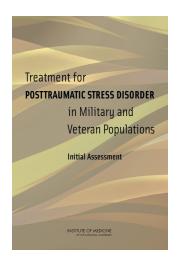
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Treatment for Posttraumatic Stress Disorder in Military and Veteran Populations

Initial Assessment



In response to the attacks of September 11, 2001, the United States entered into military conflicts in Iraq and Afghanistan. While prior wars and conflicts have been characterized by such injuries as infectious diseases and catastrophic gunshot wounds, the signature injuries suffered by U.S. military personnel involved in these conflicts are blast wounds and the psychiatric consequences of exposure to combat, particularly posttraumatic stress disorder (PTSD).

PTSD is triggered by a specific traumatic event, which can include combat. The cluster of symptoms that characterize it include persistent reexperiencing of the event; emotional numbing or avoidance of thoughts, feelings, conversations, or places associated with the trauma; and hyperarousal, such as exaggerated startle responses or difficulty concentrating. An estimated 13 to 20 percent of the 2.6 million U.S. service members who have fought in Iraq or Afghanistan since 2001 may have PTSD.

As the United States reduces its military involvement in the Middle East, the Departments of Defense (DoD) and Veterans Affairs (VA) anticipate that increasing numbers of returning veterans will need PTSD services. Congress, concerned by the number of service members and veterans at risk for, or already diagnosed with, PTSD asked the DoD, in consultation with the VA, to sponsor an Institute of Medicine (IOM) study to assess both departments' PTSD treatment programs and services. This report, *Treatment for Posttraumatic Stress Disorder in Military and Veteran Populations: Initial Assessment*, is the first of two mandated in the National Defense Authorization Act for Fiscal Year 2010.

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PTSD Risk, Resilience

Risk factors for military personnel developing PTSD include combat experience, being wounded, witnessing death, serving on graves registration duty or handling human remains, being captured or tortured, being exposed to unpredictable and uncontrollable stress, and experiencing sexual harassment or assault. Higher rates of PTSD and depression are associated with longer deployments, multiple deployments, and greater time away from base camp. Car and suicide bombs, improvised explosive devices, and rocket-propelled grenades—all elements of the recent Iraq and Afghanistan conflicts—can exacerbate the already severe stress of combat, according to the IOM committee's report.

However, good leadership, support of others in the unit, and training—which may bolster positive mental health and well-being during deployment—are protective factors that can reduce the risk of developing PTSD.

Both the DoD and the VA provide an array of prevention, screening, diagnosis, treatment, and rehabilitation options with the respective aims of maintaining force readiness and enabling veterans to function well in daily life. The DoD has a number of PTSD programs and services that can vary by service branch. These programs and services provide a range of PTSD management including outpatient care, inpatient care, complementary and alternative medicine therapies, and telemedicine. In 2010, the VA medical system treated 438,091 veterans who had PTSD through specialized treatment programs and in general mental health and medical settings, including primary care. (These veterans may have served in previous U.S. military missions, not only in Afghanistan or Iraq.)

Working collaboratively, the DoD and the VA in 2004 issued a joint guideline for managing PTSD and revised the guideline in 2010, but it is unknown whether their mental health providers adhere to it. The DoD and the VA have issued other joint guidelines for medical conditions that

military personnel can experience along with PTSD, such as traumatic brain injury, substance use disorders, depression, and chronic pain.

Analyze, Implement, Innovate, Overcome, and Integrate

To treat PTSD, the committee recommends the use of treatments and therapies supported by robust evidence, such as cognitive behavioral therapy. However, the committee's analysis of innovative treatments—including yoga, acupuncture, and animal-assisted therapy—was hampered by a lack of empirical evidence on their effectiveness.

PTSD screening should be done at least once a year, when DoD or its contract primary care providers see service members, as is currently done for veterans in the VA. The committee notes that many validated instruments can be used to screen service members and veterans for PTSD, but there is insufficient evidence to recommend one screening tool over another. Moreover, even a validated screening tool is not sufficient to actually diagnose PTSD. A diagnosis of PTSD requires a careful and comprehensive clinical evaluation performed by a qualified psychologist, social worker, psychiatrist, or psychiatric nurse practitioner.

Of the U.S. service members who deployed to Iraq and Afghanistan, only slightly more than half of those diagnosed with PTSD actually received treatment for it. The reasons for that treatment gap may include patients' concerns that the stigma of PTSD may jeopardize their careers and difficulties they may have getting to appointments with mental health providers, particularly in combat zones. Additional barriers to care include providers who lack the necessary training to treat PTSD and restrictions on PTSD medications that can be used by active-duty service members during deployment. One promising method of increasing access to PTSD care is telemental health, which delivers the expertise of trained therapists to service members in remote locations

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and to veterans who live in rural areas, allowing patients to better manage their mental health while reducing the time and expense of travel.

The DoD and the VA should build on their efforts in early identification of service members and veterans who have PTSD by providing timely access to the best evidence-based care, the committee recommends. To that end, the DoD and the VA also should support research that investigates emerging techniques and technology, including telemedicine, Internet-based approaches, and virtual reality, that may help to overcome barriers to awareness, accessibility, availability, and adherence to evidence-based treatments. Treatment for PTSD should be integrated into the treatment of other physical and mental health conditions affecting service members and veterans.

Already, the DoD and the VA have invested extensive resources on new research, programs, and services to combat PTSD, the committee finds. The DoD has spent millions of dollars on programs to build psychological resilience before, during, and after deployment, and for PTSD treatment services and programs. The VA more than doubled funding for PTSD research since 2005, targeting treatment and rehabilitation of veterans, and has added more than 7,500 full-time mental health staff and trained more than 6,600 VA and DoD mental health providers in evidence-based treatments.

The committee recommends that the DoD and the VA invest in targeted research to evaluate the implementation, delivery, and effectiveness of their PTSD prevention, screening, treatment, and

rehabilitation programs and services. To further this effort, assessment data should be collected before, during, and after patients are treated and should be entered into their medical records.

The DoD and the VA also should support research that leverages existing knowledge about the neurobiology of PTSD to improve screening, diagnosis, and treatment. More research is needed to shed light on the brain's own defense mechanisms to stress as well as neurobiologic mechanisms behind PTSD risks to identify factors that can influence the timing and severity of symptoms, and to identify biomarkers that could help with earlier diagnosis and more precise drug treatments.

The committee has requested information from the DoD and the VA on the numbers of service members and veterans who have PTSD, the treatments they are receiving, the outcomes of those treatments, the programs that are or are not being evaluated, and the costs of those programs. The committee hopes to capitalize on this new information to further assess these PTSD treatment programs and refine its findings and recommendations in its second report, expected in the summer of 2014.

Conclusion

Eleven years after the terrorist attacks on the United States, service men and women are returning from combat zones in Iraq and Afghanistan with traumatic injuries to both body and mind.



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challenge of healing these servicemen and women with invisible as well as visible wounds. How can their care be improved? Which innovative approaches could prevent PTSD before exposure to a traumatic event? Which treatments could best improve management of PTSD for service members, veterans, and their families in the short- and long-term? Answering these key questions will be critical to improving care for our nation's wounded warriors.

DoD and VA leaders are faced with the daunting

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