02/2025

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Posttraumatic Stress Disorder- A Risk Factor for Suicide Among Veterans

From Science to Practice

Using Research to Promote Safety and Prevent Suicide

Overview

Posttraumatic stress disorder (PTSD) is endorsed by about 6% of the U.S. population at some point in their lives and about 5% of adults have PTSD during any given year.[1] Although the prevalence of PTSD differs among Veterans by service era, PTSD is more prevalent among VHA primary care patients than among the general population.[1,2] The prevalence estimates vary considerably based on sampling and assessment methods used. Evidence suggests that among deployed U.S. military personnel, PTSD prevalence may be as high as 14–16%.[3] Nationally representative samples of U.S. Veterans have estimated the lifetime prevalence of PTSD to be around 6.9%,[4] while other studies indicated the past-month prevalence is approximately 5%.[5] Among Veterans who died by suicide in 2022, 24.9% had a PTSD diagnosis.[6] While the number of suicide deaths increased by 114 (1.8%) from 2020 to 2021, suicide rates among Veteran VHA users with PTSD decreased by nearly 28% from 2001 to 2021.[6] The relation between PTSD and suicide is complicated. More methodologically consistent, longitudinal studies are needed to better understand the complex interplay.[7]

Key Findings

Military and Veteran PTSD Prevalence

- The number of Veterans with PTSD varies by service era. About 15% of Veterans who served in Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF) have PTSD in a given year.[1] About 14% of Gulf War Veterans have PTSD in a given year. Among Vietnam Veterans, 12% of men and 8% of women were diagnosed with current PTSD, at the time of the most recent study in the late 1980s, the National Vietnam Veterans Readjustment Study (NVVRS).[1] It is estimated that about 10%[1] to 18.7%[8] of Vietnam Veterans have had PTSD in their lifetime. However, these figures should be taken as broad estimates because they are influenced by distinct mortality rates among the different groups.
- Among Veterans of the wars in Iraq and Afghanistan in VHA care, PTSD was the most frequent new diagnosis from six common mental disorders (PTSD, major depressive disorder, alcohol use disorder, drug use disorder, bipolar disorder, and schizophrenia) across all age groups and for both men and women between 2001 and 2014.[9] For men, the highest cumulative incidence of PTSD (41.23%) was among Veterans ages 18–29. For women, the highest incidence (27.73%) was among Veterans ages 30–44.[9]
- Most VHA patients with PTSD had a co-occurring psychiatric condition in 2012: 36.7% had one other psychiatric condition, 21.3% had two other co-occurring conditions, and 12.2% had three or more other psychiatric conditions. Multimorbidity with PTSD was associated with younger age and homelessness.[10]

PTSD Symptom Presence

- Among Veterans, changes in PTSD symptom severity and negative cognitions about oneself were found to indirectly impact suicidal ideation through changes in perceived burdensomeness, but not through changes in thwarted belongingness.[11]
- In a study on Cognitive Processing Therapy (CPT) for PTSD among service members and Veterans, PTSD symptoms predicted suicidal ideation in the subsequent CPT session.[12] Findings suggest treating PTSD with CPT may reduce suicidality by alleviating PTSD symptoms.[12,13]
- One study investigated how PTSD diagnostic status and symptom severity can predict future suicide attempts using data from a longitudinal study of Veterans deployed to Iraq and Afghanistan after 9/11, and who enrolled in VHA services. Veterans who exhibited enough PTSD symptoms for a PTSD diagnosis had a higher risk of attempting suicide in the future, with those reporting PTSD symptoms exceeding the diagnostic threshold being at an even greater risk.[14]
- In a study of Veterans receiving VHA care, those who screened positive for PTSD had a 58% increased risk of

suicide mortality one day after screening. Veterans who endorsed feeling 'numb or detached from others, activities or surroundings', had a 70% increase in suicide risk one day after the screening. Those who screened positive for PTSD had a 26% increase in risk of suicide one year following the screening.[15]

PTSD and Trauma

- Veterans who have endured combat-related experiences are at increased risk for suicidal behavior[16,17,18] as well as PTSD,[17,19] which itself is a risk factor for suicidal ideation and behavior.[14]
- In a study of active duty service members, the hyperarousal symptom cluster of PTSD was found to be a significant predictor of suicide attempts, specifically among those with combat-related experiences, but not among those who did not experience combat.[19]
- In a sample of military sexual assault survivors in a VA PTSD Residential Rehabilitation Treatment Program, those with PTSD endorsed more severe symptoms at admission, larger initial reductions in PTSD symptoms, and a greater reoccurrence of symptoms over time compared to their counterparts with PTSD who did not report military sexual trauma MST.[20]
- A 2020 study explored which DSM-5 PTSD symptoms may propel self-injurious thoughts and behaviors (SITB) in trauma exposed adults. Researchers conclude that treatment strategies focusing on risky behaviors and negative beliefs may prevent SITBs in Veterans, while addressing distorted blame and intrusive memories can help lessen SITBs among those with a history of combat trauma.[21]

PTSD and Substance Use

- In a sample of Veterans with PTSD, a diagnosis of substance use disorder (SUD) was associated with an increase in the risk of suicide death among men, and self-directed violence that results in inpatient hospitalization among men and women.[22]
- The statistical interaction between PTSD and a comorbid diagnosis of SUD is stronger in predicting non-fatal intentional self-harm for female Veterans than male Veterans.[23]
- Veterans with diagnoses of PTSD and opioid use disorder (OUD) or PTSD and non-opioid SUD demonstrated increased suicidality, anxiety, and urgent care use compared to Veterans with only PTSD or only non-opioid SUD.[24]
- Veterans with lifetime alcohol use disorder (AUD) — both those who reported current hazardous drinking and those who currently abstain from drinking — had increased odds of screening positive for symptoms of PTSD.[25] Veterans with a diagnosis of PTSD, or PTSD and AUD together, had lower scores for social connectedness and protective psychosocial characteristics than Veterans diagnosed with AUD alone. Protective psychosocial factors were found to partially mediate the relationship between diagnostic status and risk for lifetime suicide attempts.[26]

PTSD in Older Veterans

- The National Health and Resilience in Veterans Study (NHRVS), found that about 1 in 10 U.S. Veterans aged 55 and older experience a significant worsening of PTSD symptoms even decades after their trauma. Older Veterans with cognitive difficulties, such as executive dysfunction, may face a higher risk of worsening PTSD symptoms over time.[27]
- Veterans aged 55 and older who resist negative age stereotypes, such as believing it is normal to be depressed when older, are at lower risk for PTSD and suicidal ideation than Veterans who endorse these stereotypes.[28]
- Older Veterans with PTSD symptoms are more likely to report poor health, smoking, and low social support compared to those without PTSD symptoms or history of trauma.[29]
- Veterans over 60 years of age with full or subthreshold PTSD reported experiencing more Adverse Childhood Experiences (ACEs) and traumas, such as combat, assault, and serious illnesses, compared to those without PTSD.[30] These older Veterans with PTSD were more likely to screen positive for depression, substance use disorder, suicidal ideation or attempts, nonsuicidal self-injury, and decreased overall mental, physical, and cognitive health.[30]

Ways You Can Help

- Screening Veterans for PTSD and providing them with appropriate treatment may enhance suicide prevention efforts.
- Direct Veterans to the ***National Center for PTSD website*** with the "Help for Veterans" section to understand different treatment opportunities.

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- Inform Veterans of the almost 200 ***PTSD treatment programs*** across the country including the PTSD specialists offering outpatient services located at all VA medical centers.
- Inform Veterans that the VA offers ***free treatment*** for any physical and mental health condition related to MST. Every VA health care facility has an MST Coordinator who serves as a contact person for MST-related issues and who can assist Veterans in accessing care.
- Inform Veterans that other resources outside of the VA may be available. For instance, the ***Cohen Veterans Network*** provides mental health care for Veterans and their families in 20 different states, regardless of discharge status or combat experience. Similarly, the ***Headstrong Project*** is a non-profit organization providing confidential PTSD treatment to Veterans, service members and their families.

There is no single cause of suicide. It is often the result of a complex interaction of risk and protective factors at the individual, interpersonal, community, and societal levels. To prevent Veteran suicide, we must maximize protective factors and minimize risk factors at all of these levels.

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