

**FOR RELEASE**

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**One In Five Iraq and Afghanistan Veterans Suffer from PTSD or Major Depression**

**Nearly 20 percent of military service members who have returned from Iraq and Afghanistan — 300,000 in all — report symptoms of post traumatic stress disorder or major depression, yet only slightly more than half have sought treatment, according to a new RAND Corporation study.**

**In addition, researchers found about 19 percent of returning service members report that they experienced a possible traumatic brain injury while deployed, with 7 percent reporting both a probable brain injury and current PTSD or major depression.**

Many service members said they do not seek treatment for psychological illnesses because they fear it will harm their careers. But even among those who do seek help for PTSD or major depression, only about half receive treatment that researchers consider "minimally adequate" for their illnesses.

In the first analysis of its kind, researchers estimate that PTSD and depression among returning service members will cost the nation as much as \$6.2 billion in the two years following deployment — an amount that includes both direct medical care and costs for lost productivity and suicide. Investing in more high-quality treatment could save close to \$2 billion within two years by substantially reducing those indirect costs, the 500-page study concludes.

"There is a major health crisis facing those men and women who have served our nation in Iraq and Afghanistan," said [Terri Tanielian](#), the project's co-leader and a researcher at RAND, a nonprofit research organization. "Unless they receive appropriate and effective care for these mental health conditions, there will be long-term consequences for them and for the nation. Unfortunately, we found there are many barriers preventing them from getting the high-quality treatment they need."

The findings are from the first large-scale, nongovernmental assessment of the psychological and cognitive needs of military service members who have served in Iraq and Afghanistan over the past six years. The RAND study is the first to comprehensively assess the current needs of returned service members from all branches of the military.

Researchers concluded that a major national effort is needed to expand and improve the capacity of the mental health system to provide effective care to service members and veterans. The effort must include the military, veteran and civilian health care systems, and should focus on training more providers to use high-quality, evidence-based treatment methods and encouraging service members and veterans to seek needed care.

Since October 2001, about 1.6 million U.S. troops have deployed to the wars in Iraq and Afghanistan, with many exposed to prolonged periods of combat-related stress or traumatic events. Early evidence suggests that the psychological toll of the deployments may be disproportionately high compared with physical injuries.

Tanielian and project co-leader [Lisa Jaycox](#) headed a group of 25 RAND researchers who conducted a three-pronged assessment of the needs of returning service members: a national survey of those who had served in Iraq and Afghanistan to assess their psychological and cognitive injuries; economic modeling to estimate the cost not only of providing needed treatment, as well as the costs associated with lost productivity and suicide; and an assessment of treatment services that are available to service members, as well as barriers to treatment.

Researchers surveyed 1,965 service members from 24 communities across the country to assess their exposure to traumatic events and possible brain injury while deployed, evaluate current symptoms of psychological illness, and gauge whether they have received care for combat-related problems.

Service members reported exposure to a wide range of traumatic events while deployed, with half saying they had a friend who was seriously wounded or killed, 45 percent reporting they saw dead or seriously injured non-combatants, and over 10 percent saying they were injured themselves and required hospitalization.

**Rates of PTSD and major depression were highest among Army soldiers and Marines, and among service members who were no longer on active duty (people in the reserves and those who had been discharged or retired from the military).** Women, Hispanics and enlisted personnel all were more likely to report symptoms of PTSD and major depressions, but the single best predictor of PTSD and depression was exposure to combat trauma while deployed.

**Researchers found many treatment gaps exist for those with PTSD and depression. Just 53 percent of service members with PTSD or depression sought help from a provider over the past year, and of those who sought care, roughly half got minimally adequate treatment.**

**"If PTSD and depression go untreated or are under treated, there is a cascading set of consequences," Jaycox said. "Drug use, suicide, marital problems and unemployment are some of the consequences. There will be a bigger societal impact if these service members go untreated. The consequences are not good for the individuals or society in general."**

Service members report many reasons for not seeking treatment. Many are worried about the side effects of medication or believe that family and friends can provide more help than a mental health professional. Even more reported that they worried seeking care might damage their career or cause their peers to lose confidence in their abilities.

The RAND report recommends the military create a system that would allow service members to receive mental health services confidentially in order to ease concerns about negative career repercussions.

"We need to remove the institutional cultural barriers that discourage soldiers from seeking care," Tanielian said. "Just because someone is getting mental health care does not mean that they are not able to do their job. Seeking mental health treatment should be seen as a sign of strength and interest in getting better, not a weakness. People need to get help as early as possible, not only once their symptoms become severe and disabling."

Researchers also found an urgent need to train more mental health providers throughout the U.S. health care system on delivering evidence-based treatments to service members and veterans. While many opportunities for treatment exist for active-duty personnel, there is no system in place to monitor the quality of those services to ensure they are getting the latest science-based forms of treatment.

The Department of Defense's newly created Defense Center for Excellence for Psychological Health and Traumatic Brain Injury may provide a historic opportunity to change the culture of psychological health within the military and to promote and monitor the use of high-quality care to service members. The RAND report provides information that the center could use to pursue these objectives through the use of innovative care models and performance measurement techniques.

Researchers suggest special training programs are needed to instruct mental health providers in the military, veterans and civilian health systems about the type of evidence-based treatments needed by service members. Only providers with such training should be eligible to treat service members and payment programs should be retooled to reward providers who use science-based treatments.

"It's going to take system-level changes — not a series of small band-aids — to improve treatments for these illnesses," Tanielian said.

The RAND study estimates the societal costs of PTSD and major depression for two years after deployment range from about \$6,000 to more than \$25,000 per case. Depending whether the economic cost of suicide is included, the RAND study estimates the total society costs of the conditions for two years range from \$4 billion to \$6.2 billion.

The RAND study also estimates that about 320,000 service members may have experienced a traumatic brain injury during deployment — the term used to describe a range of injuries from mild concussions to severe penetrating head wounds. Just 43 percent reported ever being evaluated by a physician for that injury.

While most civilian traumatic brain injuries are mild and do not lead to long-term impairments, the extent of impairments that service members experience and whether they require treatment is largely unknown, researchers said. In the absence of a medical examination and prognosis, however, service members may believe that their post-deployment difficulties are due to head injuries even when they are not.

One-year estimates of the societal cost associated with treated cases of mild traumatic brain injury range up to \$32,000 per case, while estimates for treated moderate to severe cases range from \$268,000 to more than \$408,000. Estimates of the total one-year societal cost of the roughly 2,700 cases of traumatic brain injury identified to date range from \$591 million to \$910 million.

The report is titled "[Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery](#)." The full report and several summaries are available at <http://veterans.rand.org/>.

The project, jointly conducted by [RAND Health](#) and the [RAND National Security Research Division](#), was sponsored by a grant from the California Community Foundation.

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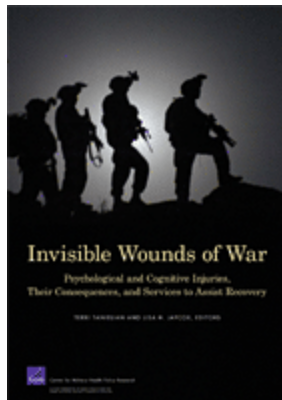
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## Invisible Wounds of War

### Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery



Edited by Terri Tanielian and Lisa H. Jaycox

Since October 2001, approximately 1.64 million U.S. troops have been deployed for Operations Enduring Freedom and Iraqi Freedom (OEF/OIF) in Afghanistan and Iraq. Early evidence suggests that the psychological toll of these deployments — many involving prolonged exposure to combat-related stress over multiple rotations — may be disproportionately high compared with the physical injuries of combat. In the face of mounting public concern over post-deployment health care issues confronting OEF/OIF veterans, several task forces, independent review groups, and a Presidential Commission have been convened to examine the care of the war wounded and make recommendations. Concerns have been most recently centered on two combat-related injuries in particular: post-traumatic stress disorder and traumatic brain injury. With the increasing incidence of suicide and suicide attempts among returning veterans, concern about depression is also on the rise.

The study discussed in this monograph focuses on post-traumatic stress disorder, major depression, and traumatic brain injury, not only because of current high-level policy interest but also because, unlike the physical wounds of war, these conditions are often invisible to the eye, remaining invisible to other service members, family members, and society in general. All three conditions affect mood, thoughts, and behavior; yet these wounds often go unrecognized and unacknowledged. The effect of traumatic brain injury is still poorly understood, leaving a large gap in knowledge related to how extensive the problem is or how to address it.

RAND conducted a comprehensive study of the post-deployment health-related needs associated with these three conditions among OEF/OIF veterans, the health care system in place to meet those needs, gaps in the care system, and the costs associated with these conditions and with providing quality health care to all those in need. This monograph presents the results of our study, which should be of interest to mental health treatment providers; health policymakers, particularly those charged with caring for our nation's veterans; and U.S. service men and women, their families, and the concerned public. All the research products from this study are available at <http://veterans.rand.org>.

Data collection for this study began in April 2007 and concluded in January 2008. Specific activities included a critical review of the extant literature on the prevalence of post-traumatic stress disorder, major depression, and traumatic brain injury and their short- and long-term consequences; a population-based survey of service members and veterans who served in Afghanistan or Iraq to assess health status and symptoms, as well as utilization of and barriers to care; a review of existing programs to treat service members and veterans with the three conditions; focus groups with military service members and their spouses; and the development of a micro simulation model to forecast the economic costs of these conditions over time.

Among our recommendations is that effective treatments documented in the scientific literature — *evidence-based care* — are available for PTSD and major depression. Delivery of such care to all veterans with PTSD or major depression would pay for itself within two years, or even save money, by improving productivity and reducing medical and mortality costs. Such care may also be a cost-effective way to retain a ready and healthy military force for the future. However, to ensure that this care is delivered requires system-level changes across the Department of Defense, the Department of Veterans Affairs, and the U.S. health care system.

