COMMENTARY

What to do about the Growing Number of Veterans with Diagnosed Sleep Disorders

Comment on Alexander et al. The National Veteran Sleep Disorder Study: descriptive epidemiology and secular trends, 2000–2010. *SLEEP* 2016;39(7):1399–1410

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There are over 21 million Veterans living in the United States today, nearly 9 million of whom receive healthcare within the Veterans Health Administration (VHA).[1] In fact, the Department of Veterans Affairs (VA) operates the largest integrated healthcare system in the United States.[2] The demographics of Veterans who use VA healthcare are changing. The average age of Veterans receiving VA care is increasing, the number and proportion of users who are women is growing, and the complexity of patients receiving VA services continues to evolve.[1] We know a great deal about VA users, in part, because VA invested in "big data" long before it was fashionable to do so. This has enabled researchers and policymakers to evaluate trends in Veterans healthcare over multiple years and to combine data from multiple sources, including inpatient stays, outpatient encounters, pharmacy, benefits, and demographic data to facilitate our understanding of longitudinal trends in health and healthcare.

In the study by Alexander et al.[3] the authors used extensive administrative VA data to examine trends in sleep disorders diagnoses over eleven consecutive years. Their analysis included over 9 million Veterans who received VA healthcare over that time period. They used sophisticated and thoughtful analytic methods, such as requiring a diagnosis to be documented more than once to increase the likelihood of capturing patients with confirmed sleep disorders (i.e., eliminating those who had the diagnosis listed only once to be "ruled out" with further evaluation). Perhaps the key central finding of their study was the 6-fold increase in rates of diagnosed sleep disorders from 2000–2010, rising from 0.4% of VA users in 2000 to 3% of VA users in 2010. In many ways, it is not surprising that the number of Veterans with diagnosed sleep disorders has increased. As the authors point out, this increase is likely due to a multitude of factors. Veterans commonly suffer from comorbid conditions that increase the risk for sleep disorders, such as obesity and posttraumatic stress disorder; however, the sheer magnitude of this increase presents unique challenges in how VA can efficiently provide high quality care to so many Veterans with sleep disorders.

The most commonly-diagnosed sleep disorder among Veterans in this sample was sleep apnea, followed by insomnia, both of which are common sleep disorders in the US population at large. What is significant about this trend in Veterans is that both sleep apnea and insomnia represent modifiable risk factors for declining physical health and poor mental health. Sleep apnea represents an important modifiable risk factor for cardiovascular disease and hypertension, which were the two most commonly diagnosed conditions in this study sample.[3] Diagnosis and treatment of sleep apnea require considerable resources, and the dramatic increase in diagnosed sleep apnea may be seen as an important advance in care for Veterans. Sarmiento et al.[4] published the results of a 2012 inventory of 111 sleep programs across the VA system and found that these sites accounted for 138,175 clinic visits and 90,904 sleep testing encounters in FY2011. These services were provided by 112.1 physicians and clinical psychologists, 100.4 sleep technologists, and 115.3 respiratory therapists, reflecting over 1,000 clinic visits per provider per year. The study by Alexander et al.[3] suggests that each provider would need to increase their capacity to over 6,000 clinic visits per year or that approximately 600 more providers would be needed to meet the treatment demands of already-diagnosed Veterans with sleep disorders. Given that a large proportion of Veterans with sleep disorders likely remain undiagnosed, meeting the demand for diagnostic testing and treatment services is a daunting task.

Treatment of insomnia represents an additional challenge, as Veterans with PTSD experienced the largest increase in rates of insomnia over the study period and are likely most difficult to treat because of PTSD symptoms (e.g., hypervigilance at night). Challenges in treating insomnia comorbid with PTSD are significant. Sleep disorders centers in VA are often ill-equipped to care for these complex patients without the help of skilled mental health providers, while at the same time, mental health providers are often insufficiently trained to deal with complex sleep-related concerns. In addition, VA has recently developed an initiative to reduce use of sedative hypnotic medications, given concerns about their long-term negative effects and the absence of data to support long-term benefits.[5,6] VA has, however, been at the forefront of training providers to provide evidence based non-medication treatments for insomnia through a national dissemination of cognitive behavioral therapy for insomnia (CBT-I).[7–9] To some extent, these national initiatives have improved access to high quality care for insomnia. In the sleep inventory study, Sarmiento et al.[4] found that over half of VA sleep medicine programs had access to CBT-I resources, which is encouraging; however, results of the initial year of CBT-I dissemination suggest that each trained provider treated a small number of patients each year, not yet meeting the need for CBT-I.

Alexander et al.[3] duly note several limitations of the analyses they present. First, the number of Veterans with a documented diagnosis of a sleep disorder likely reflects only a fraction of the total number of Veterans who have these conditions. Second, the temporal relationship between the onset of sleep disorders and comorbidities cannot be established. Finally,

external factors, such as changes in VA policy regarding services connected conditions or formulary medications my influence cross sectional trends in documented diagnoses. Despite these limitations, this study adds to our understanding of trends in diagnosis rates for sleep disorders within and beyond VA. As public awareness grows and provider training initiatives advance, these trends are likely to continue, expanding the need for specialty care for sleep disorders across the VA system and perhaps nationwide.

The dramatic increase in diagnosed sleep disorders from 2000 to 2010 raises important questions about how best to manage care for Veterans with one or more sleep disorders, but also presents significant opportunities. While VA has recently received negative attention for long wait times for Veterans in need of care, there are specific areas where VA excels. As a self-contained healthcare system, VA can invest in care that improves long-term outcomes and realize the financial benefits decades later. For example, VA has prioritized colorectal cancer screening, and has achieved high rates of screening among Veterans over age 50 using multiple strategies including provider education, clinical reminders and patient outreach.[11] Improving care for Veterans with sleep disorders, particularly sleep apnea and insomnia, has the potential to reduce the impact of comorbid diseases, lower healthcare costs and improve quality of life for Veterans. Given that multiple sleep disorders, including both sleep apnea and insomnia, have known evidence-based treatments that have been shown to improve quality of life over the long term, treatment of sleep disorders is a worthwhile investment for VA. The findings of Alexander et al.[3] point to a unique opportunity for VA to improve quality of care and quality of life for those who have served.

CITATION

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DISCLOSURE STATEMENT

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