenty of rest. Take time to do things that feel good to you.
- Try to maintain family routines, such as dinner together, church, or sports outings.

Additional Resources

For more information about PTSD and treatment, visit the National Center for PTSD website at www.ncptsd.org.

Matsakis, A. (1996). *Vietnam wives: Facing the challenges of life with veterans suffering posttraumatic stress*. Baltimore, MD: Sidran.

Mason, P. (1999). *Recovering from the war: A woman's guide to helping your Vietnam vet, your family, and yourself*. High Springs, FL: Patience Press.

AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY

FACTS FOR FAMILIES – No. 88

FAMILIES IN THE MILITARY

Global conflict and unrest have led to deployment of large numbers of military personnel (active duty, Reserves, National Guard). As a result of duty assignments, members of the military are often separated for lengthy periods of time from their families and sent to distant, dangerous or unknown locations. A family that loses the active presence of a parent through separation faces significant challenges and stress. During the parent's deployment, family members may feel isolated, unsupported and anxious. They may also experience financial stress. Media coverage of events can also increase concern.

Some families must also deal with the trauma of having a parent seriously injured or killed. Families who have little or no contact with extended family and/or the military community may be especially vulnerable to stress. In families with existing medical, emotional or behavioral problems, a parent being away can be especially difficult.

While most families and children manage successfully, it is important for parents to be aware of signs of stress and possibly serious problems. The responses of children to stress of separation are determined by their individual makeup and developmental age. The following are some common reactions:

- Infants (Birth - 12 months) may respond to disruptions in their schedule, physical environment or availability of caregivers with decreased appetite, weight loss, irritability and/or apathy.
- Toddlers (1-3 yrs.) may become sullen, tearful, throw temper tantrums or develop sleep problems.
- Preschoolers (3-6 yrs.) are more aware of the absence of a parent than younger children and their behavior may regress in areas such as toilet training, sleep, separation fears, physical complaints, or thumb sucking. They may personalize situations and express a fear that, "Daddy left because I was angry at him" or "Mommy stays away because she doesn't love me."
- School age children (6-12 yrs.) are more aware of the realities behind their parent leaving and the potential dangers. They may show irritable behavior, aggression or whininess. They also may become more regressed and fearful that their parent may be injured or die.
- Teenagers (13-18 yrs.) may be rebellious, irritable or more challenging of authority. Parents need to be alert to high-risk behaviors such as problems with the law, sexual acting out, and drug/alcohol abuse.

A parent leaving home on a military assignment increases the burden on all family members. The following suggestions can ease the stress:

- Talk as a family before the reassignment, sharing information, feelings, worries and plans for the future. Let your child know that the family member is making a valuable contribution to their country and the world.

- Emphasize the need for the family to pull together during the parent's absence with everyone sharing in family responsibilities.
- Continue family traditions, structure and discipline. This is reassuring and stabilizing to children.
- Utilize available means (e.g. letters, email, phone) for the family members to communicate with the deployed parent.
- Share information with children based upon their developmental level and ability to understand. No news is usually more stressful and difficult to deal with than bad news.
- Monitor children's exposure to TV coverage of war events and political discussions of the war.
- Encourage the open and honest expression of worries, feelings, and questions.
- Consider having children participate in a project associated with their parent's deployment (e.g. classroom letter writing project, keeping a journal or scrapbook).
- Don't make promises that you can't keep.
- Initiate and maintain a close relationship and communication with your child's teachers and school.
- Utilize extended family, community and spiritual resources and other natural supports that are available both within and outside the military.
- As a single parent at home, make sure that you also take care of yourself so that you can be available to your children.

Although a joyous occasion, when a family member returns home after a long absence, a period of adjustment will be necessary. Roles, responsibilities and routines must be re-established. The emotional readjustment will require time and patience. This can be a difficult time and all family members will need extra support. This is especially true if there has been a serious injury. If a parent or a child develops emotional or behavioral problems or is having serious difficulties with the adjustment, they should be referred for evaluation by a qualified mental health professional.

While it is a difficult time for families, most children can and do adjust successfully to the separation and stress involved when a parent in the military is deployed.

For additional information see Facts for Families: #4 The Depressed Child, #8 Children and Grief, #14 Children and Family Moves, #34 Children's Sleep Problems, #47 The Anxious Child, #66 Helping Teenagers with Stress, #54 Children and Watching TV, #67 Children and the News, and #87 Talking to Kids About War & Terrorism. **See also: *Your Child* (AACAP, 1998 Harper Collins) and *Your Adolescent* (AACAP, 1999 Harper Collins).**

# # # #

HOMECOMING AFTER DEPLOYMENT: DEALING WITH CHANGES AND EXPECTATIONS
A National Center for PTSD Fact Sheet

Ilona Pivar, Ph.D.

With deployment comes change. Knowing what to expect and how to deal with changes can make homecoming more enjoyable and less stressful. Below are some hints you might find helpful.

Expectations for Soldiers:

- You may miss the excitement of the deployment for a while.
- Some things may have changed while you were gone.
- Face to face communication may be hard at first.
- Sexual closeness may also be awkward at first.
- Children have grown and may be different in many ways.
- Roles may have changed to manage basic household chores.
- Spouses may have become more independent and learned new coping skills.
- Spouses may have new friends and support systems.
- You may have changed in your outlook and priorities in life.
- You may want to talk about what you saw and did. Others may seem not to want to listen. Or you may not want to talk about it when others keep asking.

Expectations for Spouses:

- Soldiers may have changed.
- Soldiers, used to the open spaces of the field, may feel closed in.
- Soldiers also may be overwhelmed by noise and confusion of home life.
- Soldiers may be on a different schedule of sleeping and eating (jet lag).
- Soldiers may wonder if they still fit into the family.
- Soldiers may want to take back all the responsibilities they had before they left.
- Soldiers may feel hurt when young children are slow to hug them.

What Children May Feel:

- Babies less than 1 year old may not know you and may cry when held.
- Toddlers (1-3 years) may hide from you and be slow to come to you.
- Preschoolers (3-5 years) may feel guilty over the separation and be scared.
- School age (6-12 years) may want a lot of your time and attention.
- Teenagers (13-18 years) may be moody and may appear not to care.
- Any age may feel guilty about not living up to your standards.
- Some may fear your return ("Wait until mommy/daddy gets home!").
- Some may feel torn by loyalties to the spouse who remained.

Source: US Department of the Army. Homecoming after Deployment: Tips for Reunion. US Army Medical Department Center and School, Combat Stress Actions Office, Fort Sam Houston, San Antonio Texas. Modification of materials prepared by 101st Airborne Division Mental Health Section for the Persian Gulf War (1991).

HOMECOMING AFTER DEPLOYMENT: TIPS FOR REUNION
A National Center for PTSD Fact Sheet

Pamela J. Swales, Ph.D.

Reunion is part of the deployment cycle and is filled with joy and stress. The following tips can help you have the best possible reunion.

Tips for Soldiers:

- Support good things your family has done.
- Take time to talk with your spouse and children.
- Make individual time for each child and your spouse.
- Go slowly when reestablishing your place in the family.
- Be prepared to make some adjustments.
- Romantic conversation can lead to more enjoyable sex.
- Make your savings last longer.
- Take time to listen and to talk with loved ones.
- Go easy on partying.

Tips for Spouses for Reunion:

- Avoid scheduling too many things.
- Go slowly in making adjustments.
- You and your soldier may need time for yourself.
- Remind soldier he or she is still needed in the family.
- Discuss splitting up family chores.
- Stick to your budget until you've had time to talk it through.
- Along with time for the family, make individual time to talk.
- Be patient with yourself and your partner.

Tips for Reunion with Children:

- Go slowly. Adapt to the rules and routines already in place.
- Let the child set the pace for getting to know you again.
- Learn from how your spouse managed the children.
- Be available to your child, both with time and with your emotions.
- Delay making changes in rules and routines for a few weeks.
- Expect that the family will not be the same as before you left; everyone has changed.
- Focus on successes with your children; limit your criticisms.
- Encourage children to tell you about what happened during the separation.
- Make individual time for each child and your spouse.

Source: US Department of the Army. Homecoming after Deployment: Tips for Reunion. US Army Medical Department Center and School, Combat Stress Actions Office, Fort Sam Houston, San Antonio Texas. Modification of materials prepared by 101st Airborne Division Mental Health Section for the Persian Gulf War (1991).