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CASE AND COMMENTARY: PEER-REVIEWED ARTICLE

Who Should Talk to Patients and How About Whether They Have Access to Sufficient, Quality Sleep?

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Abstract

Primary care clinicians are well-equipped to screen for sleep concerns, help some patients, and refer patients whose sleep troubles are more complex to specialists. Poor sleep affects nearly every organ system and influences many morbidity and mortality causes, so screening for sleep sufficiency and quality should be prioritized in primary care settings. This commentary on a case suggests strategies for more fully supporting primary care clinicians' compensation and capacity for conducting effective conversations with patients experiencing sleep trouble.

Case

Dr T is a faculty member in a large academic health center who regularly lectures on home safety, diet, food access, smoking status, alcohol use, exercise patterns, and income sources as key determinants of patients' health status and access to good health outcomes. "If you're going to be a good clinician," Dr T suggests to students attending today's medicine grand rounds, "You must consider roles each of these factors play in the lives of each of your patients during the brief time you spend with them, especially in patients with chronic conditions."

"And don't forget that how long and how well your patients sleep is also critical. When I say 'critical,' I mean as important as food security and shelter. Finally, sleep is getting the clinical attention it deserves, so be prepared to integrate sleep queries into your history intake and physical examination practices."

Dr D sits among the audience members, gestures to speak, and then asks, "Sleep as important as food and shelter? We have to be careful not to just add to the list of things physicians have to ask their patients about."

Dr T responds, "I'm going by the data here, Dr D. Many of our patients are sleep deprived. Sleep is critical, and we need to be asking about it in primary care settings."

"Well, then, what is sleep medicine for?" Dr D queries. "We can't dump everything on primary care, and we can't make everything a public health emergency."

Members of the audience consider whether and how to integrate conversations about sleep into their encounters with patients.

Commentary

Primary care physicians are the primary point of contact between patients and the health care system. Typically, patients will have the same primary care physician for many years, giving ample time for longitudinal, trusting relationships. During primary care visits, when physicians both inquire about specific disease states and conduct general screenings, holistic health is at the forefront of the conversation, and this conversation would be incomplete without a discussion on sleep.

Although sleep medicine is its own distinct field with specialized education and training, sleep touches on nearly every other field of medicine. Just as food and water are essential for providing energy and sustaining life, so quality sleep is essential for clearing away metabolites in the brain, as it allows for adequate memory consolidation during rest and mental concentration during waking hours and maintains vital functions like breathing.^{1,2,3} Neurologically, poor sleep can worsen seizures in epilepsy; contribute to sudden, unexplained death in epilepsy cases; and contribute to the formation of neural amyloid plaques associated with Alzheimer's dementia.^{4,5} Additionally, sleep may worsen chronic systemic diseases commonly treated by primary care physicians. According to the Centers for Disease Control and Prevention, some of the leading causes of death in the United States are heart disease, cancer, stroke (cerebrovascular diseases), chronic respiratory diseases, and diabetes.⁶ Forty percent to 80% of patients with "hypertension, heart failure, coronary artery disease, pulmonary hypertension, atrial fibrillation, and stroke" have comorbid obstructive sleep apnea (OSA),⁷ and the combination of OSA and chronic obstructive pulmonary disease worsens clinical outcomes.⁸ Likewise, poor sleepers have a 1.45-fold higher hazard of cancer mortality than healthy sleepers, while sleep duration and sleep disorders may increase risk for development of lung and gastrointestinal cancers as well as obesity and type 2 diabetes.^{9,10,11,12} Furthermore, poor sleep and stroke-related mortality have a dosedependent relationship.¹¹ From these few statistics alone, the effects of poor sleep on general mortality should be clear, as well as the role of sleep assessment as part of the primary care physician's preventive health efforts.

Implementing Sleep Assessments in Primary Care

Primary care is the ideal setting for initial sleep screening to take place, as preliminary assessments can help clinicians triage referrals to sleep medicine clinics. Initial evaluations could be informal discussions stemming from common patient concerns (eg, "I just can't seem to get through my day without several cups of coffee") or systematic components of the physician's routine social factors assessment. Additionally, researchers and clinicians are partnering to make sleep health screening as easy as possible by optimizing in-office screening,¹³ as well as by creating smartphone applications for sleep-related questionnaire completion ahead of patient visits.¹⁴ Current data indicate that electronic screening for common sleep conditions is feasible and leads to further treatment.¹⁵ Sleep apps can also help patients track their sleep and become more educated about sleep hygiene, thereby reducing prevalence of poor sleep.¹⁶ Finally, smart-wearable devices can collect sleep data interpretable by primary care clinicians with similar efficacy to actigraphy,¹⁷ which can save time on screening.

As with many other issues, such as food insecurity or smoking, once clinicians identify sleep problems, they can ask further questions to address patients' access to resources or educational gaps. For example, discussing a patient's nighttime phone usage could lead to an assessment of the patient's willingness to change or improve their sleep hygiene (using techniques currently implemented for smoking and substance cessation) and to provision of sleep hygiene information (similar to patient-centered education materials about medication administration or dietary changes). In other cases, discussions may provoke concern about specific sleep disorders. Initial testing for disorders like sleep apnea may be done with home sleep apnea testing, and primary care clinicians can initiate continuous positive airway pressure (CPAP) therapy for individuals who qualify. However, patients who cannot achieve adherence to CPAP therapy or for whom other disorders are suspected can be referred to sleep medicine by their primary care clinicians. At sleep medicine clinics, physicians can conduct further workup-including multiple sleep latency tests, maintenance of wakefulness tests, and polysomnography-and implement additional therapies, such as cognitive behavioral therapy for insomnia or hypoglossal nerve stimulation for sleep apnea.^{18,19}

Protecting Time for Sleep Screening

In addition to recognizing the importance of sleep screening and referrals to sleep medicine from primary care, it is equally important to recognize the primary care physician's time as a precious resource. Primary care physicians increasingly have more work with far less time per visit. The average primary care appointment lasts only 18 minutes,²⁰ while more than half of US adults have 3 or more chronic conditions,²¹ on top of concerns about home safety, diet or food access, smoking status, alcohol use, and exercise patterns—all of which are vital to patient health outcomes²²—that must be managed during that appointment. In order for health systems to give primary care physicians more time for these important conversations, physicians must be able to be reimbursed.

Currently, US Preventive Services Task Force (USPSTF) screening recommendations with grade A or B evidence (ie, "high or moderate net benefit for patients") are covered completely by Medicaid reimbursement, while those services not listed as USPSTF A or B have no such guarantee.^{23,24} Just as there are USPSTF A and B recommendations for screening for healthy diet, physical activity, and tobacco and alcohol use, so identifying appropriate USPSTF A and B recommendations for sleep screening would greatly aid reimbursement for this vital activity and thereby ensure that the primary care physician's time spent on this issue is valued. While streamlined screening and use of technology to collect and evaluate sleep data would help physicians save time, USPSTF guidelines would provide justification and compensation for the time taken for sleep screening.

Conclusion

While sleep screening may not initially seem vital in the primary care setting, neglecting an aspect of health that affects every organ system and most major pathologies actively prevents patients from achieving holistic health. The best hypertensive medications will have little effect without airway patency during sleep, and neurorestoration after stroke cannot occur without adequate nighttime rest. Addressing the root cause of health issues gives clinicians the best chance at providing holistic health care for patients, and one of the root causes of disease for many patients is poor sleep. It is necessary for primary care physicians to perform preliminary sleep screening to triage care, and, for that to happen, it is necessary for the health care system to value sleep enough to fully

support primary care physicians with time, screening resources, and funds as they perform this important work.

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Editor's Note

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