Sleep health and aging: Recommendations for promoting healthy sleep among older adults: A National Sleep Foundation report

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A R T I C L E I N F O

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Objectives: Sleep is a key health indicator in older adults; however, many older adults may experience less than ideal levels of sleep health. The objective of this report is to summarize the proceedings of the National Sleep Foundation’s Sleep Health and Aging Conference.

Methods: The National Sleep Foundation held a Sleep Health and Aging Conference with sleep scientists and stakeholders in the field of aging. The primary goal of this conference was to identify critical sleep health recommendations for older adults.

Results: Essential recommendations aimed at promoting sleep health in older adults focus on light exposure, physical activity, meal timing, environmental conditions, and sleep schedules. Suggestions for promoting sleep health behavior change in older adults include tailored messaging and community support.

Conclusions: There are unique challenges and opportunities around promoting sleep health in older adults, efforts toward change should include individual, community, and societal foci.

Rationale

Sleep is critically important for all age groups, including older adults. Poor sleep can contribute to a higher risk of physical and mental health disorders such as depression and anxiety, dementia, obesity, hypertension, cardiovascular disease, and stroke in older adults. Poor sleep is also associated with impaired physical and cognitive functioning, more frequent falls, and overall poor quality of life. Accordingly, sleep health is viewed as a significant indicator of overall health and functioning in later life. 

Although the need for sleep does not decrease with age (ie, the National Sleep Foundation recommendation for people 65 and older is 7-8 hours per night, similar to the recommendation for younger adults), the ability to sleep can decrease. Biological, environmental, and psychosocial changes can place older adults at greater risk for sleeping difficulties. Natural age-related changes in sleep architecture and circadian rhythms, including increased awakenings, reduced deep sleep, shorter sleep duration, and the tendency to fall asleep earlier and wake earlier, can make sleep feel lighter and less restorative. Further, medical disorders emerging later in life such as obstructive sleep apnea, neurodegenerative disease, cognitive impairment, and chronic pain, as well as some medications, can also interfere with sleep. Finally, environmental and social changes such as retirement, bereavement, reduced activity, and changes in living situations (eg, newly living and/or sleeping alone, assisted living, skilled nursing care) may alter routines and environments conducive to sleep promotion. In spite of these challenges, getting older is not synonymous with poor sleep and optimizing sleep health as people age may help prevent or delay the onset of physical, cognitive, and mental disorders in older adults.

Promoting sleep health equity is another important consideration for older adults. The older adult population in the United States is becoming more diverse, and it is estimated that nearly half of adults 65+ years old will be from minoritized racial/ethnic groups by 2060. Structural racism is believed to contribute to preventable disparities in sleep health and accelerates the aging process in socially disadvantaged older adults through policies and practices that lead to differential access to health-promoting resources and greater contact with health-damaging exposures. It is fundamentally important to address the environmental and social drivers of sleep health disparities among older adults, including stressors such as...
financial strain, substandard housing, and neighborhoods with limited places to access healthy food, for instance, food deserts and swamps and heat islands, occupational hazards among those still employed, and exposure to air, light, as well as noise pollution. Tailored messaging for populations placed at greatest risk and modifying the contributors to sleep health disparities are key steps to promoting sleep health equity among older adults. This report is based on proceedings of the National Sleep Foundation’s Sleep Health and Aging Conference which convened sleep researchers and stakeholders in the fields of sleep and aging with the following primary goal: to identify sleep health recommendations for older adults. Secondary goals of the conference included: 1) identifying ways to promote sleep health education focused on older adults, 2) identifying ways to promote sleep health behaviors in older adults, and 3) understanding the sources of racial and ethnic sleep health disparities in older adults and promoting actionable solutions to eliminate them and achieve sleep health equity. The primary goal of this paper is to summarize key sleep health recommendations for older adults.

Conference details

The Sleep Health and Aging Conference was held in March 2022. Conference speakers included internationally recognized experts in various topics related to sleep in older adults, such as circadian and homeostatic sleep and wake processes including daytime light exposure and timing of behaviors, sleep architecture, sleep duration, sex differences, sleep disorders, physical and mental health comorbidities, hospitals, nursing homes, assisted care facilities and community or retirement living, and environmental, social and behavioral factors impacting sleep health and sleep health disparities in older adults. Each presentation was followed by a moderated discussion with the entire set of conference attendees, comprised of academic, government, advocacy, and industry representatives and experts. The conference included 2 breakout sessions, 1 focused on recommendations for sleep health in older adults, and the other focused on identifying the next steps for resources, access, and promoting behavior change. The final summary from the first breakout session, focused on recommendations for sleep health in older adults, was collated, reviewed by conference organizers, and presented herein.

Recommendations

Fig. 1 provides specific recommendations for promoting sleep health in older adults. Importantly, the sleep health recommendations identified don’t necessarily deviate from recommendations for sleep health in the general adult population; however, the biological and environmental context of aging may make it more challenging or more important for older adults to closely adhere to these recommendations.

Daytime behaviors have the potential to be impactful for the night-time sleep of older adults. Recommendations for daytime behaviors with the potential to influence the sleep health of older adults include regular light exposure, regular engagement in physical activity, and consistency in meal times. Night-time behaviors were also identified as important contributors to the sleep health of older adults. Importantly, it was recommended that older adults prioritize sleep, allowing for 7-8 hours per night, while keeping relatively consistent bed and rise times. Additionally, it was recommended that older adults maintain a sleep-friendly sleep space, a place that is dark, quiet, and cool (ie, 60°F-67°F), to promote healthy sleep.

Conclusions

Optimizing sleep health for older adults can enhance overall health and well-being, especially if outreach and education begin early, with young and middle-aged adults. These efforts require cross-disciplinary collaboration and intervention at both individual and system levels, including 1) challenging common misperceptions around sleep and aging, 2) promoting recommended sleep health behaviors, 3) modifying environmental and social determinants of sleep health, 4) encouraging older adults to seek professional help if they continue to struggle with sleep, and 5) providing sleep health information and tools for healthcare professionals. There are unique...
challenges and opportunities around promoting healthy sleep in older adults. Prioritizing efforts to advance sleep health and well-being through education and advocacy across the lifespan are the first of many steps needed to engender sleep equity across ages, sex or gender, and race or ethnicity.

The Sleep Health and Aging Conference identified specific, actionable recommendations for sleep health in older adults, both in terms of daytime behaviors and night-time behaviors. Older adults may be best motivated to enact change strategies if they are made aware of the connections between sleep and various health outcomes. In particular, the associations between sleep and brain health, pain management, and weight management may be particularly salient connections to emphasize in educational efforts aimed at motivating sleep behavior change in older adults. In this regard, sleep should be included as a pillar in healthy living and disease messaging campaigns. Investigation into health behavior change models in older adults has revealed that action control, which is comprised of self-monitoring, awareness of standards, and self-regulatory effort, maybe a particularly relevant predictor of behavior change in late life. In terms of promoting healthy sleep in older adults, sleep-related goals should be clear and concrete, self-monitoring should be encouraged, and effort toward goal achievement should be monitored, encouraged, and rewarded.

In order to reach a wide audience, messaging and infographics need to be clear, culturally sensitive, and accessible to disadvantaged groups. For instance, depictions of older adults included in any written program material should depict members of the target community in terms of race, ethnicity, sex or gender, and ability status. The use of diverse older adults to deliver sleep health messaging is an additional important consideration, as matching the messengers and potential recipients has been shown to increase health behaviors in racial and ethnic minority groups. Community leaders, primary care and other healthcare professionals, government agencies, medical associations, academic institutions, foundations, and individuals should be engaged from the beginning of educational efforts to ensure widespread dissemination, uptake, and advancement of sleep health equity. Community support is also important for sleep health behavior change in older adults. For example, community and peer-to-peer support has been used to enhance cognitive health and physical health among older adults. Finally, at a policy level, efforts are needed to modify environmental and social determinants of sleep health. For example, livable wages and increased financial support could help bridge disparities, decrease financial distress, and ultimately have a downstream impact on sleep.

Regarding daytime healthy sleep recommendations, bright light exposure, physical activity, and consistent mealtimes are all important contributors to our sleep and natural 24-hour circadian rhythms. Age-related decrements in the functioning and strength of the sleep-wake cycle make it especially critical to optimize routines during the day. As older adults may be free of many of the natural time cues present in young and middle adulthood (eg, external school and work schedules, regular commute times, lunch breaks), daytime healthy sleep recommendations must be internally motivated and intentional. In terms of night-time healthy sleep recommendations, as the need to sleep does not change significantly with age, a consistent bed and rise time that allow 7-8 hours of sleep is important, as is sleeping in a sleep-friendly environment. However, the lived reality of many older adults is that direct control over daytime behaviors and schedules and night-time behaviors and environments may be outside of one’s immediate authority. In these instances, particularly in stepped-care and assisted living communities, it is recommended that action be taken to implement healthy sleep recommendations at the facility level.

Finally, the ability to sleep in older age is impacted by a number of biological and environmental challenges that may make older adults more vulnerable to sleep disorders, including insomnia and obstructive sleep apnea. Evidence indicates that poor sleep in late life is likely related to illnesses and functional limitations that occur with greater frequency with advancing age. Older adults should speak to their healthcare professionals if they have ongoing concerns about sleep; additionally, primary care clinicians should have access to knowledge and tools to identify sleep problems in their older patients, including an understanding of the effect that prescription and over-the-counter medications and supplements for other conditions can have on sleep. Should they become necessary, a number of treatments for insomnia in older adults are available, including nonpharmacological and pharmacological options.

Author’s contributions

All authors were major contributors in writing the manuscript. All authors read and approved the final manuscript.

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Declaration of Competing Interest

Dr Ancoli-Isreal reports consulting from Eisai, Idorsia, Merck, and PureTech, all outside the scope of the work described herein. Dr Zee reports consulting from Eisai, Idorsia, Jazz, CVS Caremark, and Sleep Number, all outside the scope of the work described herein. Dr Dzierzewski reports consulting from Eisai, outside the scope of the work reported herein. Dr Dzierzewski is employed by the National Sleep Foundation.

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References


