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Sleep as a vital sign: why medical practitioners need to routinely ask their patients about sleep*

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Should sleep be assessed as part of routine medical evaluation? The Institute of Medicine estimates that between 50 and 70 million US adults have a sleep disorder,¹ although most of these remain undiagnosed.² In addition, Americans report, on average, 2 nights/week of insufficient sleep,³ and 39.5% of Americans get 6 hours of sleep or less per day.⁴

Studies report that sleep symptoms are exceedingly common among patients presenting for medical visits.^{5–7} This finding is troubling because many physicians do not ask their patients about sleep. Papp et al⁸ found that only 43% of primary care physicians routinely inquire about sleep vs the 80% who discuss exercise and 79% who address healthy diet. Despite this discrepancy, only 16% believed that counseling patients on sleep is not as important as counseling on diet and exercise. Thus, asking about sleep problems would address a common concern that is underappreciated. However, the question remains whether asking about sleep should be part of the routine medical examination.

Although sleep may not be pertinent to every visit across every subspecialty, a routine physician inquiry about sleep would be an important part of a typical office visit for many. Sleep problems can predispose individuals to many medical conditions, and, conversely, medical disorders can lead to sleep disturbance. A routine sleep question would be a useful addition to nearly any visit to a pediatric or geriatric clinic because sleep disturbances often signal important developmental and/or pathologic processes. Furthermore, such a question would be useful in visits to specialty clinics, such as psychiatry (to aid in the diagnosis of mood and anxiety disorders), neurology (to aid in diagnosis and treatment planning), cardiology (to improve prognosis in heart failure or hypertension), endocrinology (to characterize potential circadian disruptions in hormones), rheumatology/pain (to improve quality of life and aid treatment), oncology (to address insomnia and fatigue, which are

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exceedingly common), obstetrics (to evaluate risk for complications), urology (to evaluate the impact of nocturia), and other specialties.

The primary benefit of physicians routinely asking about sleep would be the detection and (hopefully) successful treatment of sleep disorders, which are associated with major burden in themselves and exacerbate problems in the context of other diseases. The benefits of asking these questions extend beyond addressing morbidities directly—inquiring about sleep may improve patient engagement (the degree that individual patients become actively involved in their health care). Not only is poor sleep associated with many of the chronic conditions for which patient engagement is key, but improvements in sleep (as with other healthy behaviors) may lead to improvements in these and other chronic conditions. Furthermore, in a study of behavioral approaches to patient engagement, improved sleep was one of the domains identified by patients as being the most relevant to their health and quality of life.⁹

Asking about sleep may also improve patient confidence in medical care. Patients identified “taking your problems seriously” as a key factor in the doctor-patient relationship.¹⁰ It is plausible that if doctors took sleep complaints more seriously, this approach may improve this relationship. After all, sleep complaints are common and are often rated as highly relevant to patients, although they are infrequently adequately assessed by physicians and infrequently broached by patients.

One other area of patient experience that may be improved is adherence to medical treatments. For example, sleep disturbance is associated with a lower likelihood of adherence to medication regimens,¹¹ poor sleep quality is associated with lower diabetes control,¹² and Continuous Positive Airway Pressure-adherent sleep apnea patients are more likely to adhere to medication regimens.¹³

Many questions remain unanswered, however. For example, how should sleep be assessed? Does inclusion of sleep assessment actually improve care, and does this information justify the added burden on providers? Is it possible to motivate patients to initiate conversations about sleep with health care providers? There is still much progress that needs to be made in these areas.

Taken together, the scientific literature indicates that sleep is a critical marker or indicator of disease and recovery, and changes in sleep are relevant for common disorders and presentations across many medical subspecialties. Despite evidence showing that sleep complaints are exceedingly common, sleep quality and sleep duration are rarely assessed in medical visits, even when it would be relevant to do so. This deficiency likely results in underdiagnosis of sleep problems and suboptimal treatment of many medical disorders. Therefore, we believe that it would benefit the public’s health if medical practitioners would regularly ask their patients about sleep, be aware of the importance of sleep, and incorporate at least 1 basic sleep question in patient evaluations.

References

1. Colten, HR.; Altevogt, BM.; Institute of Medicine Committee on Sleep Medicine and Research. Sleep disorders and sleep deprivation: an unmet public health problem. Washington, DC: Institute of Medicine: National Academies Press; 2006.
2. Baran AS, Chervin RD. Approach to the patient with sleep complaints. *Semin Neurol.* 2009; 29(4): 297–304. [PubMed: 19742407]
3. Altman NG, Izci-Balserak B, Schopfer E, Jackson N, Rattanaumpawan P, Gehrman PR, et al. Sleep duration versus sleep insufficiency as predictors of cardiometabolic health outcomes. *Sleep Med.* 2012; 13(10):1261–1270. [PubMed: 23141932]
4. U.S. Department of Health and Human Services. , editor. Centers for Disease Control and Prevention. National Health and Nutrition Examination Survey Data. Hyattsville, MD: National Center for Health Statistics; 2008.
5. Mold JW, Quattlebaum C, Schinnerer E, Boeckman L, Orr W, Hollabaugh K. Identification by primary care clinicians of patients with obstructive sleep apnea: a practice-based research network (PBRN) study. *J Am Board Fam Med.* 2011; 24(2):138–145. [PubMed: 21383212]
6. Pigeon WR, Heffner K, Duberstein P, Fiscella K, Moynihan J, Chapman BP. Elevated sleep disturbance among blacks in an urban family medicine practice. *J Am Board Fam Med.* 2011; 24(2): 161–168. [PubMed: 21383215]
7. Senthilvel E, Auckley D, Dasarathy J. Evaluation of sleep disorders in the primary care setting: history taking compared to questionnaires. *J Clin Sleep Med.* 2011; 7(1):41–48. [PubMed: 21344054]
8. Papp KK, Penrod CE, Strohl KP. Knowledge and attitudes of primary care physicians toward sleep and sleep disorders. *Sleep Breath.* 2002; 6(3):103–109. [PubMed: 12244489]
9. Lawson KL, Jonk Y, O'Connor H, Riise KS, Eisenberg DM, Kreitzer MJ. The impact of telephonic health coaching on health outcomes in a high-risk population. *Glob Adv Health Med.* 2013; 2(3): 40–47. [PubMed: 24416671]
10. Croker JE, Swancutt DR, Roberts MJ, Abel GA, Roland M, Campbell JL. Factors affecting patients' trust and confidence in GPs: evidence from the English national GP patient survey. *BMJ Open.* 2013; 3(5)
11. Marcum ZA, Zheng Y, Perera S, Strotmeyer E, Newman AB, Simonsick EM, et al. Prevalence and correlates of self-reported medication non-adherence among older adults with coronary heart disease, diabetes mellitus, and/or hypertension. *Res Social Adm Pharm.* 2013; 9(6):817–827. [PubMed: 23291338]
12. Chasens ER, Korytkowski M, Sereika SM, Burke LE. Effect of poor sleep quality and excessive daytime sleepiness on factors associated with diabetes self-management. *Diabetes Educ.* 2013; 39(1):74–82. [PubMed: 23192600]
13. Platt AB, Kuna ST, Field SH, Chen Z, Gupta R, Roche DF, et al. Adherence to sleep apnea therapy and use of lipid-lowering drugs: a study of the healthy-user effect. *Chest.* 2010; 137(1):102–108. [PubMed: 19820075]