Defense Health Agency (DHA) Clinical Communities Speaker Series

2024 MAY CCSS: Bridging Gaps and Building Resilience in Primary Care

S06: Brief Behavioral Treatment for Insomnia (BBTI): Evidence-Based Practices for Improved Sleep in the Military

Resource List

The scientific statement of the American Health Association (AHA) (2024), discussed the evidence supporting an association between sleep disorders and disturbances and poor brain health ranging from stroke to dementia and opportunities for prevention and early treatment. Understanding the causal role of sleep disorders and disturbances in the development of adverse brain health is complicated by the common development of sleep disorders among individuals with neurodegenerative disease. In addition to the potential role of vascular risk factors as confounders of the sleep/brain health association, sleep disorders can contribute to the development of cardiovascular risk factors, including obesity, hypertension, diabetes, and dyslipidemia. Common sleep disorders, particularly insomnia and OSA are associated with an increased prevalence of cardiovascular risk factors, and adequate sleep duration, quality, and regularity are emphasized for optimal cardiovascular health.

Among people who have had COVID-19, adults with obstructive sleep apnea were more likely to experience long-term symptoms suggestive of long COVID than those without the sleep disorder, according to a large study supported by the National Institutes of Health (NIH) (2023). In fact, multiple analyses of electronic health records (EHR) identified adults with sleep apnea may have up to a 75% higher risk of developing long COVID. The findings is part of the NIH's Researching COVID to Enhance Recovery (RECOVER) Initiative. The researchers also found women in the N3C study had an 89% increased likelihood of having long COVID if they had obstructive sleep apnea, compared to a 59% increased chance for men. The underlying associations aren't clear.

In the article Sleep, Immune Function, and Vaccinations in Military Personnel: Challenges and Future Directions (2023), sleep deficiency is defined as short duration, poor quality, and/or mistimed sleep (e.g., circadian misalignment), negatively impacts the functioning of multiple biological systems and increases the risk of diseases. The relationship between sleep deficiency and health problems is often bidirectional—disease states may also worsen sleep patterns—thereby causing a vicious cycle that complicates the effectiveness of clinical treatment plans and prolongs the rate of recovery. Military personnel are a unique population with a high risk and prevalence of sleep deficiency, with rates nearly double those observed in civilians, according to the 2015 Department of Defense Health Related Behaviors Survey. Factors causing sleep deficiency in the military are widespread and complex, resulting from the interplay of rigorous physical and mental demands incurred during training and deployments, as well as adverse work schedules and challenging sleeping conditions.

According to the authors of Why We Forget and How To Remember Better: The Science Behind Memory (2023), review material you wish to remember shortly before bed. This reduces interference from other information and will increase the likelihood the information is strengthened in memory overnight. If you listen to calm, relaxing music while you are studying, try listening to the same music while you are getting ready for sleep. This may increase the likelihood that the information you studied is reactivated overnight. Don't cram. Space out your learning. Remember: Study, sleep, repeat. Don't pull an all-nighter; you'll remember more information if you give yourself time to sleep. Make sure you get enough sleep each night. Remember that you likely need between 7 and 9 hours in bed trying to sleep each night to get your required amount of sleep.

References

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