

Sleep Disturbances and Suicide Risk



From Science to Practice

Using Research to Promote Safety and Prevent Suicide

Overview

People with sleep disturbances are at increased risk for suicidal ideation and behavior.^{1,2,3,4} Certain sleep disturbances may also be proximal or acute risk factors for suicide death.^{4,5} Patients with mental health conditions and people with chronic pain who have comorbid sleep disturbances are especially at risk for suicidal behavior.^{6,7,8,9} However, not all sleep disturbances confer the same risk.¹ Treatment for sleep disturbances may reduce suicide risk, but more research is needed.^{10,11,12}

Key Findings

Insomnia and nightmares are associated with an increased risk for suicidal behavior including suicide ideation, suicide attempt, and completed suicide.^{4,5} Other sleep disturbances, including and sleep apnea, are significantly associated with suicidal ideation but not necessarily with other suicidal behavior.^{3,9,13}

Insomnia

- Insomnia is a risk factor for suicidal ideation and behavior, independent of other known risk factors, such as anxiety, depression, and substance use disorders.^{3,14}
- One study found that patients with insomnia and a mental health condition were 18 times more likely to attempt suicide than patients with neither.¹⁴
- Among people with a history of suicide attempts, past-year remission from suicide attempts and from suicidal ideation was associated with being free of sleep problems.¹⁵
- In a study of 200 treatment-seeking active-duty Service members, researchers found that insomnia symptoms had an indirect effect on suicidal ideation through thwarted belongingness and perceived burdensomeness.¹⁶

- Another study found the relationship between insomnia and current suicidal ideation was fully mediated by thwarted belongingness among Veterans, however it was only partially mediated among civilians and active Service members.¹⁷
- Pre-deployment insomnia may increase the risk of post-deployment suicidal ideation and posttraumatic stress disorder (PTSD). A study of US Army soldiers found pre-deployment insomnia to be associated with a 50% increased risk of PTSD and more than a 40% increased risk of suicidal ideation post-deployment. These risks were even further elevated in those with no lifetime history of PTSD or suicidal ideation.¹⁸

Behavioral Treatment for Insomnia

- Behavioral treatment of insomnia is the recommended first-line treatment for insomnia, and there is data regarding behavioral treatment for insomnia within the context of suicide. One study found that 8 weeks of cognitive behavioral therapy (CBT) was associated with reduced insomnia when compared with treatment as usual (TAU). This may be due to a reduction in nightmare-related awakenings, fear of sleep, and sleep window stabilization. Suicidal ideation and depression did not significantly decrease with 8 weeks of CBT when compared to TAU.¹⁹
- Evidence suggests that cognitive behavioral therapy for insomnia (CBT-i) may reduce suicidal thoughts among individuals with insomnia.^{20,21,22} Initial data found that a brief, four session form of CBT-i for Veterans presenting with insomnia and suicidality significantly reduced insomnia compared to sleep hygiene.²³ Further work examining this treatment approach, which also includes safety planning, may not only reduce insomnia but also suicidal ideation among Veterans.²⁴

Nightmares

- Nightmares are associated with suicidal ideation even after controlling for other risk factors (e.g., depression and insomnia); whether they increase one's risk for suicidal behavior independent of other risk factors is uncertain.^{3,25,26,27}

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- One study found that people with PTSD who experienced nightmares were more likely than those who did not to report suicidal behavior. The relationship between nightmares and suicidal behavior may be partially explained by feelings of defeat, entrapment, and hopelessness.²⁸
- A study examined what aspects of nightmares differentiated between single versus multiple suicide attempts. Nightmare frequency was found to significantly predict multiple suicide attempts, while nightmare severity was not found to be a predictive aspect of nightmares for multiple suicide attempts.²⁹ A night with more nightmares than usual was associated with increased suicidal ideation.³⁰
- Sleep apnea is associated with suicidal ideation and suicide planning, even after controlling for covariates.^{13,31} One study found that suicidal ideation decreased among people treated with continuous positive airway pressure, or CPAP.³²
- People with restless legs syndrome are significantly more likely than people without the condition to attempt or die by suicide, even after controlling for other risk factors.³³
- Nocturnal wakefulness itself — a result of sleep disturbances — may contribute to suicide risk, as suicides overall are more likely to occur at night (11 p.m. – 6 a.m.).^{34,35} However, there is some variance by age group. Suicides peak at night among people ages 18–39, but during the day among people aged 40 and older.³⁴
- Shift work has been identified as a risk factor for suicidal ideation.³⁶
- An ecological momentary assessment study found that among those already reporting suicidal ideation, less sleep time was associated with high levels of next-day suicidal ideation. Poor sleep quality has been shown to be associated with increased levels of next-day suicidal ideation.^{37,30}
- Assessing for and treating sleep disturbances may prevent suicide. When considering treatments for patients with sleep disorders, be aware that hypnotic medications, including zolpidem, carry their own risks for suicidal ideation and behavior.^{38,39}

Other Sleep Disturbances

Ways You Can Help

- Ask Veterans about sleep health in your clinical assessments. Familiarize yourself with The VA/DoD Clinical Practice Guideline for the **Assessment and Management of Patients at Risk for Suicide** recommends screening patients for sleep disorders, including insomnia, in suicide risk evaluations.
- VA/DoD's Clinical Practice Guideline on **The Management of Chronic Insomnia Disorder and Obstructive Sleep Apnea** describes the critical decision points in the management of Chronic Insomnia Disorder and Obstructive Sleep Apnea and provides clear and comprehensive evidence-based recommendations.
- Inform Veterans about **VA's Path to Sleep**, a program to help with a variety of sleep challenges. This program can help with screening for sleep disorders, understanding sleep hygiene, self-managing insomnia, and learning about sleep apnea.
- CBT-i is the first-line treatment for chronic insomnia and may, in turn, help with reducing suicide risk. Brief CBT-i can be delivered in the primary care setting. And the **CBT-i Coach app** for Veterans is a helpful adjunct to treatment.
- Licensed VA behavioral health providers have the ability to obtain training in CBT for Insomnia via resources within the **OMHSP Evidence-Based Practices program** or **VA Center for Integrated Healthcare**, so they can become certified in providing this behavioral treatment to Veterans.

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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