Psychiatry and the behavioral health sciences are a central part of military medicine. The United States military has long emphasized the principles of prevention and early intervention in preparing for and treating those suffering from the psychological wounds of war.

This article will briefly review the lessons learned by the military in the field of combat and other trauma, including the treatment of the wounded and POWs. Psychiatric readiness for deployment, including issues of dangerousness and medication use in the field, are discussed. The response to the attack on the Pentagon on September 11, 2001, and mitigation strategies for the psychological effects of weapons of mass destruction (WMD) are also discussed. Military mental health resources are outlined. Because this only is a brief overview, selected references to further explicate the issues are provided.

HISTORY OF COMBAT PSYCHIATRY

The management of psychiatric casualties in the military is based on the programs developed during World War II, which were a rediscovery of the forgotten work of British and American psychiatrists during World War I. Initially, soldiers with psychological symptoms in both conflicts were evacuated out of theater. They did not fare well. It was learned

EDUCATIONAL OBJECTIVES

1. Discuss the basic structure and function of psychiatry in the military.
2. Describe diagnoses that should keep an individual service member from deploying to a hostile environment.
3. Compare and contrast effective and noneffective strategies for health-risk communication when confronted by an emergency disaster.

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The opinions contained herein are those of the author and do not represent those of the US Army or the Department of Defense.

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that treating them close to the front lines led to a much higher return to duty rate. These basic principles, later codified as Proximity, Immediacy, Expectancy and Simplicity, directed simple, immediate treatment on the front lines, with the expectation of return to duty.4

Similarly, very high numbers of psychological casualties occurred among American troops during the initial months of the Korean War — 250 per 1,000 soldiers per year. Initially, these men were evacuated to Japan or the United States, and very few of them returned to duty. Following a reinstatement of the principles of early and far-forward treatment learned in the previous world wars, however, up to 80% of neuropsychiatric casualties were returned to duty.5

During the Vietnam conflict, combat stress casualties were relatively few, with about 11% of patients presenting for psychological symptoms. However, there was a high prevalence of alcohol and drug abuse, as well as highly publicized evidence of misbehavior, such as the killing of civilians and unit leaders.4 Longer-term consequences became apparent with the emergence of post-traumatic stress disorder (PTSD).

During 1991’s Operation Desert Storm in the Persian Gulf, immediate psychological casualties were also few and mainly related to home front difficulties. However, in the intervening years, many physical symptoms have emerged; known as Gulf War Syndrome or Gulf War Illness, these may be related to a combination of physical environmental toxins and psychological stressors.6

Casualties attributed to stress have been few both in combat and other deployments between 1991 and 2001. It is unknown what the more recent military events in the Persian Gulf area will produce. However, given the nature of the conflict (eg, the initial threat of chemical and biological warfare, suicide bombers, civilians killed, the targeting of American service members), it is highly likely that long-term psychological and physical symptoms will emerge.

The current focus is on preparing service members for the return home. This has been spurred by highly publicized tragedies such as the cluster of murder-suicides at Fort Bragg in the spring and summer of 2002. All service members should receive redeployment briefings to help them prepare for re-integration.

Recently, a standard health questionnaire has been implemented to interview every service member about a range of health and mental health concerns. There is emphasis on deployment cycle support to help service members and their families cope with the high operations tempo.

RESOURCES

The US military has numerous behavioral health units and psychiatric inpatient services that are fairly similar to those in the civilian world. There are very robust training programs for all the mental health disciplines. For example, in the Washington, DC, area alone, approximately 60 psychiatrists are in training with the Army, Navy, or Air Force. All of the standard psychiatric methods of evaluation and treatment are taught, with an additional focus on military psychiatry.

The military has also developed a wide array of mental health units to work specifically in combat, operations other than war, and terrorist events. In the Army, combat stress control teams deploy overseas, and stress response teams operate out of the major hospitals for events located within the United States.

The Navy’s Specialized Rapid Intervention (SPRINT) teams deploy to a ship after a traumatic event, such as the bombing of the USS Cole in Yemen in 2000. The Air Force maintains Critical Incident Stress Management (CISM) teams. The strategy of the Marines is similar to that of the Army, using Operational Stress and Combat Response units. Each division in the Army and Marine Corps, a fighting force of 16,000 to 18,000 service members, is assigned a Division Mental Health section. Each of these teams comprises a mixture of mental health disciplines, including psychiatrists, psychologists, social workers, psychiatric nurses, and occupational therapists.

BASIC TRAINING

Basic training has been used for years to transform young, inexperienced civilians into soldiers, sailors, airmen, and Marines. More advanced military training, such as that for Special Forces, further transforms service members into tough, independent warriors. This training focus-
es not only on individual strength and skill but also on the development of unit bonding and morale. It is well known that units with high morale and “esprit de corps” have a lower rate of psychological casualties. Conversely, misfits or loners have a higher rate of psychological casualties, including suicide.

COMMON DISORDERS
Most of the issues that present in the home station, in the garrison, or in the field are related to marital difficulties, occupational problems, or legal problems. The classic combat stress reaction is currently uncommon. Because the typical age group is 18 to 22, bipolar and schizophreniform disorders do occur. Major depression may also be a problem, especially in the older age groups.

All attempts are made to keep service members in theater. However, if they are psychotic, seriously suicidal, or homicidal, they must be evacuated out of theater to a tertiary care facility if 3 to 7 days of monitoring does not resolve the issue.

SUICIDE
The suicide rate for the military hovers at about 12 per 100,000. This is lower than the civilian rate but still is too high, considering that all service members are pre-screened, are fully employed, and have access to health care. The highest risk factors for suicide are romantic, occupational, and legal difficulties. There is a heavy emphasis on programs to reduce suicide, as well as domestic violence.

The military does its best to reduce stigma and promote the use of behavioral health services. However, as in many parts of the civilian world, service members are reluctant to use clinic services because of fears concerning career effects. In reality, discretion is the rule. However, if a service member is judged dangerous to himself or herself, or to others, the command may need to be informed and the service member may be hospitalized.

MEDICATION USE IN THE FIELD
Antidepressant and anti-anxiety medications are used judicially. Selective serotonin reuptake inhibitors (SSRIs) are usually available in troop medical clinics, but may or may not be on ship. Unfortunately, there is usually little capacity to obtain blood levels of lithium, carbamazepine, or valproate acid. If unobserved, blood levels of these substances can rise to a dangerous point in a hot environment. Therefore, these medications are contraindicated in the field. Active duty service members should not be deployed while taking these medications.

Antipsychotics are used when service members are psychotic and must be evacuated from the battlefront. These service members often subsequently are separated from the service. Occasionally, reservists come into theater while taking antipsychotics or antimanic agents and must be returned home.

DISCHARGE FROM THE SERVICE
Certain diagnoses do require medical discharge from the service, including schizophrenic disorders, bipolar disorder, and severe depression. Individuals with lesser diagnoses, such as adjustment disorders and dysthymia, usually can be retained within the service. A careful review procedure, called a medical board, ascertains whether a service member is fit for duty. If the service members is found unfit, the review process determines if compensation for a disability is warranted.

Service members may also be administratively discharged for a variety of psychiatric disorders judge to be existing prior to service, such as personality disorders.

THE WOUNDED
Too often, the psychological treatment of the wounded has been overlooked. The wounded are at a higher risk of developing PTSD than their non-wounded colleagues.

Often, after a wounded individual is initially brought to the hospital, there is great relief, almost euphoria, in both the individual and his or her family. Wounded individuals usually receive a lot of attention from command leadership, the media, and their families. They see others around them with more serious wounds, or remember colleagues who were killed in the same action.

However, depending on the level of pain and disability, this initial gratitude may give way to a number of negative psychological reactions as the extent of the disability is recognized. These reactions include survivor guilt, dismay over being separated from the unit, and depression. Being bed-ridden or immobilized is a major stressor for many previously young and healthy soldiers. To be forced to depend on their families again after most just obtained their independence can be galling.

The transition from hospital to home is a high-risk period. Wounded individuals may still have visitors, but the reality of having lost a limb, being blinded, or remaining in pain leads to depression and fears about the future. Depression may hinder physical rehabilitation programs. Thus, the rehabilitation of the wounded must focus on long-term physical and psychological care of the wounded, both within military treatment facilities and through the Veterans Health Administration.

PRISONERS OF WAR
Prisoners of war (POWs) and hostages are at high risk for the development of psychological symptoms, including shame, depression, PTSD, and other anxiety disorders. Factors that impact the
likelihood of developing symptoms include the circumstances and length of confinement. Circumstances for such situations include isolation, sensory deprivation, torture, other maltreatment, and connections with other POWs during capture. Many of these potential problems can be alleviated by a careful reintegration into society.

Understanding the phases of captivity is helpful in planning the response. There may be a real possibility of being killed by captors immediately after capture. POWs may face many relocations, long painful marches through freezing cold or deadly hot weather, and transfer among many captors. During World War II, in Korea, and in Vietnam, this initial turbulent phase was followed by a long period of relative sensory deprivation, often with years spent in the enemy POW camps. Malnutrition and chronic medical diseases usually accompanied this period. In more recent cases, malnutrition has been less of an issue.

During the reunion phase, emphasis is now given to the idea of “decompression.” This allows the returning POW or hostage to receive medical and psychological care before being subjected to the glare of media lights or the well-meaning but sometimes overwhelming ministrations of family, friends, and local politicians. The returning POW will usually deny significant psychological symptoms and will be eager to re-integrate with the unit. This should be encouraged, but attention must be paid to the longer-term needs of the POW.

THE SEPTEMBER 11TH ATTACK ON THE PENTAGON

Following the September 11, 2001, crash of American Airlines Flight 77 into the Pentagon, the immediate medical response was a mission to evacuate and treat the wounded. Within hours, however, it became apparent that the dead outnumbered the wounded considerably. The responses then turned to finding and identifying the remains of the deceased and to providing mental health support to survivors, rescue workers, family members of the victims, and other affected personnel.

A variety of therapeutic activities were employed. The term “debriefing” was used, but seldom was a formal Crit-

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or on coffee rounds. Meetings with the workplace often focused on “repairing the organizational fabric.”

All mental health disciplines were represented in this effort, including psychiatric nurses and occupational therapists. Chaplains provided spiritual and therapeutic services, both through individual and group work, and memorials and remembrances were conducted in the workplace. There is a long tradition of chaplains and mental health professionals working side-by-side in the military, so chaplains were well incorporated in the initial mental health response.

One Army team was concerned because many workers who had been displaced expressed a fear of going back into the Pentagon. They performed a group desensitization, in which they brought workers to view the crash site, then gradually reincorporated them back into the daily work routine there.

Consultants to the Army Surgeon General and other Army medical staff developed a long-range plan for the provision of care. Using data from the 1995 Oklahoma City bombing and other acts of terror and disasters, they sought to project the trend for mental health care over the weeks, months, and years after the attack. Resources were then deployed to meet those anticipated needs.

A long-term plan, termed Operation Solace, was developed. A mental health clinic was set up in the Pentagon to provide outreach and early intervention. Long-term negative outcomes have been relatively few, with little PTSD and no known suicides.

THE PSYCHOLOGICAL EFFECTS OF WEAPONS OF MASS DESTRUCTION

The US military has long focused on the medical aspects of WMD. The importance of the psychological effects of chemical, biological, and radiological or nuclear (CBRN) weapons has
increasingly been recognized in the post-September 11th, post-anthrax era. With the exception of nuclear weapons and high explosives, most WMD do not cause large-scale physical destruction. A better term is "weapons of mass disruption," as these weapons can cause mass medical casualties along with extreme psychosocial effects. WMD weapons are not particularly effective agents of war, but all are very potent agents of terror.¹³

Critical characteristics of CBRN exposures differ from conventional weapons. Many CBRN agents are invisible and odorless, leading to uncertainties regarding what kind of agent was used and the exposed amount. Only a small amount of a biological weapon may be needed, and it can be delivered via air, water, food supply, or by mail. In the case of biological agents, the potential for spreading the disease may lead people to fear socialization or worry about infecting their children.

Principles of intervention from the disaster psychiatry literature are relevant here, as are lessons learned from the severe acute respiratory syndrome (SARS) epidemic.¹⁹,²⁰ For example, knowledge and accurate information should reduce anxiety if communicated in a consistent and timely fashion. However, the potential for contamination and contagion argues for some different approaches of delivery. Classic “town hall” strategies of health-risk communication and group debriefings may be contraindicated. On the other hand, the Internet and telephone may be essential for sharing information and possibly for therapy. Prior training and exercises in the use of protective gear and evacuation may prevent panic.

**SUMMARY**

This article has touched upon many complicated issues of military psychiatry, highlighting those which have relevance to civilian providers. Civilian providers, especially those who treat reservists or veterans, need to know about the stresses their patients have encountered. As the wounded from recent conflict in Iraq become veterans and move into civilian society, practitioners should know about their challenges. Fortunately, the number of POWs from this conflict are few, but future conflicts and terrorist attacks offer further potential for hostage-taking, and the principles discussed above will still be relevant.

The US military has learned the importance of primary prevention approaches to forecast and mitigate psychological reactions to combat and terrorism. It is increasingly sophisticated in treatment of service members. Suicide and domestic violence prevention programs are an ongoing challenge.

**REFERENCES**