# **CLEARINGHOUSE** FOR MILITARY FAMILY READINESS

## Suicide Prevention in the US Military: Rapid Literature Review

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#### Executive Summary

We conducted a brief literature review on suicide prevention among the United States (US) Military. Suicide has historically been the second leading cause of death within the US Military (Martin, Gharamaulou-Holloway, Lou, & Tucciarone, 2009). While the suicide rates in the military are high, they have been proven to be lower than suicide rates among the comparable US population (Ramchand, Acosta, Burns, Jaycox, & Pernin, 2011).

Risk factors for suicide include (Ramchand, Acosta, Burns, Jaycox, & Pernin, 2011):

- □ Prior suicide attempts;
- □ Mental disorders;
- □ Substance-use disorders;
- □ Head trauma/traumatic brain injuries;
- □ Suffering from hopelessness;
- □ Stressful life events;
- □ Firearm access; and
- □ Suicides of others.

The lack of evidence on prevention programs have made recognizing best practices in preventing suicide difficult (Ramchand, Acosta, Burns, Jaycox, & Pernin, 2011). However, some studies have determined that multifaceted approaches have been effective in reducing the suicide risk (Bagley, Munjas, & Shekelle, 2010; Hyman, Ireland, Frost, & Cottrell, 2012; Mann, et al., 2005; Ramchand, Acosta, Burns, Jaycox, & Pernin, 2011). One study highlights identifying high risk individuals, providing quality access to mental health care, and restricting access to weapons as approaches that have shown to be effective in preventing suicides (Ramchand, Acosta, Burns, Jaycox, & Pernin, 2011).

#### Introduction

Suicide is a public health concern. In 2006, suicide accounted for almost half of the world's violent deaths (Martin, Gharamaulou-Holloway, Lou, & Tucciarone, 2009). In 2015, an estimated 9.3 million adults reported having suicidal thoughts in the US (Center for Disease Control and Prevention (CDC), 2016). Due to these factors, the Department of Defense (DoD) issues a DoD Suicide Event Report Annually to allow the DoD to use the information to implement programs and policies designed to prevent future suicides (Pruitt, et al., 2016). Studies have identified risk factors that contribute to suicidal behaviors but data is still limited on best practices to reduce behaviors.

#### Suicide Rates

According to the CDC (2016), in 2015 suicide was the second leading cause of death among 15-34 year olds and the tenth leading cause of death for all ages. The overall rate in the US was 12.6 suicides per 100,000. Males represent 77.9% of all US suicides and guns are the primary method used by males at 56.9%. The DoD announced the suicide rate as 20.2 per 100,000 in 2015 for the Active Component (Pruitt, et al., 2016).

While the disparity in suicide rates seem tremendously higher in the military population, when the US civilian population is adjusted (i.e., similar demographics) to be comparable to that of the US Military the rates are similar. A 2011 RAND study found that the suicide rates for the comparable US population were higher than the suicide rates of the US Military population. Two other studies (Bagley, Munjas, & Shekelle, 2010; Eaton, Messer, Garvey Wilson, & Hoge, 2006) also compared the comparable US population suicide rates to US military during 1990 through the year 2000 and found that the military suicide rates were lower.

#### **Risk Factors**

Suicide risk factors for US military have proven to be consistent to the civilian population (LeardMann, et al., 2013). Some common risk factors are demographics (i.e., young adult males) and mental disorders. Risk factors that differ for the military population compared to the civilian population include higher exposure to traumatic brain injury (TBI), post-traumatic stress disorder (PTSD), and increased access and training with firearms (Martin, Gharamaulou-Holloway, Lou, & Tucciarone, 2009). Studies also suggest that stressful life events have more serious implications on several life domains for the military population (Martin, Gharamaulou-Holloway, Lou, & Tucciarone, 2009). For instance, legal trouble could affect a service member's promotion or even future status as an active duty service member. There are also studies that have found no direct relationship between deployments and suicides (LeardMann, et al., 2013; Martin, Gharamaulou-Holloway, Lou, & Tucciarone, 2009). However, one study (Hyman, Ireland, Frost, & Cottrell, 2012) found that in the Army, deployments increased the risk for suicide but the risk for suicide decreased with multiple deployments.

#### **Best Practices**

Several studies have demonstrated that multifaceted programs worked to reduce the risk of suicide (Bagley, Munjas, & Shekelle, 2010; Hyman, Ireland, Frost, & Cottrell, 2012; Mann, et al., 2005; Ramchand, Acosta, Burns, Jaycox, & Pernin, 2011). LeardMann et al. (2013) found that high quality treatment for mental and substance use disorders in primary care, specialty mental health care, and post deployment settings have the greatest potential to mitigate suicide risks. However, some researchers recognize that multifaceted approaches can make it difficult to determine which component is most effective and recommend that this needs to be explored more in the research (Mann, et al., 2005). A 2016 RAND study (Ramchand, Acosta, Burns, Jaycox, & Pernin, 2011) outlined six best practices:

- Raise awareness and promote self-care;
- Identify those at high risk;
- Facilitate access to quality care;
- Provide quality care;
- Restrict access to lethal means; and
- Respond appropriately.

Another important area to examine when considering approaches in preventing suicide are protective factors. One study identified resiliency as a protective factor in suicide prevention due to the training military personnel receive in resiliency (Martin, Gharamaulou-Holloway, Lou, & Tucciarone, 2009).

#### Recommendations

This rapid review of the literature provides a brief look into the research available regarding suicide prevention with regards to the US Military. The reports and studies reviewed all highlight the need to identify the at-risk population, and utilize a multifaceted approach to reducing the risk. This approach should include quality mental health care, restriction from access to weapons, providing a sense of belonging, and resilience training.

#### Suggested Citation

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