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Leaning in to Address Sleep Disturbances and Sleep Disorders in Department of Defense and Defense Health Agency

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LETTER TO THE EDITOR

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In their article entitled, "Engaging Stakeholders to Optimize Sleep Disorders Management in the U.S. Military: A Qualitative Analysis," Abdelwadoud and colleagues conducted focus groups of service members, primary care managers (PCMs), and administrative stakeholders about their perceptions, experiences, roles in sleep management, stated education needs, and management of sleep disorders.[1] The qualitative methods are rigorous, and the findings reinforce and nuance prior results, especially regarding key requirements from PCMs. We feel compelled, however, to further nuance the authors' conclusion that "current military sleep management practices are neither satisfactory nor maximally effective" and offer specific examples of actions taken by the Department of Defense (DoD) and Defense Health Agency (DHA) in recognition of the significance of optimal sleep in combat readiness and overall health of service members. We offer here a succinct list of concrete efforts to support and implement substantial clinical, operational, research, or educational efforts by the DoD or DHA to improve sleep in service members and associated clinical challenges in this unique population.

The challenges identified by Abdelwadoud et al. parallel challenges in sleep medicine in society at large; where sleep disorders are prevalent, there are a limited number of sleep specialists; and inconsistent applications of evidence-based clinical management contribute to poor health and astronomical healthcare costs.[2] Since the onset of Operations Iraqi Freedom and Enduring Freedom, the increase in sleep disturbances and clinically significant sleep disorders, most notably insomnia and obstructive sleep apnea (OSA), has grown by over 650% in the DoD.[3] This unprecedented growth in sleep disorders would pose a challenge to any healthcare organization, especially in primary care as clearly highlighted by PCM interviewees. Importantly, sleep disturbances and disorders are complex in service members, especially for those with posttraumatic stress disorder and/or traumatic brain injury.[4] The needs of patients, providers, and stakeholders who engage in the sleep care of patients presenting with these comorbidities may differ.

The Veterans Affairs/DoD Clinical Practice Guideline for Chronic Insomnia Disorder and OSA (https://www.healthquality.va.gov/guidelines/CD/insomnia/index.asp) directly addresses the standardization of screening and diagnostic assessments and management of the two most prevalent sleep disorders, insomnia and OSA, in service members and veterans. While the guidelines are admittedly not all encompassing, they do provide DoD-specific evidence-based recommendations regarding sleep questionnaires and management, and provider education. The guidelines research agenda is cited in the study. However, it is not clear if PCMs or administrators were aware of the sleep management recommendations.

There have been other notable efforts throughout the DoD and DHA—in all branches of the U.S. Military, including the Army, Navy, Air Force, and Marines—in addressing inappropriate sleep practices, providing sleep education for service members and clinicians, and advancing the practice of military sleep medicine.[5,6] The authors acknowledge the U.S. Army Performance Triad, which started in 2013, as the leading effort to change the military culture regarding inappropriate and insufficient sleep. This has evolved into the more comprehensive Holistic Health and Fitness. Since that time, there has also been substantial funding for research supporting the basic, clinical, and technological advancements to optimize sleep and mitigate fatigue in operational and clinical settings. The recent congressional report, Study on Effects of Sleep Deprivation on Readiness of Members of the Armed Forces, acknowledges the dire consequences

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of insufficient sleep and sleep disorders for combat readiness in the military and details specific interventions to address this.[7] Based on multiple studies, the Navy's Surface and Submarine Forces have mandated circadian-based watch-bills to better align with sailors' sleep and rest cycles.[8] The recently released Getting to Outcomes Content Area Module for Air Force Sleep Health Promotion provides actionable steps utilizing promising practices and evidence-based interventions to address inappropriate sleep practices.[9] These operationally directed initiatives substantiate the importance of and concrete efforts by the U.S. Military to appropriately address sleep in service members.

The authors gathered valuable input from semi-structured interviews with active duty patients, PCMs, and administrators from Walter Reed National Military Medical Center and Fort Belvoir Community Hospital. Of note, both are metropolitan sites with on-site sleep services and an accredited sleep medicine fellowship at Walter Reed National Military Medical Center. The extent to which their findings may overlap or diverge by surveying other military treatment facilities (MTFs) or operational bases such as Creech Air Force Base, Fort Polk, or Jacksonville Naval Air Station where sleep medicine assets are limited is unclear. More broadly, a comprehensive survey of currently available sleep healthcare assets and needs across the DoD, as well as a thorough analysis of the costs and benefits of referrals for sleep medicine outside the DHA, would augment ongoing efforts. As noted by Abdelwadoud and colleagues, digital sleep technology and telehealth provide unique leverage to meet all stakeholders' stated needs and offer a scalable approach that can extend evidence-based sleep practices beyond large MTFs. This would likely enable the DHA to reach underserved MTFs with limited or no sleep assets that are essentially located in sleep care "deserts" and provide evidence-based sleep care at these facilities.

While we agree that many targets of opportunity remain to enhance sleep healthcare across the DoD and DHA, we contend that there are concrete established and ongoing efforts aimed at addressing the pressing sleep needs of service members. The recognition that sleep is a pillar of health and readiness and that sleep disorders require standardized and multifaceted diagnosis and treatment approaches is better today than it has ever been. This provides a solid foundation for healthcare innovations and to overcome the remaining barriers of scalable access and delivery of evidence-based sleep care. The report by Abdelwadoud et al. highlights clear areas for continued improvements, including patient education, PCM training, and costs–benefits analyses that balance patient engagement and clinical outcomes, as well as assets and resources allocations and associated costs. Sleep medicine is an area that closely aligns with the DoD plan to leverage support from the private sector combined with digital technology to mitigate possible gaps in the provision of sleep healthcare services during the ongoing reorganization of the military healthcare system.

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CONFLICT OF INTEREST STATEMENT

V.M. served as consultant for Armed Forces HST, CPAP medical, Ebb Therapeutics, Jazz Pharmaceuticals, Nightware, and Sleep Care Inc. He is the Vice President (VP) of Medical Affairs for NOCTEM Health Inc. A.G. is a Chief Executive Officer (CEO) and owns equity interest in NOCTEM Health Inc. She has served as a consultant for Alairion Inc. and Eisai.

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