

Suicide and the United States Army:
Perspectives from the Former Psychiatry Consultant to the Army Surgeon General
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Photograph by Chester Simpson

Editor's note: The suicide rate of active-duty soldiers doubled between 2003 and 2010. In response, the Department of Defense and the United States Army improved their data collection methods to better understand the causes of military suicides. As retired colonel Dr. Elspeth Cameron Ritchie writes, unit history and the accumulation of stressors—from relationship problems to chronic pain—are significant suicide risk factors among soldiers. But, she argues, Army officials must use this knowledge to design more-effective strategies for suicide reduction, including limiting access to weapons, especially post-deployment, and better connecting soldiers with their communities.

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Headlines in late 2011 lauded the end of combat operations in Iraq, celebrating the thousands of troops who are finally able to return home from the “sandbox.” But tens of thousands remain in Afghanistan, and will be there for an undetermined length of time. While homecoming for some soldiers, sailors, marines, and airmen may be imminent, reintegration into family and civilian life after deployment is filled with challenges. Hundreds of thousands of troops have so-called “invisible wounds of war,” post-traumatic stress disorder and mild traumatic brain injury. And the suicide rate has climbed steadily since the war in Iraq began.

The rate of suicide in the United States Army active-duty force remained relatively stable from 1990 to 2003, hovering at about 10 per 100,000 per year. This is approximately half the civilian rate. But in 2004 it began to rise, and from 2003 to 2010 the suicide rate for this group doubled, to about 21 per 100,000. Then the rate finally began to level off among active-duty soldiers, but it continued to rise among National Guard soldiers, although it remained relatively stable for those in the Navy and Air Force.¹ The rate of suicide remains twice as high as it was before the wars in Iraq and Afghanistan, so high that some have described the current situation as an epidemic.² The increased rate commanded the attention of the highest military officers from all the branches of the service and the Department of Defense (DoD), and for the last five years or so, several ongoing, high-profile efforts have been made to better understand what may underlie these alarming statistics, and to determine how to prevent further suicides.

In the last three years, the Department of the Army and the Department of Defense each created task forces charged with the singular mission of better understanding the precipitants of military suicide—especially those that may be unique to this particular population. The task forces have looked at multiple issues, including mental health and medical care, screening, and personnel selection. The two reports published by the task forces contain several hundred recommendations, including better military-wide education about the realities of suicide, standardized treatment protocols for at-risk soldiers, and expanded primary health screenings that will include behavioral health assessments.^{3,4} In addition, the Army and the National Institute of Mental Health (NIMH) are cosponsoring an ongoing \$50 million study known as the Army Study to Assess Risk and Resilience in Servicemembers, or STARRS. The ultimate goal of this study is to develop data-driven methods for mitigating or preventing suicidal behaviors and improving the overall mental health and behavioral functioning of soldiers during and after their

Army service.⁵ But even as the military moves vigorously to implement key recommendations, including better education and training in the armed forces from the leadership down, the suicide rate remains stubbornly high.

Sources of Data

The Army has assembled some very good data on completed suicides from the last 10 years,⁶ partially in result of a change in its data-collection practices. The use of the routine “psychological autopsy” ended in 2001.⁷ The psychological autopsy was a long narrative seeking to describe the motivation for suicide in the deceased. Now formal psychological autopsies are mandated only when the cause of the death is undetermined.

The Army Suicide Event Report, or ASER, replaced the psychological autopsy. Implementation of the ASER, which began in 2003, gradually grew more robust, collecting data not only about the manner of death but also about events and factors thought to be involved with the suicide. ASERs have been performed for all active-duty soldiers who died by suicide since about 2004. The ASER is a Web-based quantifiable instrument, with data fields including demographic and clinical information, as well as information about the cause and manner of death. Thus it is easy to sort the information in numerous ways. Data on all known active-duty Army suicides are entered into an automated system and published as a composite report.¹ The ASER later expanded its scope to include suicides from all the services, and was re-named the DoD Suicide Event Report, or DODSER, implemented in 2005.⁶ Similar to the former composite ASER Report, data on all known active-duty suicides from all the services are entered into an automated system and published as a composite report.⁸

Researchers from the Army’s Public Health Command published in 2011 the composite Army data from 2003 to 2009,⁶ and this article draws heavily upon those data. (The other services are not currently publishing their own individual composite reports.)

In addition, over the last 10 years, a number of epidemiological consultation teams (EPICONS) have conducted reviews at Army bases that have experienced high suicide or homicide rates. And staff assistance visits and other investigations have contributed to the search for information as to the causes of suicide. Mental Health Advisory Teams (MHATs), led by Army researchers from the Walter Reed Army Institute of Research (WRAIR), have

administered surveys in Iraq and Afghanistan roughly once a year. These anonymous surveys ask about depression and PTSD symptoms, as well as barriers to care. Several of them, especially the fifth one, MHAT V, looked very closely at suicides in the theater of war. I was part of a suicide assistance visit to Iraq in 2007, when the suicide rate there was peaking.

An important caveat is that less is known about suicides in the reserve components of the services. Only in the last few years has the Army been able to collect good data on Army reserve suicides, and they have not been systematically studied in the same way as active-duty data. ASER reports are not routinely done for reserve soldiers. Most researchers believe that suicide is underreported in the reserves.

Risk Factors for Suicide

For at least the last 20 years, the highest risk factors for committing suicide in the military were being young, white, and male. Of course, given that the vast majority of service members are young and male, those data points were not particularly surprising. There have been relatively few completed suicides among women (usually two to three a year, although one year the number peaked at nine). Being Caucasian, rather than black or Hispanic, is also a risk factor.

Both old and new research has highlighted clear precipitants in the majority of military suicides, especially relationship breakups and getting in trouble at work. For years, about two-thirds of suicides appeared to be triggered by a breakup, and another third involved a humiliating event at work, threatening the job. In many cases, both factors are in play, so the percentages are not mutually exclusive. Typically a humiliating event appears to trigger the self-destructive behavior. That event might include relationship difficulties with parents or members of the unit, not just with romantic partners. A recently published article, which I coauthored, documents the data from known suicides in the Army from 2003 to 2009,⁶ which support the idea that military suicides are often relatively impulsive, again related to a psychosocial imminent stressor or stressors. The article also highlights the stress load, as defined by the accumulation of multiple stressors, including relationship breakups, job difficulties, and physical problems that many soldiers experience during their active-duty careers.

This stress load may not be directly related to frequency or length of deployments. While many expected the data to show that frequent deployments could be linked to suicide risk, the

data did not support that theory, as 79 percent of the suicides recorded by the Army in fiscal year 2009 were soldiers who had completed only a single deployment or had not deployed at all.³

One emerging factor that requires further study is the contribution of chronic pain and physical disability. Chronic pain and physical limitations seem to be the precipitants for suicide among a number of older soldiers and those of higher rank. Good quantifiable data on pain as a contributing factor are lacking, as information about pain is not always coded well in the ASERs. Perhaps counterintuitively, suicides among those who have major injuries are rare; more often a minor injury or backache contributes to depressive symptoms, a belief that one cannot “be the Soldier I used to be,” and irritability. Although depressive symptoms may be present in these cases, they may not meet the criteria for a formal diagnosis of depression.

The vast majority of service members who commit suicide do not have a documented or ascertainable major mental illness. This conclusion is based on the individual ASER report prepared for each soldier, which examines existing medical and mental health data, as well as the cumulative published ASER and DODSER reports.⁸ This conclusion is clearly not the case in the general population, where suicide is linked to major psychiatric disorders, especially depression and bipolar disorder. Substance abuse disorders do accompany suicides in both populations. While it is possible that service members have simply not yet been diagnosed with a disorder (due to their youth or to the stigma involved with mental illness in the military), the data suggest that military suicides are more impulsive rather than linked to psychiatric disease. However, it is certainly possible that PTSD or undiagnosed depression contributes to the suicidal impulses.

Although much public attention has been paid to the use of antidepressants in deployed soldiers, in actuality there is not an overly high rate of antidepressant use. It is very hard to say exactly what the rate is, although easy to say how many prescriptions have been ordered and distributed within the DoD formulary. Estimates developed over the years from pharmacy reports and MHAT surveys show that doctors prescribe antidepressant medication to between three to six percent of deployed soldiers.⁹ (In comparison, about 11 percent of U.S. civilians take antidepressants.¹⁰) Antidepressants are also prescribed for PTSD and pain, so antidepressant use is not always an accurate marker for actual depressive episodes. There is certainly speculation that antidepressant use contributes to suicidal behavior, but no relationship between

antidepressant use and suicides in soldiers has been confirmed. Both civilians and soldiers who are prescribed antidepressants are at higher risk for suicide because of the underlying reason for antidepressant use; whether the antidepressant is a contributing factor in increasing or lowering the suicide rate is a matter of considerable debate. The STARRs research will further explore this area.

The Effects of Combat

There are other factors, of course, related to the wars in Afghanistan and Iraq. Soldiers get used to violence and become desensitized. They do not know if or when they will be blown up. As described in the Mental Health Advisory Reports (MHARs), which have documented combat exposure since 2003,⁹ soldiers have seen many dead bodies and have known many comrades who were killed or wounded. As revealed by numerous personal accounts, soldiers feel estranged from families and friends back home. A sense of fatalism often develops, which sometimes translates to playing Russian roulette, driving too fast, or sitting in the garage cleaning the gun.

An excellent article published last year, “Reframing Suicide in the Military,” represents one of the few discussions of the relationship between society and suicide.¹¹ It refers to the work of French sociologist Emile Durkheim and Florida State University professor Thomas Joiner. In his classic study of suicides in France, Durkheim describes “fatalistic suicides.”¹² Many soldiers, being frequently exposed to death and destruction, develop a sense of fatalism. Joiner emphasizes three factors as contributing to suicidal potential: failed belongingness, perceived burdensomeness, and habituation to self-injury.¹³ An examination of Army suicides reveals that these three factors are pervasive. They may be evident in a soldier’s not fitting into the unit, not being able to perform as a soldier, facing discharge from the Army, having seen many comrades or civilians die, and experiencing pain or disability from injuries.

When Do Soldiers Commit Suicide?

We have been at war for 10 years, with numerous deployments for many soldiers and units. But a surprising statistic has remained relatively constant over the last 7 years: about one-third of the soldiers who commit suicide have never deployed. Another third commit suicide

during deployment, and one-third do so afterward. Drawing my conclusions from ASER data and many other sources, I will argue that it is the unit's deployment history, rather than the individual's deployment history, that contributes the most to suicide risk.

While in the Army, I was involved in numerous investigations of completed suicides and suicide attempts. These included formal epidemiological consultation teams (EPICONS) and less-formal staff assistance visits. The installations with the highest suicide rates are often those with the highest deployment op-tempo (operations tempo). High op-tempo refers to rapid movement both in and out of the theater of war and back and forth to training. Units based at installations like Fort Campbell, Fort Carson, Fort Stewart, Fort Hood, and Fort Riley have frequently deployed to Iraq and Afghanistan, some as often as every other year, since 2003. Even when these units are supposedly "home," the soldiers may still be working long, intense hours, preparing and training for the next deployment. I have been part of teams investigating all of these bases with escalating suicide rates. Over and over commanders told me, "This high op-tempo means I do not know my soldiers. There used to be all sorts of ways to incorporate a soldier into a unit—picnics, runs, and barbecues. Now we are all too busy preparing for the next deployment."

Another factor common to all these installations is that they are in states with relatively permissive gun laws, the consequences of which will be further discussed below. Unfortunately, though, knowing risk factors does not solve the problem. The challenge is to translate what we know into effective suicide prevention.

Mitigating Strategies

Extensive and robust efforts have been made to counteract the rising suicide rate. I will focus here on some of the major ideas.

Numerous training programs have been developed, many of which I helped to build when I was on active duty in the Army Surgeon General's office. These programs generally focus on buddy aid, training the individual soldier to recognize signs and symptoms of potential suicide in their fellow soldiers, and doing what it takes to get the suicidal soldier to mental health treatment. Buddy aid programs are implemented at both pre- and post-deployment briefings, as well as during company-level safety briefings and annual suicide briefings.

In addition, instruments such as the Post-Deployment Health Assessment, the Post-Deployment Health Reassessment, and the Periodic Health Assessment screen for depression and post-traumatic stress disorder (PTSD). Primary care physicians now ask returning soldiers questions about risky behavior, drug and alcohol use, and potential home problems, as well as look for physical signs of behavioral problems. They then review the screens and refer at-risk service members to mental health providers. In 2009, the Army implemented the Comprehensive Soldier Fitness program. This is a resiliency program modeled after other similar programs, such as the Army's Battlemind, and on "positive psychology."¹⁴ It is not a suicide prevention program per se. It is too early to tell whether it will decrease PTSD or suicide.

It is clear that the strategies of training, screening, and getting to a mental health provider do not necessarily eliminate suicide. If they did, the suicide rate would have flattened several years ago. A toxic event that leaves a soldier estranged from his unit—a "Dear John" letter, a driving-under-the-influence (DUI) arrest, hazing from fellow soldiers, or a poor review at work—may take place after a screen has been administered. In addition, many soldiers are reluctant to admit to problems, for fear that they will be sent to the shrink or "wizard" ("wizard" is a derogatory term used mainly in the Marine Corps), and their careers will be over. Other strategies, like means restriction, must be put into place.

Means Restriction

Means restriction refers to the implementation of barriers to easy access to lethal means of suicide. The barriers most commonly cited as actually reducing suicides are fences on bridges, blister packs for medications, change from coal gas to natural gas (which has less carbon monoxide) in ovens in the United Kingdom, and fewer firearms in the home.¹⁵ These methods are used in various parts of the civilian world, but they have not been tried in the military.

In a seminal article, "Guns and Suicide Risk," Matthew Miller and David Hemenway of Harvard University state that the empirical evidence linking suicide risk in the United States to the presence of firearms in the home is compelling.¹⁶ They point to U.S. case-control studies that find that the presence of a gun in the home and the way in which the firearm is stored are associated with a greatly increased risk of suicide, typically 2 to 10 times higher than that in homes without guns, depending on the age of the sample population (adolescents or older

adults). Case-control studies have also found that the higher risk of completed suicide in homes with firearms applies not only to the gun owner but also to the gun owner's spouse and children.¹⁶

After reviewing hundreds of suicide cases, I am convinced that the easy availability of weapons is a major part of the problem. According to the Army's database, about 70 percent of Army suicides are committed with a firearm.⁶ In the theater of war, guns are normally the government-issued weapon. Stateside, a gun is usually the privately owned weapon. The gun in the nightstand is too easy to pull out and use when a person is angry or humiliated or fighting with a spouse. Yet discussion of access to weapons is the third rail in the military—it is not often brought up in formal mitigation strategies. The Army Task Force did not address access to weapons at all. The DoD Task Force does mention means restriction.

The military offers no public safety campaigns about the problems of easy access to weapons in the context of volatile relationships or other reintegration problems. In contrast, returning soldiers have access to numerous classes and billboards on motorcycle safety and on not driving under the influence. To the best of my knowledge, no classes or billboards on responsible gun ownership, including discussion of trigger locks and gun safes, are offered.

A Course of Action

In order to address the epidemic of suicides in the military, we need to take a public health, or population-based, approach. All soldiers—and other service members—are at risk. Soldiers are a proud lot. If they are humiliated, publicly or privately, and if a weapon is available, they may use it on themselves. They rarely use it on others, though tragic events like the shootings in 2009 at Camp Liberty and Fort Hood, and periodic homicide-suicides, usually in domestic violence incidents, do sometimes occur.

What is the solution? There are no simple answers here. Suicide is a very complex problem, as DoD leadership has increasingly realized. Numerous strategies are already in place—training, screening, improved access to behavioral health care—but we need to focus more on identifying and putting in place ways of getting help that will be more acceptable to at-risk soldiers. Soldiers and other service members intensely dislike sitting in the public waiting room of a behavioral health clinic or substance abuse clinic in order to see a clinician, and they

fear that opening up to such mental health professionals will get them kicked out of the service. I have heard this from soldiers for years, and the MHATs continue to document their fears.⁹

Complementary and alternative, or integrative, medicine offers some solutions. Acupuncture can be helpful for pain.¹⁷ It is increasingly used in the military, including in Afghanistan. One of my Navy colleagues traveled throughout Southwest Asia with his acupuncture therapies. As he said, “They come for the needles to get pain relief, but stay for the therapy.”

Animal-assisted therapy is another way to provide nurturance and a sense of purpose. Therapy dogs are now with several of the Combat Stress Control teams in Afghanistan. Soldiers will stop by to pat the dog. Wounded soldiers find that the presence of their service animal decreases their PTSD symptoms and their feelings of anger and fear. Veterans who would not leave the house will bond with their dogs, walk them, and regain structure in their lives. There are numerous organizations that supply dogs to veterans as service dogs, therapy dogs, or rescue animals. Several of them offer a chance for veterans to train dogs for other veterans, a win-win situation.

What Can Mental Health Providers and the Community Do?

As mental health providers in the community, we need to ask patients whether they have served in the armed forces, whether they have had a traumatic brain injury, whether they are in pain, whether they have depressive symptoms such as sleep disturbances, and whether we can offer an alternative to the gun in the nightstand. TBI contributes to impulsivity. Chronic pain may lead to despair. Clinicians who know about the sleep disturbance, irritability, TBI, or pain can treat it. Fortunately, newer antidepressant medications help with both depressive symptoms and PTSD, and a number of evidence-based psychotherapies are applicable to both depression and PTSD.¹⁸

Another emerging practice is the use of retreats to reintegrate veterans and family members. The Coming Home Project is an example of an organization that has offered retreats with great success. Founder and president Joseph Bobrow described it in an e-mail as “An integrated in-person and online/virtual community-building, support, educational, and clinical

reintegration program targeting the unseen injuries from wars in Iraq and Afghanistan.” The Defense Centers of Excellence recognized the project as a best practice for reintegration in 2011.

In our communities—whether statewide or local—we need to do more to understand where the resources are and where the gaps are. The Substance Abuse and Mental Health Services Administration (SAMHSA) over the last few years has sponsored policy academies to help states develop strategic action plans. Areas of focus include not just mental health access, but also economic security, educational advancement, homelessness, and criminal justice.

The next steps in reducing suicide for the vast majority of soldiers need to move beyond education and screening. We need to talk more about getting soldiers through the times when they are lost and humiliated and in pain. We need to offer meaningful jobs for veterans and focus on reconnecting soldiers with their communities.

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