

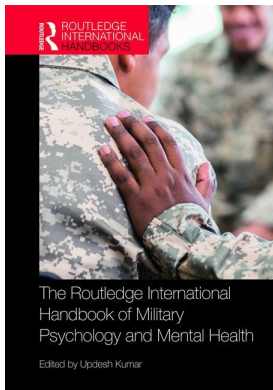
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Marissa N. Eusebio, Abigale Brady, Bruce Bongar

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SUICIDE PREVENTION STRATEGIES IN MILITARY POPULATIONS

Marissa N. Eusebio, Abigale Brady, and Bruce Bongar

Death by suicide among military populations has captured the attention and concern of leaders within the military, policy-makers, and the general public (Ramchand, Acosta, Burns, Jaycox, & Pernin, 2011). The increase in prevalence of psychopathology after war is a testament to the amount of stress that military members can experience. While deployed, military members may be exposed to environmental, physiological, and emotional stressors (Kennedy & Zillmer, 2012). These stressors can have numerous psychological consequences, including posttraumatic stress disorder (PTSD), substance abuse, depression, and suicidality (Bush et al., 2013; Kennedy & Zillmer, 2012). Likely the increased exposure to stressful and traumatic events combines with mental health stigma to create a “tough-it-out” mentality. Furthermore, this avoidance and suppression can lead to increased psychopathology, which can put the individual at risk for developing suicidal ideation.

In 2009, military suicide rates rose above civilian rates for the first time in 28 years, which is often attributed to the wars in Iraq and Afghanistan (Kennedy & Zillmer, 2012). Within this trend, and still today, nine years later, the Army has the highest suicide rate of all of the branches, with the Marine Corps coming in a somewhat distant second (Kennedy & Zillmer, 2012). The list of possible suicide risk factors within military branches is extensive, including interpersonal difficulties/lack of social support, substance use, and depressed mood. Protective factors can also come in many forms; however, a central theme is that of social support (Kennedy & Zillmer, 2012). Furthermore, 61% of deaths by suicide involve the use of a firearm; of these, 17% used a military-issue firearm (Bush et al., 2013). Risk and protective factors as well as individual characteristics combine with systemic factors to influence military suicide rates.

Among different military components, suicide rates vary in size and growth trends. According to the Department of Defense’s Suicide Event Report (DoDSER), active duty military saw an increase in rate of suicides since 2013, beginning at 18.7 deaths by suicide for every 100,000 service members, increasing to 21.1 for every 100,000 in 2016 (Department of Defense, 2012–2016). Typically, the rates of suicide increase in active duty populations once deployment has concluded. It has been suggested that Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) have exposed service members to stress during active duty to the extent that suicidal ideation develops despite historical trends, though it is unclear if this is a result of this specific deployment or mental health history (Harmon, Cooper, Nugent, & Butcher, 2016). Other risk factors for active duty military members include decreased fear associated with death

and a desire to escape both psychological and environmental stress (Harmon et al., 2016). The reserves and National Guard components of the military have overall higher rates of suicides than the active duty component but have either fluctuated without a trending direction or remained stable (Department of Defense, 2012–2016).

Comparison of military branches

Definitive statements about the different suicide rates among active duty and reserve and National Guard components cannot be made. Likewise, certain interbranch trends of suicidal behaviors can be observed. This can result due to accumulated stressors and stigmas associated with each branch's individual culture. For example, one Navy survey found that sailors were experiencing stress related to chain of command and deployment changes. A mental health provider recommended taking time ashore when possible, which resulted in stigma related to abandoning the crew (Millegan, Delaney, & Klam, 2016). As such, under-reporting is a reasonable assumption to make when considering that the Navy has the lowest suicide rate of the four main branches (Department of Defense, 2016). Additionally, in 1978, the Navy established its Special Psychiatric Rapid Intervention Teams (SPRINT) model. SPRINT typically consists of one mental health provider and a medical corpsman that are deployed upon request to evaluate mental health both at the individual and at the unit level (Milligan et al., 2016). While stigma still existed among crew members, the increased access to mental healthcare could be related to the Navy's low suicide rates. Across all branches, limitations of suicide rate trends should be considered, for example, lack of standardization of data collection procedures across branches and the absence of adjusting suicide rates based on enlistment numbers (i.e. higher suicide rates among officers in a branch with fewer officers than other branches) (Kennedy & Zillmer, 2012).

While trends can be difficult to directly attribute to specific factors, there are some relationships regarding military suicide and risk factors that can be reliably studied. Differences in suicide rates between branches can also be affected by deployment setting. A positive relationship has been observed between exposure to violence and suicidal ideation. One theory behind this relationship is the normalization of death, which in addition to suicidal ideation can lead to risk-taking behaviors (Bryan, Kanzler, Durham, West, & Greene, 2010). The probability of risk-taking behaviors, combined with access to firearms and a combat setting, present service members with means and opportunity to act on suicidal urges. Furthermore, for a deployed service member, access to mental health care can be limited. This can pose a risk to safety in order to get a provider to the unit or to transport someone to a larger base and get the service member to a provider. Even if a provider can be accessed, being in a combat zone can create a number of therapy-interfering behaviors such as poor sleep hygiene, poor homework compliance, and various treatment communication difficulties (scheduling, wellness checks) (Bryan et al., 2010). While different branches have created different prevention plans, these interfering behaviors can occur in any branch.

Another interbranch trend which is widely recognized is the higher suicide rates among Army and Marine service members (Ayer, Ramchand, Geyer, Burgette, & Kofner, 2016; Department of Defense, 2016). It has been theorized that stress related to instances of improvised explosive devices (IEDs) could explain the higher occurrence of Army suicide rates. A significant relationship between attempted or completed suicide and IED explosions was found by Ursano et al. (2017). This could contribute to Army suicide rates, as it is possible that the Army encounters IEDs more frequently than other branches. An IED explosion could cause a military member to experience grief related to unit casualties, confronting their own mortality and fears about living in an unstable environment. Military leaders as well as the Department of Defense have put strategies

in place to prevent and treat mental health symptoms related to stress which deployed service members may encounter.

The Army and Marine Corps both rely on noncommissioned officers called gatekeepers to identify and report behaviors which could indicate suicidal ideation (Ayer et al., 2016). While this could reinforce elements of social support, it also introduces human error (gatekeeper evaluation) with regard to the ability to address these behaviors, as well as the role of stigma as to the screening of suicidal behaviors. About two-thirds of Army and Marine gatekeepers (64% and 73%, respectively) reported receiving 1–10 hours of suicide prevention training, while 34% of Army gatekeepers and 24% of Marine gatekeepers reported receiving over 11 hours of suicide prevention training (Ayer et al., 2016). Of note is that these results only report on attendance of training, not comprehension, and the quality of these training sessions is often unstandardized. In Marine populations, it is noted that there may be more stigma related to mental health results with regard to untreated suicidal ideation. In a sample of over 1700 Marines, when asked why they do not seek mental health care, the top three responses cited were embarrassment and unit cohesion/leadership dynamics (VanSickle et al., 2016).

Cultural intersectionality

As previously noted, access to healthcare when deployed can be scarce. However, after returning to civilian life, new veterans can still struggle to access healthcare. Mental health stigma which may develop during deployment could persist once veterans return. This combined with the separation from a veteran's unit can make a veteran less likely to seek healthcare (while making them more likely to experience psychopathology) (McDaniel, Thomas, Albright, Fletcher, & Shields, 2018). Further, mental health care can be lacking in rural areas for both veterans and civilians, reducing access to mental health care (Brooks, Dailey, Bair, & Shore, 2016). Another trend in civilian populations which can also be seen in veteran populations is that low-income veterans experience poorer mental health symptoms, though the direction of this relationship is unclear (LeHavot, O'Hara, Washington, Yano, & Simpson, 2015; McDaniel et al., 2018). Furthermore, an association has been found between being of minority or low-income status and under-utilizing Veterans Health Administration (VA) healthcare (LeHavot, O'Hara, Yano, & Simpson, 2016).

Perceived trust of a provider can influence a veteran's decision to seek mental healthcare. Communication, openness, and perception of provider competence are known factors which can influence trust (van den Berk-Clark & McGuire, 2014; Chanfreau-Coffinier et al., 2018). Pease, Billera and Gerard (2016) discuss preliminary recommendations for providers seeking to build rapport with veterans such as acknowledging veteran status as a salient cultural identity (gathering information about time served, branch, and duties). Further, providers should incorporate aspects of positive psychology to emphasize growth rather than focusing on the illness, as well as working to empower veterans throughout care to combat stigma associated with psychopathology (Pease et al., 2016).

Military members and veterans cite stigma related to mental health as a reason not to seek mental healthcare. Within the identity of military member or veteran, other culturally salient identities that are stigmatized can affect an individual's willingness to seek treatment. In civilian populations, LGBTQ (lesbian/gay/bisexual/transgender/questioning) individuals are at a higher risk of experiencing suicidal ideation than non-LGBTQ individuals (Blosnich, Mays, & Cochran, 2014; Matarazzo et al., 2014; Sexton et al., 2018; Wilder & Wilder, 2012). In a study conducted by Blosnich and colleagues (2014), 47% of sexual minority veterans reported experiencing suicidal ideation at some point in their lives, compared to 22% of heterosexual veterans, a

significant difference. For veterans identifying as a gender and sexual minority, an association was found between an increased risk of developing psychopathology and reports of stigma or bullying during deployment (Sexton et al., 2018). Further, isolation, discrimination, minority stress, and abuse have been identified as risk factors for suicidal ideation in this population (Chen, Granato, Shipherd, Simpson, & Lehavot, 2017; Wilder & Wilder, 2012). These factors can also be experienced by heterosexual military and veteran populations, creating a doubly increased risk. A deployed service member may experience isolation from family, whereas a veteran may also experience isolation from their unit. On September 20, 2011, “Don’t Ask, Don’t Tell,” (the concept of not asking or disclosing non-heterosexual orientation) was repealed (Wilder & Wilder, 2012). This *allowed* for open communication of a new identity; however, stigma was still present. Internalized heterosexism within a unit (or with family prior to or post-deployment) can contribute to distress associated with increased risk of suicidal ideation (Wilder & Wilder, 2012). Deployed service members may choose to conceal this identity to avoid heterosexism and other discrimination, but this concealment can also lead to distress. In military LGBTQ populations, decreased social support was associated with increased suicidal ideation (Matarazzo et al., 2014).

Identifying as a sexual or gender minority can lead to a new level of isolation in which the veteran/active duty military individual encounters discrimination from civilian populations for being a veteran/military and encounters discrimination among military circles for being a sexual or gender minority. In spite of this, transgender military service members may be drawn to the military due to a desire either to mimic traditional gender roles or to express the gender with which they identify in a socially acceptable way (Lehavot et al., 2016). While military and veteran populations may experience increased suicidal ideation, for transgender military/veterans, this rate is higher for both ideation and completed suicides (Lehavot et al., 2016). Past year suicidal ideation and lifetime experience of plan or attempt has been correlated with being a transgender male, and specific factors include military stigma and mental health symptoms (Lehavot et al., 2016).

In addition to cultural effects related to identifying as transgender, additional trends in suicide behaviors can also be seen. In civilian populations, a known gender trend is that women attempt suicide more than men, but men complete suicide more than women (Freeman et al., 2017). In veteran populations, female veteran completion rates are closing the gap between male and female veterans who die by suicide (Dorsey Holliman, Monteith, Spitzer, & Brenner, 2018). In discussing military suicide rates, consideration should be given to the prevalence of military sexual assault. Research has shown that veterans who have been sexually assaulted while serving are more likely to attempt suicide, as well as more likely to die from suicide (Monteith et al., 2016). Further, the prevalence of military sexual assault is higher in women than in men (endorsed 25% of the time and 1.3% of the time, respectively, on VA screeners) (Monteith et al., 2016). This provides some evidence that female veterans may experience suicidal ideation more than male veterans. In addition, male military service members and veterans also experience unique stressors related to their gender which can be associated with suicidal ideation, such as stress related to meeting the male gender role. This can manifest in interpersonal interactions, relationships, and acknowledgment/expression of emotion (Sterling et al., 2017).

Suicide risk

In a recent research study of OIF and OEF veterans and active duty service members, as well as non-deployed service members and veterans, researchers assessed the impact of suicide among military personnel (LeardMann et al., 2013). In addressing the prevalence and impact of suicide among military personnel since 2005, LeardMann and colleagues (2013) considered covariates

including physical functioning, adverse life events, mental health, and behavioral factors (e.g., posttraumatic stress disorder (PTSD), depression, manic-depressive disorder, panic/anxiety symptoms, and alcohol-related problems) in relation to suicide risk.. Overall, this research study proposed that factors related to deployment, (e.g., length, number, combat exposure) were not indicative of risk for a suicide attempt. Rather, suicide risk factors such as male sex and mental disorders, which are also risk factors among civilian populations, were consistent within this sample of military personnel. LeardMann and colleagues suggest that overall stress related to being in the military during years of war may be a specific risk factor for suicide (2013). In addition to military related stress, they also identified manic-depressive disorder, depression, and alcohol-use problems as being mental health problems significantly related to suicide risk. These findings indicate that individuals with these specific mental health problems are at increased risk for suicide and that conducting thorough assessments of military populations may result in better success in detecting the presence of suicidal ideation. Aside from mental health disorders, research has shown that stressful life events such as unsuccessful romantic relationships, financial issues, legal/disciplinary problems, stress related to work, and employment limitations due to a medical condition are all factors that increase the risk of suicide among Army and Marine Corps populations.

In addition to specific risk factors for suicide, there is also some controversy regarding the categorization of death by suicide among military personnel. Often, research studies utilize the Defense Medical Surveillance System (DMSS) to determine deaths by suicide among military personnel. The DMSS contains mortality information on each branch of the military, as well as demographic and deployment data on each individual (Eaton, Messer, Wilson, Hoge, 2006). One issue when utilizing this tool to identify deaths by suicide among military personnel is the presence of mortality among military service members being “accidents” or “undetermined,” – potentially leading to the under-detection of deaths by suicide in this population. Furthermore, Eaton et al. (2006) found that among the deaths documented in the DMSS, the Navy had a greater proportion of deaths labeled as “undetermined” or “pending” than any other branch of military, suggesting that deaths by suicide may be higher in the Navy than what is documented in the DMSS.

Post-deployment psychological assessment

Although there appear to be some similarities among risk for suicide between civilian and military populations, it is important to consider distinct differences between these groups and how suicide may impact military personnel uniquely. In 1997, the U.S. military made it mandatory for all military personnel returning to the United States from deployment to undergo mental health screening (Department of Defense, 1997). The Department of Defense proposed the change in policy to “expand the concept of joint deployment medical surveillance to a more comprehensive approach to monitoring and assessing health occurrences related to participation of Service members in deployments” (p. 1). Currently, a service member can opt to complete the post-deployment assessments either in the theater or once they have returned home, and the post-deployment reassessment is then completed within 90–180 days (Warner, Appenzeller, Mullen, Warner, & Grieger, 2008). Despite these assessments being mandated by the Department of Defense, there continues to be debate regarding the implementation of mental health screenings among military personnel (Zamorski, 2011). Based on a survey completed by Warner et al. (2008) service members’ attitude towards post-deployment mental health screening varies. Service members disclosed that they were more likely to respond truthfully on the mental health screening when the person administering the screening was a mental health provider in the unit,

unit medical providers and mental health providers from other units being the next groups of providers service members were more likely to be truthful with. A common theme within this data is that service members were reporting that they are overall more comfortable being truthful with personnel who were military and had been part of a unit. This information can be helpful to providers considering the pervasive stigma many service members experience regarding mental health (Vogt, 2011). Furthermore, service members outlined barriers to seeking mental health treatment as being fear of work-related impediments, being treated differently by those in leadership positions, and fear that other service members would not have confidence in them because they had sought out mental health treatment. Overall, post-deployment psychological screening can help providers address mental health needs of service members, so long as the provider administering the assessment is someone whom the service member feels they can trust.

Suicide prevention strategies

Utilizing suicide prevention strategies among service members can vary depending on a person's unique stress factors, deployment status, and the branch of the military. Many people debate whether the data regarding civilians and mental health is sufficient when assessing military personnel with mental health issues (Zamorski, 2011). One major challenge when addressing suicide prevention strategies is that many suicide prevention programs lack empirical data to support the effectiveness of the program (Ramchand et al., 2011). Typically, there are two categories that suicide prevention interventions fall under: awareness and skill building, and those that provide suicide screening followed by mental health referrals (Ramchand et al., 2011). Ramchand et al. (2011) conducted an extensive literature review and identified six practices that suicide prevention strategies should include: (1) raise awareness and promote self-care, (2) identify those at high risk, (3) facilitate access to quality care, (4) provide quality care, (5) restrict access to lethal means, and (6) respond appropriately. Suicide prevention strategies can be specific to the deployment environment, branch of military, and veteran status. While considering the unique nature of these identities can be helpful when considering suicide prevention, there is also a breadth of research that focuses on non-specific suicide prevention strategies that are targeted to military personnel as a whole.

Deployment environment

Typically, during deployment, there are various mental health providers including psychiatrists, psychologists, occupational therapists, social workers, chaplains, and military enlisted mental health technicians present (Hill, Johnson, & Barton, 2006). When service members experience suicidal ideation during deployment, this poses a significant challenge for mental health providers to be able to provide adequate care and safety to the service member. Providing suicide prevention strategies during deployment is often difficult given the service member's access to weapons, distance from mental health providers, and job requirements while deployed (Hill et al., 2006). If a provider chooses to evacuate a soldier due to a service member's risk of suicide, then they are also depleting the fighting force and potentially putting others in danger, although this is often the simplest solution and best way for a service member to access proper care (Hill et al., 2006). In a research study that was conducted with soldiers during Operation Enduring Freedom II (OEF II), soldiers who experienced suicidal ideation were provided with a treatment plan that was unique to the level of severity and risk of suicide (Hill et al., 2006). For those who were at lower risk of suicide, determined by the treatment plan, safety plan, and assessment, interventions consisted of speaking with the chaplain or regular visits with mental health providers (Hill et al.,

2006). Those who were determined to be at higher risk for suicides during deployment were put on unit watch as a suicide prevention strategy, which focuses on social support to ensure the soldier's safety (Hill et al., 2006).

The United States Army defined unit watch as, "a commander's program that is designed and implemented to protect at-risk Soldiers from self-harm and harm to others" (Gould, Kalafat, HarrisMunfakh, Kleinman, 2010, p. 13) and can be used across military branches during deployment. A unit watch consists of a soldier being supervised at all times, with emphasis on the soldier not being left alone at any point while also not inflicting undue harm or humiliation to the soldier on unit watch (Gould et al., 2010). Often, a unit watch involves the soldier's personal belongings being searched for harmful weapons, which are removed if found, prohibiting substance use, and limiting a soldier's contact with people who may have a negative influence on them (Payne, Hill, & Johnson, 2008). The United States military conceptualizes suicidal ideation during deployment as stress fatigue, and unit watch is a way for a soldier to remain safe and supported while also not experiencing the stigmatization within the unit that often occurs after a psychiatric hospitalization (Payne et al., 2008). While there are several benefits of implementing a unit watch, there are also various challenges when implementing this suicide prevention strategy.

One major factor that should be considered when utilizing unit watch is that it is not recommended to be the single form of suicide prevention (Payne et al., 2008). Psychological and psychopharmacological treatments should also be considered in conjunction with a unit watch (Payne et al., 2008). Second, there is a significant lack of data on unit watch and the safety and efficacy of this intervention strategy (Payne et al., 2008). Finally, while unit watch may result in less stigmatization by fellow soldiers and service members than a psychiatric hospitalization, many soldiers who undergo unit watch do continue to experience some level of stigma (Payne et al., 2008). Although a unit watch does pose some challenges, it is a useful method for mental health providers to implement procedures to reduce the risk of suicide while also maintaining the fighting force.

The suicide prevention strategies that are often implemented when a soldier is deployed often differ when compared with non-deployed service members (Bryan et al., 2010). A major contributing factor is exposure to war zone violence – which has been shown to increase the prevalence of suicide risk (Bryan et al., 2010). Service members who have been deployed are more likely to own a firearm than non-deployed service members – putting combat-related service members at greater risk for death by suicide, as they have access to a lethal means for suicide (Bryan et al., 2010). Veterans often report experiencing a sense of belonging due the closeness of their unit while deployed, but they are also often experiencing a significant level of disconnect from their loved ones and home (Bryan et al., 2010). Communication is often difficult and unreliable while deployed, which may further decrease a service member's feeling of belonging (Bryan et al., 2010). Finally, factors such as insomnia, lack of willingness to disclose suicidal ideation, and limited access to mental health resources are all contributing factors to suicide risk that are unique to service members who are deployed, as opposed to those who are non-deployed.

Overall, service members who are deployed likely experience stressors that are distinct from service members who are non-deployed. Mental health providers who are in a deployment environment experience unique challenges and barriers when working with service members who are experiencing suicidal ideation. Mental health providers are faced with options such as psychiatric hospitalization, which may be the easiest solution but potentially damaging to the unit as a whole and result in the service member experiencing stigma as a result. Unit watch is a suicide prevention strategy that is often employed when a service member's suicide risk is elevated, although it may still result in stigmatization from the unit.

Branch-specific strategies

In response to the impact of suicide within the military as a whole, the branches within the military have established methods for increasing awareness, education, and training. Similarly, Veterans Affairs has also begun to establish individualized suicide prevention strategies in an effort to decrease stigma and augment access to mental health care and resources. In addition to these strategies, there is also a breadth of research on suicide prevention that is generalized to the military as a whole and non-specific to specific identities within the military. The Department of Defense sponsors suicide-prevention strategies across various military service branches (Ramchand et al., 2011). There is a committee that is part of the Department of Defense that focuses on suicide prevention in the effort to reduce the risk the risk of suicide among all military populations (Ramchand et al., 2011).

U.S. Army

Suicide prevention methods within the army are often disseminated through public awareness campaigns and psychoeducation provided by leaders and soldiers within the military (Ramchand et al., 2011). The Army focuses primarily on utilizing soldiers to help support other soldiers in crises and promote resilience (Ramchand et al., 2011). They also implement suicide prevention activities throughout multiple levels within the Army (Ramchand et al., 2011), including the Ask, Care, Escort (ACE) program that works towards reducing stigma training, providing soldiers information on how to identify suicidal behaviors (Griffith & Bryan, 2018).

U.S. Marines

The Marines utilize mental health providers and other personnel within leadership roles in the Marines to train them on how to identify Marines at risk for suicide and the necessary steps to get adequate support when experiencing suicidal ideation (Ramchand et al., 2011). They also provide training relating to being able to identify suicide risk within their annual training. Similar to the Army, the Marines also provide suicide awareness through public platforms (Ramchand et al., 2011). Last, the Marines also have behavioral health professionals embedded into Marine infantry regiments to increase support of Marines before, during, and after deployment (Ramchand et al., 2011).

U.S. Air Force

Within the Air Force, suicide prevention strategies focus on the highest-ranking officials with regard to encouraging and inspiring cultural changes and the perception of suicide (Ramchand et al., 2011). The Air Force takes the initiative to train and educate all personnel about suicide as well as procedures for when a fellow service member is experiencing suicidal ideation (Ramchand et al., 2011). They have also established the Integrated Delivery System (IDS), which focuses on specific suicide prevention strategies (Ramchand et al., 2011).

U.S. Navy

The Navy conceptualizes suicide on a continuum of risk, and they utilize this model to address early intervention strategies that increase stress regulation and management when experiencing stressful life events (Ramchand et al., 2011). Similar to the Marines and Army, the Navy employs

public platforms to provide psychoeducation regarding suicide (Ramchand et al., 2011). Finally, the Navy has adopted strategies that incorporate behavioral health care providers into nontraditional roles to increase their presence within the naval community (Ramchand et al., 2011).

Veterans

Given the impact of deaths by suicide among veterans, some researchers have called for an increase in suicide research and prevention strategies, including more robust training for all providers within VA settings (York, Lamis, Pope, & Egede, 2013). Several strategies to help provide resources to veterans who are experiencing suicidal ideation have been implemented, including the Veteran Crisis Line, Suicide Prevention Coordinators, and increased access to telehealth (York et al., 2013). Universal prevention strategies that are utilized when working with veterans focus on psychoeducation about suicide risk as well as screening for specific suicide risk factors (Bruce, 2010). In addition to these broader programs and suicide prevention strategies, when a veteran is identified as being at increased risk for suicide, the VA has developed formalized individualized suicide prevention strategies.

Within the VA, providers emphasize the use of evidence-based practice when treating a veteran with suicide ideation (York et al., 2013). Selective prevention strategies focus on providing care and support to veterans who are known to be at risk for suicide (Bruce, 2010). At this level, evidence-based psychiatric treatments are implemented with the goal to reduce symptoms of mental health disorders, especially those related to suicide and suicidal ideation (Bruce, 2010; York et al., 2013). Interventions focus specifically on suicide as well as the proximal risk factors present (Bruce, 2010). These interventions revolve around monitoring the safety of the veteran and utilizing an individualized safety plan, as well as potentially using pharmacotherapy and psychotherapies for suicide risk (Bruce, 2010). Various therapeutic intervention strategies are frequently used when working with veterans who have experienced trauma, including cognitive processing therapy (CPT), prolonged exposure therapy (PE), and eye-movement desensitization and reprocessing (EMDR) (Reisman, 2016). Although these treatment interventions are specific for PTSD, some research suggests that PTSD and suicide ideation and behavior are associated (Reisman, 2016) and therefore the reduction of PTSD symptoms will likely reduce suicidal ideation. The strategies applied at this level of intervention can be utilized when working with veterans from all war eras (Bruce, 2010). Providers can also utilize the veterans medical records to place a Patient Record Flag to make other providers aware that a specific veteran is experiencing suicidal ideation and may need additional support (York et al., 2013).

Non-specific methods

While there are unique differences in how each branch of the military approaches suicide risks assessments, there are also some similarities among branches and military status. Use of the media has been implemented across branches to increase awareness of suicide risk, although these campaigns do not often emphasize self-care (Ramchand et al., 2011). The Army, Navy, and Marine Corps try to detect those who are at higher risk of suicide by having specific personnel who are tasked with this responsibility and then refer those individuals to the necessary level of care (Ramchand et al., 2011). The Air Force has a slightly different method by which they monitor suicide risk severity with individuals who are already thought to be at risk for suicide. Overall, the method most frequently used by the Department of Defense is primary prevention, which focuses on broad educational and awareness campaigns (Griffith & Bryan, 2018).

The Department of Defense and RAND Center for Military Health Policy Research conducted a study that addressed suicide risk assessment and best practices. The data collected

as a result of that research study proposed 14 recommendations for all branches of the military with regard to suicide assessment and prevention: (1) track suicide and suicide attempts systematically and consistently; (2) evaluate existing programs and ensure that new programs contain an evaluation component when they are implemented; (3) include training in skills building, particularly help-seeking behavior, in programs and initiatives that raise awareness and promote self-care; (4) define the scope of what is relevant to preventing suicide and form partnerships with the agencies and organizations responsible for initiatives in other areas; (5) evaluate gatekeeper training; (6) develop prevention programs based on research and surveillance; selected and indicated programs should be based on clearly identified risk factors specific to military populations and to each service; (7) ensure that continuity of services and care are maintained when service members or their caregivers transition between installations in a process that respects service members' privacy and autonomy; (8) make service members aware of the benefits of accessing behavioral health care and specific policies and repercussions for accessing such care and conduct research to inform this communication; (9) make service members aware of the different types of behavioral health caregivers available to them, including information on caregivers' credentials, capabilities, and the confidentiality afforded by each; (10) improve coordination and communication between caregivers and service providers; (11) assess whether there is an adequate supply of behavioral health-care professionals and chaplains available to service members; (12) mandate training on evidence-based or state-of-the-art practices for behavioral health generally and in suicide risk assessment specifically for chaplains, health-care providers, and behavioral health-care professionals; (13) develop creative strategies to restrict access to lethal means among military service members or those indicated to be at risk of harming themselves; and (14) provide formal guidance to commanders about how to respond to suicides and suicide attempts (Ramchand et al., 2011). These 14 recommendations provide an informative foundation for those working with military populations on how to address suicide risk and reduce suicidal ideation.

The Department of Veterans Affairs and the Department of Defense combined efforts to address the negative impact of suicide by providing clinicians and mental health providers with guidelines and recommendations on suicide risk. Based on these guidelines, when working with a service member who is at risk for suicide, determining the level of care and appropriate setting is an important initial step (VA/DoD, 2013). Various treatment settings include inpatient programs, partial hospitalization, outpatient care, primary care, emergency departments, and deployment-related options, and the level of acute risk for suicide and individualized treatment plan should be taken into consideration when determining the treatment setting (VA/DoD, 2013). Once the appropriate treatment setting has been established for a service member, the implementation of a treatment modality specific to suicide is recommended. The VA and Department of Defense identified cognitive therapy and problem-solving therapy, with a specific emphasis on suicide prevention, as a specific strategy for many veterans in reducing the risk of suicide (2013). Cognitive therapy as an evidence-based therapy emphasizes techniques towards identifying thoughts and core beliefs around suicidal ideation and increasing a person's ability to cope with stressful life events (VA/DoD, 2013). The goal of problem-solving therapy is to augment a person's ability to successfully solve problems and identify coping skills, which typically leads to increase feelings of confidence and self-control (VA/DoD, 2013). Specific treatment modalities will depend on the presentation of the veteran's symptomology and case conceptualization. Another approach to reducing the risk of suicide among military personnel is the use of pharmacological treatments. The use of pharmacological treatments is largely dependent on the underlying mental health disorder and symptom presentation (VA/DoD, 2013) and may be utilized as a stand-alone treatment or in conjunction with psychotherapy.

Finally, in order to reduce the risk of suicide, particularly in service members who have a recent suicide attempt, follow-up and careful monitoring of suicidality is crucial in ensuring safety. The VA and Department of Defense consider the first 30 days after release from a psychiatric inpatient unit to be the highest risk with regard to vulnerability, followed by the first week, month, and year as a time period when a service member may be vulnerable and at risk for a suicide attempt (2013). Following such a discharge, service members should be followed by either a mental health or primary care provider who has a previously established relationship with the service member, and ongoing follow-up regarding suicide risk should be assessed regularly (VA/DoD, 2013). Following up with service members to determine their continued level of risk and ensuring safety is a key component of such a suicide prevention effort.

Postvention and prevention after death by suicide

Research has shown that when a person dies by suicide, those close to that person are also at risk of dying by suicide (Ramchand et al. 2015). Although this topic represents an area in research where there are not a major number of studies, there are some recommendations for providing support to those who have been impacted by a loved one having died by suicide. Ramchand et al. (2015) propose that implementing general suicide screening and suicide prevention strategies can be helpful in determining who may be at increased risk for suicide after experiencing death by suicide by someone close to the veteran or military service member. Furthermore, these researchers found that it is often beneficial to have a strategy for discussing suicide, as well as a method to identify those who may be more impacted by a death by suicide. Considering the impact of suicide among service members, and the closeness that is often experienced between military personnel, suicide is likely negatively to impact many service members – even if they themselves are not experiencing suicidal ideation.

Conclusion

As the impact of suicide within military populations and veterans continues to be a very serious issue, researchers have begun to address gaps in the literature with regard to suicide prevention. Griffith and Bryan propose the need for secondary suicide prevention strategies, which are strategies that focus on identifying those who are experiencing suicidal ideation and are at increased risk for a suicide attempt (2018). A large body of research on primary suicide prevention strategies, which includes suicide awareness and education on a broad level, currently exists. Additionally, tertiary suicide preventions strategies, such as the evidence-based treatment methodologies previously discussed, are also well represented in the literature and in practice (Griffith & Bryan, 2018). The ability more accurately and consistently to identify those who are at risk for suicide through secondary suicide prevention strategies may greatly impact the prevalence of suicide among military personnel and veterans.

Military populations, especially those who have experienced combat, are uniquely impacted by psychopathology and mental health stigma. Suicide rates within military populations have risen in recent years, emphasizing the need to better identify and address suicide within this population. Providers who work with various military populations should be aware of unique risk factors that various sub-populations and identities within the military experience in the context of suicide and suicidal ideation. Even within the various branches of the military, suicide prevention strategies vary and are dependent on the setting. While the clinical and research efforts to reduce the occurrence of deaths by suicide have grown, there is much to be done to better support military populations and veterans and to identify and care for those most at risk.

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