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Understanding Nonsuicidal Self-Injury and Suicidal Risk Among Veterans

From Science to Practice

Using Research to Promote Safety and Prevent Suicide

Overview

Nonsuicidal self-injury (NSSI), also referred to as non-suicidal self-directed violence, is the deliberate, self-inflicted destruction of body tissue without suicidal intent.[1] NSSI is sometimes referred to as self-directed violence or deliberate self-harm, and it includes behaviors such as intentionally cutting, hitting, burning, bruising, or scratching oneself, as well as picking at wounds to prevent them from healing.[1]

The association between suicide attempts and NSSI in the general population is stronger than the association between suicide attempts and almost any other risk factor for suicide.[2,3] A meta-analysis found a co-occurrence of NSSI, and suicide attempts in approximately 6% and 26% in the general population and individuals with psychiatric conditions, respectively.[4] This relationship has also been observed among active duty service members, National Guard personnel, and Veterans.[5,6,7] A meta-analysis of the prevalence of NSSI among service members and Veterans found a lifetime prevalence rate of 15.8%.[8] A study utilizing data from the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS) found that as many as 8% of new service members and over 6% of those in active duty have engaged in NSSI in their lifetime.[9] An earlier study estimated this figure to be slightly higher, finding 14% of service members have engaged in NSSI in their lifetime.[10] A study of Gulf-War I-Era Veterans found a 22.4% lifetime prevalence and an 8.10% past-year prevalence of NSSI.[11] Similarly, a study specific to female Veterans found a lifetime prevalence of 13.2%.[12] Among Veterans, NSSI is associated with suicide attempts even after controlling for posttraumatic stress disorder (PTSD), traumatic brain injury (TBI), depression, alcohol dependence, and combat exposure.[6]

Key Findings

- Suicidal ideation among service members and Veterans may emerge before the onset of NSSI.[13,14] NSSI may be associated with a longer period between the onset of suicidal ideation and the first suicide attempt compared to those who do not engage in NSSI, suggesting that NSSI may function as a strategy for emotional regulation that abates the desire to attempt suicide.[13,15] Although NSSI can develop later in life or following a traumatic experience (e.g., military sexual trauma, see below)[16] among a national sample of female Veterans (n=439), it most often had an initial onset pre-military.[12] Greater emotional dysregulation may also increase the likelihood of engaging in NSSI.[15]
- A study involving 152 active-duty soldiers in outpatient mental health care with current suicidal ideation/attempt found that soldiers with a history of NSSI are twice as likely to have a following suicide attempt compared to soldiers without a history of NSSI.[5]
- One study of active duty service members (n=21,449) and recently enlisted members (n=38,507) found younger, female, less educated, and never married individuals were more likely to report NSSI.[9]
- In a sample of Veterans with PTSD, men with a diagnosis of substance use disorder (SUD) had an increased risk of suicide death, and men and women had self-directed violence that resulted in inpatient hospitalization.[17] Among Veterans with PTSD, women were more likely to engage in nonfatal self-directed violence, while men were more likely to die by suicide.[17]
- NSSI has also been associated with interpersonal violence among male Veterans seeking treatment for PTSD. Veterans with recent reports of hitting, cutting, or burning themselves are significantly more likely to threaten or commit violent acts against others than those with no history of NSSI.[18]
- Studies have found a positive relationship between NSSI and prior traumatic experiences, including childhood sexual and physical abuse,[19,20,21] domestic violence, intimate partner violence (IPV), cumulative trauma exposure, dissociative disorders, and PTSD.[20]

Understanding Nonsuicidal Self-Injury and Suicidal Risk Among Veterans

- Military sexual trauma (MST) may be a risk factor for NSSI. Over 25% of Veterans with a history of MST report a history of NSSI,[16,22] while just 6% to 17% of all Veterans report a history of NSSI.[6,10,23,24] Research suggests that cutting is one the most utilized methods of NSSI among Veterans who have experienced MST.[16,22] For Veterans with a history of both MST and NSSI, NSSI usually begins after the MST. Survivors of MST with a history of NSSI also report more severe recent suicidal ideation, PTSD symptoms, and trauma-related cognitions, such as perceptions of themselves or the world and feelings of self-blame.[16]
- Data from the 2019-2020 National Health and Resilience in Veterans Study found that Veterans who endorsed lifetime NSSI were more likely to be female, younger, non-Caucasian, single, and have a lower annual income than Veterans who did not endorse lifetime NSSI. They were more likely to report adverse childhood experiences (ACEs), military sexual trauma (MST), and total lifetime traumas.[21]
- A study examining the relationship between military sexual assault (MSA) and NSSI in Veterans found that Veterans with a history of MSA had about 2.5 times higher risk of engaging in NSSI, even after controlling for demographic and NSSI related factors.[25]
- Veterans who endorsed a lifetime history of NSSI were younger, identified as White, Asian or mixed race, were disabled, and had been deployed. They were also more likely to experience poor psychosocial functioning, worse PTSD and depression, and have attempted suicide over their lifetime or have current thoughts of suicide. Men with lifetime NSSI were more likely to report lifetime suicidal ideation. Women, however, were more likely to have attempted suicide. Wall/object punching was the most common form of NSSI reported by men and women Veterans throughout their life.[11]
- Among Veterans who engaged in NSSI within the past year (n=61), anger was the most common antecedent.[26] Anger was present prior to NSSI 71.8% of the time, whereas sadness was present an average of 46.07% of the time, and fear was present 31.48% of the time. Over half of the Veterans included in the study (57%) said that anger always preceded their NSSI behaviors.[26]
- Being subjected to interpersonal distress preceded and predicted NSSI urges in a study comprised of Veterans with NSSI disorder.[27] These stressors did not precede or predict NSSI engagement. The most endorsed NSSI methods were wall/object punching, followed by hitting oneself, biting, scratching, banging one's head, and burning oneself in Veterans with NSSI disorder.[27]
- In a sample of Veterans (n=88), NSSI was associated with increased suicidal thoughts, behaviors, and intense psychosocial impairment, even after adjusting for PTSD, major depressive disorder (MDD), and alcohol use disorder (AUD).[28]
- Another study found that Veterans who had NSSI had increased suicide attempts, ideation, MDD, PSTD and poor psychosocial functioning compared to Veterans who were at low risk for NSSI. In this group, wall punching/banging were the most common NSSI methods.[29]
- Transgender and Gender Diverse (TGD) Veterans report less NSSI history than TGD non-Veterans, however, TGD Veterans were more likely to have been hospitalized due to their self-harm.[30] Higher hospitalization rates among TGD Veterans may reflect the severity of the NSSI methods in Veterans compared to non-Veterans.[30]
- Traditional masculine gender role norms can contribute to NSSI in Veterans. Emotional control was strongly associated with lifetime engagement of NSSI behaviors, and the normalization of violence was associated with NSSI. These norms seemed to affect women Veterans and women Veterans who were sexual minorities the most.[31]
- Compared to the general population, Veterans were more likely to have hurt themselves due to a stunt, dare, or by encouraging physical fights. Veterans were also older at age of NSSI onset and older at age of last NSSI engagement. While the general population were more likely to engage in NSSI as a way of self-punishment as a response to negative emotions, Veterans, engaged in NSSI as an anti-suicide function.[32]
- One study found that cutting was the only NSSI method significantly associated with suicide attempts including those requiring medical attention, and non-ambivalent attempts among substance-dependent patients in residential treatment (n=203).[33]
- Although not linked to suicide attempts, punching walls or other objects is a common form of NSSI among male Veterans.[34] Wall and object punching is positively associated with impulsivity and anger. A study that included Veterans with at least one psychiatric diagnosis found that 42% reported engaging in wall/object punching within the past year, suggesting a need for emotional regulation and distress tolerance interventions.[34]

Ways You Can Help

- Assess survivors of MST for new NSSI behaviors even if they did not report a history of NSSI, because MST survivors may be at increased risk for NSSI.[16]
- Consider screening for NSSI when assessing a Veteran's risk for engaging in interpersonal violence, since research has found a connection between interpersonal violence and NSSI.[18]
- Assess suicidal behaviors and NSSI in Veterans with both PTSD and substance use disorder, since substance use disorder is associated with both suicidal behaviors and NSSI among Veterans with PTSD.[17]
- The Screen for Nonsuicidal Self-Injury (SNSI) could be used to identify patients who engage in NSSI that are more likely to benefit from a more comprehensive assessment and treatment programs.[35] The SNSI was found to be an important initial step in developing clinical pathways.[35]
- Learn about Veterans' motivations for engaging in NSSI behaviors, when they engage in the behaviors, and the effects the behaviors have on their thoughts and feelings. This information can support treatment and safety planning, since NSSI may serve as a strategy for emotion regulation, increasing the timespan between the first experience of suicidal ideation and a suicide attempt by abating the desire to attempt suicide.[13]
- Consider providing cognitive behavioral therapy or dialectical behavior therapy, which have been found to be helpful in treating NSSI patients in the general population, though the efficacy of these treatments is unclear when researchers distinguish between suicidality and the intent behind NSSI.[36,37,38,39]
- The VA/DoD Clinical Practice Guidelines for Assessment and Management of Patients at Risk for Suicide provide additional guidance on the assessment and treatment of self-directed violence.
- VA's ***Suicide Risk Management Consultation Program*** provides free consultation, support, and resources to help providers intervene effectively in difficult cases, including cases of NSSI.

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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