

LETTERS TO THE EDITOR

Sleep insecurity as a health disparity

Galit Levi Dunietz, PhD, MPH^{1,2}; Tiffany J. Braley, MD, MS¹; Erica C. Jansen, PhD, MPH^{1,2}

¹Division of Sleep Medicine, Department of Neurology, University of Michigan, Ann Arbor, Michigan; ²Department of Nutritional Sciences, School of Public Health, University of Michigan, Ann Arbor, Michigan

We applaud Drs. Attarian, Mallampalli, and Johnson for proposing the term "sleep deserts" to describe "neighborhoods that are not conducive to adequate sleep health." We agree that the burden of poor sleep in racially and ethnically segregated neighborhoods is disproportionally high, and call for collaborative efforts to eliminate food, fitness, and sleep deserts in support of public health and social justice. Furthermore, we propose to extend the concept of "sleep deserts" to consider other settings associated with poor sleep conditions. For example, on college campuses, unhealthy lifestyle and academic and social pressures promote sleep deprivation and poor sleep behaviors among students. Hospitals could also be viewed as sleep deserts, as illness, medical care, noise, and light disrupt sleep of both patients and staff. A high burden of sleep disturbances has been reported by active-duty soldiers.

Moreover, the term "sleep deserts" describes fixed, environmental sleep barriers, while sleep health could also be influenced by transient behavioral and pathophysiological factors—ie, short-term family or professional responsibilities and health states. To characterize limited or uncertain availability of adequate sleep, we suggest the term "sleep insecurity." For example, women are vulnerable to sleep insecurity during key stages along their reproductive life. Pregnancy is associated with compromised and variable maternal sleep along the 3 trimesters, 5 and in the postpartum period, maternal (and paternal) sleep depends on sleep and feeding schedules of their infant. Perimenopausal women often experience acute insomnia symptoms that reduce their quality of life. 6 Beyond its impact on women, sleep insecurity impairs the sleep of men and racial/ethnic minorities with life stressors and mood disorders. 7

Sleep deserts and sleep insecurity often coexist and contribute to the well-described sleep health disparities. We believe that extrinsic and intrinsic, fixed and transient sleep disparities warrant attention to alleviate their impact on the physical and mental health of vulnerable communities.

CITATION

Dunietz GL, Braley TJ, Jansen EC. Sleep insecurity as a health disparity. *J Clin Sleep Med*. 2022;18(10):2521.

REFERENCES

- Attarian H, Mallampalli M, Johnson D. Sleep deserts: a key determinant of sleep inequities. J Clin Sleep Med. Published online May 2, 2022.
- Hershner SD, Chervin RD. Causes and consequences of sleepiness among college students. Nat Sci Sleep. 2014;6:73–84.
- Wesselius HM, van den Ende ES, Alsma J, et al; "Onderzoeks Consortium Acute Geneeskunde" Acute Medicine Research Consortium. Quality and quantity of sleep and factors associated with sleep disturbance in hospitalized patients. *JAMA Intern Med.* 2018;178(9):1201–1208.
- Luxton DD, Greenburg D, Ryan J, Niven A, Wheeler G, Mysliwiec V. Prevalence and impact of short sleep duration in redeployed OIF soldiers. Sleep. 2011;34(9): 1189–1195.
- White KM, Dunietz GL, Pitts DS, Kalmbach DA, Lucchini M, O'Brien LM. Burden of sleep disturbance in non-Hispanic Black pregnant women. J Clin Sleep Med. 2022; 18(5):1319–1325.
- Baker FC, de Zambotti M, Colrain IM, Bei B. Sleep problems during the menopausal transition: prevalence, impact, and management challenges. *Nat Sci Sleep*. 2018;10:73–95.
- Johnson DA, Jackson CL, Williams NJ, Alcántara C. Are sleep patterns influenced by race/ethnicity—a marker of relative advantage or disadvantage? Evidence to date. Nat Sci Sleep. 2019;11:79–95.

SUBMISSION & CORRESPONDENCE INFORMATION

Submitted for publication June 22, 2022 Submitted in final revised form June 27, 2022 Accepted for publication June 28, 2022

Address correspondence to: Galit Levi Dunietz, PhD, MPH, Division of Sleep Medicine, 1500 East Medical Center Drive, University of Michigan, Ann Arbor, MI 48109-5845; Tel: (734) 647-9241; Fax: (734) 647-9065; Email: gldt@med.umich.edu

DISCLOSURE STATEMENT

All authors have seen and approved the manuscript. Work for this letter was performed at the University of Michigan, Ann Arbor. Dr. Dunietz reports grants from the National Heart, Lung, and Blood Institute (K01 HL144914) and the National Institute on Aging (R01 AG074342). Dr. Braley reports grants from the National Institute on Aging (R01 AG074342) and from the National Center for Complementary and Integrative Health (R01 1AT011341). Dr. Jansen reports grants from National Heart, Lung, and Blood Institute (K01 HL151673). The authors report no conflicts of interest.