Rurality and Suicide Risk Among Veterans

From Science to Practice

Using Research to Promote Safety and Prevent Suicide

Overview

People who live in rural areas, including Veterans, die by suicide at higher rates than people in cities.[1,2,3,4] Strides have been made in closing the overall gap among VHA users,[5] but some groups of rural Veterans such as Hispanics and American Indian and Alaska Natives[6] are experiencing a growing disparity.[7] Rural suicide risk factors include greater access to lethal means, greater economic distress, lower quality behavioral health care, and remoteness.[3,8] Individual risk factors such as race, sex, and mental illness remain important across both rural and urban settings.[9] Clinicians can help rural Veterans by providing culturally acceptable and feasible care within the context of available resources at the local level. The public health approach provides a framework for understanding the individual within their environment, attending to needs at the individual clinical level as well as at the interpersonal and community levels.

Key Findings

Demographics

- Rural communities differ from urban communities in their demographic composition.[6,7,10,11,12,13]
- Fifty-five percent (55%) of rural Veterans Health Administration (VHA) participants are aged 65 or older compared to 46% of urban VHA participants.[10]
- Among the general population, the rural group with the fastest growing suicide rate is American Indian and Alaska Native (AI/AN) individuals.[2,14]
- Among Veterans living in non-metropolitan areas, AI/AN Veterans have twice the risk for suicidal ideation compared to White Veterans.[5]
- When controlling for race and ethnicity, rural residence is associated with a 41% increase in suicide risk among Hispanic VHA users,[7] but is not associated with increased suicide risk among non-Hispanic White or Black VHA users.[7]

Barriers to Health Care Access

- Rural adults are more likely than urban adults to experience a health service deficit, not have had a health exam in the past year, and not have a primary care provider.[15]
- Rural residents may have less access to quality behavioral health care than urban residents, potentially contributing to increased suicide risk. Another rural barrier to care includes less health care seeking due to cultural attitudes and stigma.[16]
- Rural Veterans report that barriers to mental health service use may also include a preference for independence and self-reliance,[17] the perception that seeking help for mental health is an admission of weakness, and the belief that seeking help for mental health may prevent others who are suffering more from accessing care.[18,19]
- Rural Veterans may lack transportation access and often must travel long distances to access mental health care, in part due to the scarcity of mental health care providers in rural settings.[18,20] They are also less likely to receive mental health treatment for the recommended duration than those in urban areas.[21]

Access to Firearms

- With a case fatality rate of over 89%, firearms are the most lethal method of attempting suicide.[8]
- About 46% of adults who live in rural areas own a firearm compared to 28% of adults who live in suburban areas and 19% of adults who live in urban areas.[22]
- Suicide deaths are nearly twice as likely to involve a firearm in rural areas than in urban areas. In rural counties, 60% of suicides involved a firearm. This partially accounts for the rural-urban suicide death disparity.[8]

Spatial Effects

- In a study on national firearm and drug-related mortality rates from 2012-2016 in 1,974 U.S. rural counties, counties with a combination of recreational economies (e.g.,

entertainment, restaurants), substantial Veteran and Native American populations, high home prices, high drug death rates, high opioid prescribing, and high violent crime had the highest rate of firearm suicide deaths.[23] Counties with a combination of farming economies, high population loss (number of residents declined between 1990 and 2010), low home prices, low drug death rates, low opioid prescribing, and low violent crime had the lowest rate of firearm suicide deaths.[23] The counties with the highest firearm suicide rates had more than double the rate of firearm suicide death than the counties with the lowest firearm suicide rates.[23]

Economic Factors

- An analysis of data from 16 U.S. states over seven years found an association between suicide and poverty across gender and age groups.[24]
- Rural areas tend to have higher rates of negative economic indicators, including poverty and unemployment, and rely more on production industries for economic well-being than urban areas.[25] Suicide is associated with economic cycles, with the rate falling during economic expansion and rising during periods of contraction.[26]
- In rural areas, short-term economic crises[27] and gross domestic product reduction seem to result in increases in suicide rates of women.[8] Long-term economic crises, chronic poverty and unemployment appear to have a greater impact suicides rate of men.[27]
- In rural Alaska, more access to opportunities for higher median incomes was associated with lower suicide rates, while remoteness was associated with higher suicide rates.[8]

Substance Use Disorder

- Substance use disorder (SUD) is associated with an increased risk for suicidal ideation, suicide attempts, and death by suicide[28] and may be an important contributor to rural suicides. However, the evidence is mixed.[8]
- A retrospective study of over 6 million unique rural and urban VHA users between 2003 and 2017 found that SUD was a strong predictor of suicide risk among rural Veterans.[5]
- Substance use may be a driver for the rural-urban disparity in suicides, especially among men,[29] AI/AN populations,[30,31] and people with previous suicide attempts.[32]
- However, a systematic review determined that, while 4 studies found substance use to be a suicide risk factor among rural residents, 1 study found that rural suicide decedents were less likely to have had an issue with substance misuse than urban decedents.[8]

Ways You Can Help

- Reduce lethal means access to reduce suicide deaths.[8] Lethal means counseling and distributing gun locks are effective at encouraging safer firearm storage.[33,34] Ask Veterans if they keep firearms at home.
- Discuss ways they can protect themselves and others at home from harm, including by ***safely storing firearms***. Avoid sounding judgmental; begin conversations with open-ended questions (e.g., "Do you have any concerns about the accessibility of your firearms?").
- Work with substance misuse treatment providers to integrate appropriate treatment into care for Veterans with substance or alcohol use disorders. The ***VA/Department of Defense "Management of Substance Use Disorders"*** clinical practice guideline offers guidance on the treatment of Veterans with a substance or alcohol use disorder.
- Educcate yoursekf on ***VA Center for Medication Safety resources*** and expand naloxone (a medication to reverse opioid overdose) distribution to Veterans who use prescribed or unprescribed opioid medication or drugs.
- Maximize the use of telehealth for mental health care delivery to rural Veterans. Develop virtual groups focused on safety planning, increasing engagement and connection with others, and providing resources to support Veterans and their families. ***VA Video Connect*** lets Veterans and their caregivers meet with VA health care providers via live video on any computer, tablet, or mobile device with an internet connection.
- ***The Veterans Geography of Opportunity Tool*** is an online toll developed by VA's Office of Health Equity. It includes a map of demographic data and factors that influence health such as access to exercise opportunities, overdose deaths, frequent mental distress, high school graduation, homeownership, income inequality, residential segregation, and more. The data are available at the county level and are pulled from ***VA National Center for Analysis and Statistics*** and

County Health Rankings & Roadmap.

- Connect Veterans with job search and skill-building resources. VA offers career and employment resources such as ***Veteran Readiness and Employment*** programs and benefits , which includes the ***Compensated Work Therapy*** (CWT) program. Contact your local CWT program, for evidence-based and informed vocational services.
- ***The Together With Veterans*** (TWV) community-based suicide prevention program for rural Veterans supports the dissemination of evidence-based best practices to reduce stigma, promotes help-seeking and lethal means safety, provides suicide prevention trainings, enhances primary care suicide prevention, and improves quality care access.[35]

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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