

# Preventing Suicides in US Service Members and Veterans

## Concerns After a Decade of War

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**B**EFORE THE WARS IN IRAQ AND AFGHANISTAN, THE INCIDENCE of suicide in active duty US service members was consistently 25% lower than that in civilians, attributable to “healthy-worker” effects from career selection factors and universal access to health care.<sup>1</sup> Between 2005 and 2009, the incidence of suicide in Army and Marine personnel nearly doubled. From 2009 through the first half of 2012, the incidence of suicide among Army soldiers remained elevated (22 per 100 000 per year), with the number dying of suicide each year exceeding the number killed in action. High rates of suicide have also been reported for US veterans, although incidence studies in veteran populations have drawn conflicting conclusions.<sup>2</sup>

The pressing question is why suicides increased so markedly in soldiers and Marines, but not in Navy or Air Force personnel (or in civilians). An obvious answer would be repeated ground combat tours. However, to date no study has definitively confirmed an independent association with deployment variables. This may be due to confounding factors such as higher service attrition for personnel with deployment-related mental health problems (contributing to healthy-worker effects).<sup>3</sup> The optimal way to study military-specific risk factors is to follow individuals longitudinally beyond the time of their service, an endeavor few research groups are able to undertake.

Although longitudinal studies may eventually establish deployment associations, current evidence suggests that such associations are likely to be weak and not independent of well-established risk factors, especially underlying mental health problems. A logical explanation for the high suicide rates in soldiers and Marines is the cumulative strain from the protracted war effort, across both deployed and garrison environments, causing higher population prevalences of mental disorders.<sup>4</sup> If this explanation is accurate, the most effective medical intervention strategies are those that facilitate access to effective treatment.

Determining the value of intervention strategies requires reliable effectiveness measures. However, military and

veteran suicide research is hampered by problems with determination of “veteran” status on surveillance records; misclassifications of the manner of death; lack of integration of data from the US Department of Defense (DOD), Department of Veterans Affairs (VA), and National Death Index; and wide rate variability in population subgroups.<sup>1,2,5</sup>

Pressures exist to rapidly implement multicomponent prevention programs. However, apparent program successes based on observational evidence (eg, Air Force effort in the 1990s) cannot be replicated without knowing which components contributed to effectiveness. As the war effort in Afghanistan draws down, caution is advised in attributing future reductions in suicide rates to specific programs. Attention must stay focused on the most promising suicide intervention strategies within the broad categories of screening, education, and treatment, considering also potential iatrogenic effects.

### Screening and Risk Assessment

Screening is often heralded as the default mental health strategy of priority. Screening for mental disorders, particularly depression, posttraumatic stress disorder (PTSD), and substance misuse, in primary care, when combined with care management, has acceptable evidence for benefits. In contrast, the available evidence for deployment-related screening is insufficient. Problems with deployment screening include low predictive value of validated tools when used on population levels and the unwillingness of many service members to truthfully report concerns, because of stigma and other reasons.<sup>6</sup> The only deployment-related screening program associated with significant benefits, including lower rates of suicidal ideation, linked screening to close coordination of in-theater medication management by unit medical personnel.<sup>7</sup>

Screening specifically for suicidal propensity (as distinct from underlying mental disorders) is also being actively pursued. However, critical problems arise when researchers or

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policy makers recommend tools developed with high-risk patients for application in primary care or population settings. Instruments that quantify severity of suicidal ideation or behavior in recent attempters (eg, Columbia Suicide Severity Rating Scale) will have very low predictive value when used outside specialty care. Potential unintended consequences of such use include unnecessary referrals, adverse treatment effects, stigma, reduced patient satisfaction, and treatment withdrawal.<sup>5</sup>

### Education and Public Awareness

Although suicide awareness training is mandatory for military personnel, evidence demonstrating effectiveness is lacking, and there are other reasons for concern. Many factors influence public understanding apart from education campaigns, including news media. Studies suggest associations of news reports (print and television), film, and web content with attempted and completed suicides, particularly when details surrounding deaths are reported.<sup>8</sup> This suggests a need to study the relationship between media reporting and military suicides, as well as how educational efforts portray stories involving suicidal behavior. Interactive military training videos may convey the wrong messages through illustrating details of suicidal behavior or implying that peers or leaders could be blamed for failing to heed warning signs. It is critical to validate training tools in the military environment and ensure they are associated with improvements in mental health awareness, attitudes concerning suicide, and help seeking.

Examining communication strategies is also critical. Stigmatizing attitudes may be unwittingly reflected in clichés, such as “zero tolerance” or “one suicide is one too many,” expressed by well-intentioned VA or military leaders. These slogans convey an implicit message: suicides are different from any other medical condition, the result of a bad “choice” by the individual or negligence by peers or leaders. These types of communications would not be used to describe attitudes toward depression, PTSD, or cancer.

Suicide occurs for many reasons but is not the “fault” of the individual or those closest to the individual. To put things in perspective, for a brigade of 4000 soldiers, approximately 200 soldiers (5%) will seriously consider suicide each year,<sup>4</sup> while less than 1 (0.02%) will die of suicide. Although social support, including strong leadership and unit cohesion, is associated with improved mental health, leaders and peers cannot be expected to know which soldier is in need of immediate intervention. No intervention or treatment can prevent all suicides; one-quarter of service members who die of suicide saw a mental health professional within the previous 30 days.<sup>9</sup> Individuals who make serious attempts often report perceiving suicide as an option that represents relief from chronic suffering or the burden they feel they place on others (for combat veterans, this may involve survivor’s guilt). Although suicide seems to be within an individual’s control, it is not a decision or choice a person reaches when other options appear to have been exhausted. Suicidal intent is no different than any other life-threatening condition.

### Treatment

Although evidence remains insufficient, experience from clinical practice and some trials lends support to a wide range of targeted interventions focused on enhancing access to care (eg, crisis call lines, providing emergency contact information), means restriction (eg, gun locks, bridge netting, dispensing medications in individual blister packages rather than bottles), and psychosocial treatment to reduce repeated attempts (eg, problem solving, risk management, cognitive or dialectical behavioral therapy). In response to the urgent need for high-quality clinical trials, DOD has established a suicide interventions research consortium.

The most important challenges in suicide prevention are stigma surrounding mental illness, negative perceptions of treatment, and other barriers (including confidentiality concerns in the military setting) that result in the majority of service members and veterans not accessing care when needed or dropping out prematurely.<sup>10</sup> It is imperative that intervention strategies—and research efforts—prioritize patient engagement and satisfaction, screening for underlying mental disorders in primary care, care coordination, capacity for timely appointments, effective treatment, and reinforcing protective effects of family and peer connections.

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