Older Veterans (Aged 55+) and Suicide Risk

From Science to Practice

Using Research to Promote Safety and Prevent Suicide

Overview

More than half of all Veterans (64.9%) are 55 years of age or older.[1] In 2021, suicide rates among Veterans aged 55-74 were 29.9 per 100,000 and 32.1 per 100,000 for Veterans over 75.[1] From 2020-2021 the suicide rate among Veterans aged 55-74 rose 7.4%; and among Veterans aged 75 and older, the suicide rate fell 8.0%.[1] Clinicians may be able to help prevent suicide in older Veterans by partnering in collaborative safety planning,[2] considering the role of health-related concerns and functional limitations on suicide risk,[3,4,5] using integrated approaches to care that address both physical and mental health concerns,[6] and making use of interventions that promote social connectedness.[7]

Key Findings

Suicide Risk

- The odds of using a firearm in a fatal suicide attempt are nearly three times greater for Veterans ages 65 and older than they are for younger age cohorts.[8]
- In 2021, 86.5% of Veterans aged 75 and older who died by suicide used a firearm, and 72.7% of those aged 55-74 died by using a firearm. Less than 63% of Veterans younger than 55 used a firearm in a fatal suicide attempt.[1] As many as 9 in 10 suicide attempts that involve firearms prove lethal.[9]
- A study comparing comorbidity profiles (Minimal Comorbidity, Chronic Pain-Osteoarthritis, Depression-Chronic Pain, Depression-Medical Comorbidity, and High Comorbidity) in VHA older adults last seen in primary care prior to suicide attempt found that the highest proportion of fatal suicide attempts occurred in the Chronic Pain-Osteoarthritis (86%) and Minimal Comorbidity groups (73.4%), averaging 3-4 months between last visit and attempt. The High Comorbidity group (9.6%) had the lowest proportion of fatal suicide attempts but were more likely to have documented suicidal ideation on their medical records when compared to the other groups. Compared to the other groups, the high comorbidity groups had the highest proportion of minorities and lowest proportion of married individuals. The Chronic Pain-Osteoarthritis group had the highest proportion of married individuals.[10]
- About half of older Veterans who attempted or died by suicide did not have a psychiatric diagnosis or history of suicide attempt [10,11] Conversely, older adults in the general population who died by suicide were more likely to meet criteria for a psychiatric disorder at time of death than those who died a natural death.[12]
- Times of transition, such as returning from incarceration and moving to or from residential long-term care (e.g., nursing homes, assisted living facilities, or continuing care retirement communities), may be periods of especially pronounced risk for suicide among adults ages 50 and older.[13,14] Among people ages 55 and older in the general population, 2.2% of suicides were associated with residential long-term care, and 43% of those were associated with transitioning into or out of residential long-term care.[13]
- Veterans discharged from VHA Community Living Centers (CLC) were found to be at increased suicide risk when compared to the general VHA patient cohort when studying unadjusted analyses and analysis adjusted for age and sex however, after controlling for diagnoses this became nonsignificant.[15]
- Social connectedness has been shown to be a protective factor against suicidal ideation for Veterans ages 60 and older regardless of combat history.[7]
- Loneliness is a risk factor for suicidal ideation. When surveyed, a predominantly older (mean age=62) sample of US Veterans reported feeling lonely sometimes (37.2%) or often (19.7%). Veterans who reported "often" feeling lonely had 12 times greater odds of current suicidal ideation. Veterans who reported "sometimes" feeling lonely had 3 times greater odds of current suicidal ideation when compared to those who do not feel lonely.[16]
- In a study of predominantly older (mean age=62) Veterans, high or average perceived purpose in life

VA | U.S. Department of Veterans Affairs

was associated with a 42-94% decrease in odds of screening positive for major depressive disorder (MDD), anxiety, posttraumatic stress disorder (PTSD), substance use disorder (SUD), suicide attempt, suicide ideation, and future suicidal intent when compared to Veterans with low perceived purpose in life.[17]

- Subjective cognitive difficulties may be a risk factor for suicidal ideation and suicidal intent. In the National Health and Resilience in Veterans Study, middle-aged and older Veterans (ages 50+) who reported subjective cognitive difficulties were more likely to report suicidal ideation in the past two weeks or current suicidal intent both in the absence of, or in addition to, PTSD status.[18]
- Older Veterans reporting subjective cognitive difficulties with memory were significantly more likely to report current suicidal intent than Veterans who did not have subjective cognitive difficulties.[18]
- An analysis of comorbidity in Veterans ages 65 and older who were last seen in primary care before their first documented suicide attempt identified 5 comorbidity clusters: chronic pain and osteoarthritis (30.1%), minimal comorbidity (23.2%), depression and chronic pain (22.9%), depression and another medical comorbidity (16.5%), and high comorbidity (7.3%).[10] Those in the high comorbidity group were most likely to have been seen by a mental health professional in primary care and least likely to have a fatal suicide attempt.[10] Those in the minimal comorbidity and chronic pain and osteoarthritis groups were most likely to have died by suicide, with more than 80% using a firearm.[10]
- Among Veterans over 65 (n=8,955), frailty increased the risk of suicide attempt when compared to Veterans without frailty. The largest cumulative incidence of any suicide attempt over time was among Veterans with moderate frailty. Factors independently associated with increased risk of suicide attempt were bipolar disorder, depression, anxiety, chronic pain, use of durable medical equipment and lung disease.[4]

Older Veterans vs. Younger Veterans

- Veteran suicide decedents ages 45 and older more commonly reported physical health problems than younger Veteran suicide decedents.[9] Physical health problems that lead to functional limitations are associated with suicide risk among the older general population,[19] and are more prevalent among Veterans ages 65 and older than in the general population.[9] In 2019, poor physical health was identified as a factor in one in five suicide deaths in the 65 and older age group.[20] Veteran suicides related to poor physical health increased with age from 19.25% for Veterans aged 35-64 and 61.79% for Veterans over 65.[20]
- A study of patients who visited a Veterans Health Administration (VHA) medical facility in the year prior to a suicide attempt found that older adults (age ≥50) were less likely to visit a mental health specialist when compared to their younger counterparts. A medical record review found that patients over 50 were less likely to have been screened for impulsivity, firearms access, engagement in safety planning, referrals to mental health services and consideration of psychiatric hospitalization.[21]
- A study examining the characteristics of individuals who utilized the Veterans Crisis Line (VCL) with and without prior VHA use found that those aged 50-59 called the VCL more often than both younger and older age groups, and that the number of calls decreased as age increased.[22] Among a sample of Veterans who called the VCL, older adults (age ≥60) reported physical health issues, loneliness, and death of loved ones more frequently compared to their younger counterparts. Older adults were less likely to report economic hardships, mental health issues, PTSD symptoms, drug dependence, and interpersonal issues.[23]
- A study examining trends in self-reported physical, cognitive, and mental health data in Veterans found that: physical health scores were the highest at lower age ranges, had no change between ages 40 and 79, and were lowest after age 80; Cognitive scores by age increased in a linear trend until its peak at age range 70-79 and decline after age 80. Mental health scores also increased linearly until age 79 where it hit its peak at age range 80-89, and then declined at age 90.[24]

Mental Health

- Veterans ages 65 and older who report PTSD symptoms have an elevated prevalence of mental distress and suicidal ideation compared with those who do not report either PTSD symptoms or a history of trauma.[25] Older Veterans who report PTSD symptoms are also more likely than older Veterans who either do not report PTSD symptoms or a history of trauma to report poor health, tobacco use, and low social support.[25]
- Mild cognitive impairment (MCI) and dementia may

be associated with suicide attempts among older Veterans. A study examining MCI, dementia and suicide in a sample of Veterans over 50 who were diagnosed with MCI found that the risk of suicide attempt was around 1.2-1.3 times higher in Veterans with MCI/dementia diagnosis when compared to Veterans without MCI or dementia.[5] Recency of diagnosis was also associated with increased risk of suicide attempt. Veterans with a recent MCI diagnosis were at 73% higher risk for suicide and Veterans recently diagnosed with dementia had a 44% higher risk when compared to Veterans without MCI/dementia. Individual psychiatric comorbidities or having any psychiatric disorder were not found to be significant moderators in the association of MCI/dementia and suicide attempts.[5]

- Among Veterans ages 50 and older who had dementia, roughly 25% were diagnosed with at least one comorbid mental health disorder.[26] The prevalence of mental health disorders and suicidal behavior differed between dementia subtypes, with frontotemporal dementia having the highest prevalence followed by vascular dementia, Lewy body dementia, mixed dementia, and Alzheimer's disease.[26]
- Among Veterans ages 60 and older, perception of stigma related to mental illness is associated with decreased mental health care utilization.[27] And negative beliefs about mental health care, such as distrust of mental health professionals, are associated with decreased mental health care utilization in older Veterans who experience distress.[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 suicidal ideation, anxiety, and PTSD than Veterans who endorse these stereotypes.[28]
- In a study examining age-related concerns among a sample of male Veterans who called the suicide crisis line, age was found to contribute greatly to loneliness and mental illness in older Veterans who were less likely to report mental health concerns when compared to their younger counterparts.[29]
- Among male Veterans ages 60 and older, 6% reported current or recent (past two weeks) suicidal ideation. Older male Veterans who endorsed current or recent suicidal ideation did not receive mental health treatment.[6] Only 6% of older Veterans disclosed current mental health care usage and only 25% who screen positive for a current psychiatric disorder were using services.[27]

Combat Exposure and Trauma

- Veterans ages 60 and older with a history of combat who served in World War II, the Korean War, or the Vietnam War are more likely to experience suicidal ideation than Veterans with no history of combat. Major depressive disorder (MDD) and physical health problems were the strongest risk factors found for suicidal ideation among Veterans with a history of combat, while generalized anxiety disorder was the strongest risk factor found for suicidal ideation among Veterans with no history of combat.[6]
- Longitudinal data of Veterans who served between World War II and the Vietnam War show that depression and anxiety symptoms decreased until age 60, after which they increased. But Veterans exposed to combat experienced a steeper increase in symptoms after age 60, even after other factors, such as self-rated health, were accounted for.[30]
- Trauma stemming from exposure to a life-threatening illness or accident is associated with suicidal ideation in adults ages 55 and older in the general population, with mainly being informed of a life-threatening illness associated with nearly triple the odds of suicidal ideation.[31]
- More than a third (35.9%) of adults ages 65 and older report adverse childhood experiences (ACE). Having experienced any ACE is associated with past-year psychiatric and SUDs and with lifetime suicide attempt.[32]
- Veterans over 60 years of age with either full or subthreshold PTSD reported more ACEs and total traumas than Veterans over 60 without PTSD. The most common traumas included combat exposure, physical or sexual assault, and life-threatening illness or injuries. Older Veterans with full or subthreshold PTSD had higher chances of screening positively for depression, SUD, suicide ideation or attempts, nonsuicidal self-injury (NSSI), and decreased mental, physical, and cognitive functioning.[33]
- A study examining the prevalence of military sexual trauma (MST) among women Veterans over 50 found an association between MST and increased rates of PTSD, depression, suicidal ideation, insomnia, sleep apnea, SUD, AUD, and chronic pain. Women Veterans who reported MST had 7.25 times the odds of PTSD and over twice the odds for depression and suicidal ideation.[34]

Ways You Can Help

- Assess, monitor, and treat Veterans of all ages for suicide risk, and ***develop safety plans*** with older Veterans that include their families and caregivers.
- Screen older adults for lethal means access and provide means ***safety counseling and resources*** in primary care and beyond.[10,21]
- ***Screen older adults for PTSD*** if they endorse a history of trauma, even if the traumatic event occurred long ago. PTSD symptoms in older adults may present decades after the initial exposure to trauma.[10]
- Veterans who screen positive for PTSD should be assessed and monitored for suicide risk. For more information, visit ***VA/DoD Clinical Practice Guidelines on the Management of Posttraumatic Stress Disorder and Acute Stress Disorder*** webpage.
- Encourage Veterans and/or their caregivers to visit ***VA's Dementia Care (including Alzheimer's) resource page*** for more information on what dementia is, different services available (home-based primary care, homemaker and home health aide, respite care, etc) as well as resources for caregiver services.
- Screen older adults who have been through a life-threatening accident or illness for suicidal ideation and other risk factors for suicide, since they may be at elevated risk.[31] Provide extra support and appropriate referrals to help mitigate distress and risk. ***The VA/DoD Clinical Practice Guidelines for Assessing and Managing Patients Risk for Suicide*** can provide more information.
- Ensure added ***whole health support and care*** is provided to older Veterans as they transition from the hospital, rehabilitation centers, or nursing homes to another level of care.
- For Veterans who are lonely, encourage them to reach out to VA's peer support groups or VA's Compassionate Contact Corp (CCC). Find out more on the ***CCC webpage.***
- Make sure Veterans are aware of the Veterans Crisis Line (VCL). If you're a Veteran in crisis or concerned about one, contact the Veterans Crisis Line to receive 24/7 confidential support. You don't have to be enrolled in VA benefits or health care to connect. To reach responders, Dial 988 then Press 1, ***chat online***, or text 838255.
- VAMobile has ***mental health and behavioral therapy apps available*** for Veterans to download. These apps assist with alleviating trauma symptoms, creating healthy coping mechanisms, and providing support for Veterans in need all at the touch of their fingertips.

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.

References

1 Office of Mental Health and Suicide Prevention (2023) 2023 National Veteran Suicide Prevention Annual Report.

2 Conti, E., Arnspiger, C., Kraus-Schuman, C., Uriarte, J., & Batiste, M (2016). Collaborative safety planning for older adults.

3 Fässberg, M. M., Cheung, G., Canetto, S. S., Erlangsen, A., Lapierre, S., Lindner, R., Draper, B., Gallo, J. J., Wong, C., Wu, J., Duberstein, P., & Wærn, M. (2016). A systematic review of physical illness, functional disability, and suicidal behaviour among older adults. *Aging & Mental Health*, *20*(2), 166–194.

4 Kuffel, R. L., Morin, R. T., Covinsky, K. E., Boscardin, W. J., Lohman, M. C., Li, Y., & Byers, A. L. (2023). Association of frailty with risk of suicide attempt in a national cohort of US Veterans aged 65 years or older. *JAMA Psychiatry, 80*(4), 287–295.

5 Günak, M. M., Barnes, D. E., Yaffe, K., Li, Y., & Byers, A. L. (2021). Risk of suicide attempt in patients with recent diagnosis of mild cognitive impairment or dementia. *JAMA Psychiatry*, *78*(6), 659–666.

6 Fanning, J. R., & Pietrzak, R. H. (2013). Suicidality among older male veterans in the United States: Results from the National Health and Resilience in Veterans Study. *Journal of Psychiatric Research, 47*(11), 1766–1775.

7 Fogle, B. M., Tsai, J., Mota, N., Harpaz-Rotem, I., Krystal, J. H., Southwick, S. M., & Pietrzak, R. H. (2020). The National Health and Resilience in Veterans Study: A narrative review and future directions. *Frontiers in Psychiatry, 11*, 538218.

8 Kaplan, M. S., McFarland, B. H., Huguet, N., & Valenstein, M. (2012). Suicide risk and precipitating circumstances among young, middle-aged, and older male veterans. *American Journal of Public Health, 102* Suppl 1(Suppl 1), S131–S137.

9 Conner, A., Azrael, D., & Miller, M. (2019). Suicide case-fatality rates in the United States, 2007 to 2014: A nationwide population-based study. *Annals of Internal Medicine, 171*(12), 885–895.

10 Morin, R. T., Li, Y., Mackin, R. S., Whooley, M. A., Conwell, Y., & Byers, A. L. (2019). Comorbidity profiles identified in older primary care patients who attempt suicide. *Journal of the American Geriatrics Society, 67*(12), 2553–2559.

11 Simonetti, J. A., Piegari, R., Maynard, C., Brenner, L. A., Mori, A., Post, E. P., Nelson, K., & Trivedi, R. (2020). Characteristics and injury mechanisms of Veteran Primary Care suicide decedents with and without diagnosed mental illness. *Journal of General Internal Medicine,* 10.1007/s11606-020-05787-1.

12 Hernandez, S. C., Overholser, J. C., Philips, K. L., Lavacot, J., & Stockmeier, C. A. (2021). Suicide among older adults: Interactions among key risk factors. *International Journal of Psychiatry in Medicine, 56*(6), 408–421.

13 Mezuk, B., Ko, T. M., Kalesnikava, V. A., & Jurgens, D. (2019). Suicide among older adults living in or transitioning to residential long-term care, 2003 to 2015. *JAMA Network Open, 2*(6), e195627.

14 Barry, L. C., Steffens, D. C., Covinsky, K. E., Conwell, Y., Li, Y., & Byers, A. L. (2018). Increased risk of suicide attempts and unintended death among those transitioning from prison to community in later life. *The American Journal of Geriatric Psychiatry : Official Journal of the American Association for Geriatric Psychiatry, 26*(11), 1165–1174.

15 Cooper, S. A., Szymanski, B. R., Karel, M. J., Katz, I. R., & McCarthy, J. F. (2021). Suicide among veterans receiving Veterans Health Administration home based primary care and following discharge from community living centers. *Suicide & Life-Threatening Behavior, 51*(6), 1055–1066.

16 Straus, E., Norman, S. B., Tripp, J. C., Tsai, J., Sippel, L. M., Jeste, D. V., Southwick, S. M., & Pietrzak, R. H. (2022). Behavioral Epidemic of Loneliness in Older U.S. Military Veterans: Results From the 2019-2020 National Health and Resilience in Veterans Study. *The American Journal of Geriatric Psychiatry : Official Journal of the American Association for Geriatric Psychiatry, 30*(3), 297–310.

17 Fischer, I. C., Tsai, J., Harpaz-Rotem, I., McCutcheon, V. E., Schulenberg, S. E., & Pietrzak, R. H. (2023). Perceived purpose in life, mental health, and suicidality in older U.S. military veterans: Results from the National Health and Resilience in Veterans Study. *The American Journal of Geriatric Psychiatry : Official Journal of the American Association for Geriatric Psychiatry, 31*(2), 87–93.

18 Cations, M., Cook, J. M., Nichter, B., Esterlis, I., & Pietrzak, R. H. (2023). Subjective cognitive difficulties and posttraumatic stress disorder interact to increase suicide risk among middle-aged and older US military veterans. *International Psychogeriatrics,* 1–9.

19 Bickford, D., Morin, R. T., Woodworth, C., Verduzco, E., Khan, M., Burns, E., Nelson, J. C., & Mackin, R. S. (2021). The relationship of frailty and disability with suicidal ideation in late life depression. *Aging & Mental Health, 25*(3), 439–444.

20 Phillips, J. A., & Hempstead, K. (2022). The role of context in shaping the relationship between physical health and suicide over the life course. *SSM - Population Health, 17*, 101059.

21 Simons, K., Van Orden, K., Conner, K. R., & Bagge, C. (2019). Age Differences in Suicide Risk Screening and Management Prior to Suicide Attempts. *The American Journal of Geriatric psychiatry : Official Journal of the American Association for Geriatric Psychiatry, 27*(6), 604–608.

22 Britton, P. C., Kopacz, M. S., Stephens, B., & Bossarte, R. M. (2016). Veterans Crisis Line callers with and without prior VHA service use. *Archives of Suicide Research : Official Journal of the International Academy for Suicide Research, 20*(3), 314–322.

23 Rasmussen, K. A., King, D. A., Gould, M. S., Cross, W., Tang, W., Kaukeinen, K., Tu, X., & Knox, K. L. (2017). Concerns of older veteran callers to the Veterans Crisis Line. *Suicide & Life-Threatening Behavior, 47*(4), 387–397.

24 Overstreet, C., & Pietrzak, R. H. (2022). Paradoxical age-related improvement in mental health in U.S. military veterans: Results from the National Health and Resilience in Veterans study. *International Journal of Geriatric Psychiatry, 37*(10),10.1002/gps.5804.

25 Durai, U. N., Chopra, M. P., Coakley, E., Llorente, M. D., Kirchner, J. E., Cook, J. M., & Levkoff, S. E. (2011). Exposure to trauma and posttraumatic stress disorder symptoms in older veterans attending primary care: comorbid conditions and self-rated health status. *Journal of the American Geriatrics Society, 59*(6), 1087–1092.

26 Lai, A. X., Kaup, A. R., Yaffe, K., & Byers, A. L. (2018). High occurrence of psychiatric disorders and suicidal behavior across dementia subtypes. *The American Journal of Geriatric Psychiatry : Official Journal of the American Association for Geriatric Psychiatry, 26*(12), 1191–1201.

27 Blais, R. K., Tsai, J., Southwick, S. M., & Pietrzak, R. H. (2015). Barriers and facilitators related to mental health care use among older veterans in the United States. *Psychiatric Services (Washington, D.C.), 66*(5), 500–506.

28 Levy, B. R., Pilver, C. E., & Pietrzak, R. H. (2014). Lower prevalence of psychiatric conditions when negative age stereotypes are resisted. *Social Science & Medicine (1982)*, *119,* 170–174.

29 King, D. A., O'Riley, A. A., Thompson, C., Conwell, Y., He, H., & Kemp, J. (2014). Age-related concerns of male veteran callers to a suicide crisis line. *Archives of Suicide Research : Official Journal of the International Academy for Suicide Research, 18*(4), 445–452.

30 Lee, H., Aldwin, C. M., Choun, S., & Spiro, A. (2019). Impact of combat exposure on mental health trajectories in later life: Longitudinal findings from the VA Normative Aging Study. *Psychology and Aging, 34*(4), 467–474.

31 Beristianos, M. H., Maguen, S., Neylan, T. C., & Byers, A. L. (2016). Trauma exposure and risk of suicidal ideation among older adults. *The American journal of Geriatric Psychiatry : Official Journal of the American Association for Geriatric Psychiatry, 24*(8), 639–643.

32 Rhee, T. G., Barry, L. C., Kuchel, G. A., Steffens, D. C., & Wilkinson, S. T. (2019). Associations of adverse childhood experiences with past-Year DSM-5 psychiatric and substance use disorders in older adults. *Journal of the American Geriatrics Society, 67*(10), 2085–2093.

33 Moye, J., Kaiser, A. P., Cook, J., & Pietrzak, R. H. (2022). Post-traumatic stress disorder in older U.S. military veterans: Prevalence, characteristics, and psychiatric and functional burden. *The American Journal of Geriatric Psychiatry : Official Journal of the American Association for Geriatric Psychiatry, 30*(5), 606–618.

34 Gibson, C. J., Maguen, S., Xia, F., Barnes, D. E., Peltz, C. B., & Yaffe, K. (2020). Military sexual trauma in older women veterans: Prevalence and comorbidities. *Journal of General Internal Medicine, 35*(1), 207–213.