



10.5281/zenodo.7903225

A review of sleep disorders in the elderly

Osman Kiratli¹

1. General practitioner, Ministry of Justice Health Unit, Ankara, Turkey

ORCID ID of the author(s):

O.K: 0009-0007-2085-7641

Correspondence Author

Osman Kiratli, Ministry of Justice Health Unit, Ankara, Turkey.

e-mail

osman.kiratli@gmail.com

Phone

+0 312 417 77 70



ulusmedj.com

2023 Published by
Ulus Medical Journal.



Abstract

Insomnia continues to be one of the most prevalent sleep disorders seen in the geriatric clinic population. It is frequently characterized by the subjective complaint of difficulty falling or maintaining sleep, or nonrestorative sleep, and it can cause serious daytime symptoms like difficulty concentrating and mood swings. Insomnia remains a clinical diagnosis. Late-life insomnia can be caused by a variety of demographic, psychological, biological, and behavioral factors. Insomnia can have negative psychological and physical health repercussions for older persons. A comprehensive physical examination and a careful history-taking are the most crucial components of the diagnosis of insomnia. When compared to pharmaceutical therapy, nonpharmacological treatment options offer favorable and long-lasting advantages.

Keywords: sleep disorders, insomnia, elderly

How to cite: Kiratli O. A review of sleep disorders in the elderly. Ulus Med J. 2023;1(1):1-4.

Received: 10 January 2023 **Revised:** 15 February 2023 **Accepted:** 19 February 2023 **Published:** 30 April 2023

OPEN ACCESS This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>)

Introduction

A general definition of insomnia is a lack of satisfaction with either the quality or quantity of sleep. This is frequently related to some or all of the following: (1) trouble falling asleep, (2) trouble keeping asleep, indicated by numerous awakenings or difficulty falling back to sleep following awakenings, and (3) early morning awakening with difficulty falling back to sleep. While the International Statistical Classification of Diseases and Related Health Problems, 10th revision (ICD-10) requires at least one month of symptoms not explained by another sleep-wake disorder, the Diagnostic and Statistical Manual for Mental Disorders, Fifth Edition (DSM-5) emphasizes that a sleep disturbance causes clinically significant distress or functional impairment and occurs at least three nights a week for at least three months despite adequate opportunity to sleep (1,2).

Possible causes of insomnia

Predisposing factors

These consist of biological, psychological, social, and biologic traits. Women over 45 are 1.7 times as likely than males to experience sleeplessness. Additionally, those who are widowed, separated, or divorced are more likely to experience insomnia than those who are married (3).

Precipitating factors

These considerations typically involve demanding life circumstances or potentially disruptive medical issues. Insomnia risk is higher in older persons with respiratory symptoms, physical impairment, and fair to poor subjective health. One of the causes of insomnia may be medications like beta blockers, glucocorticoids, nonsteroidal anti-inflammatory medicines, decongestants, and antiandrogens (4).

Age-related sleep changes

Changes in sleep and circadian rhythm are just two of the many physiological aspects of aging that become noticeable over time. Total sleep time drops dramatically from 10–14 hours a night in childhood to 6.5–8.5 hours a night in young adulthood, then drops more slowly to 5–7 hours a night in middle life, and finally levels off at age 60. Some elderly people, whose overall amount of sleep time will inevitably decrease as they age, may develop insomnia due to anxiety brought on by their inflated expectations about how long it will take them to fall asleep and stay asleep (5).

Sleeplessness and morbidity

If untreated, insomnia is linked to substantial morbidity. For mental disease, the amount of evidence is strongest. The likelihood of developing depressive symptoms is 23% higher in older insomniacs. Numerous studies have shown that older patients with chronic insomnia are more likely to experience depression (6). Additionally, insomnia raises your risk of having suicidal thoughts. Sleep deprivation and insomnia are linked to high blood pressure, myocardial infarction, and possibly stroke (7).

Diagnosis and treatment

Insomnia is evaluated and diagnosed clinically, with the help of a full clinical history of the patient's sleep issues and pertinent comorbidities from the patient, their spouses, and/or any other people who may be providing care. Wrist actigraphy, polysomnography, insomnia rating scales, and imaging studies are helpful modalities for diagnosis. Sleep hygiene education, cognitive behavioral therapy for insomnia, sleep restriction therapy, stimulus control therapy, and brief behavioral therapy for insomnia appear as nonpharmacological treatment options

(8,9). Drugs such as Benzodiazepines and Nonbenzodiazepine Sedatives, Antidepressants, Melatonin Receptor Agonists, and Orexin Receptor Antagonists are used in pharmacological treatment (10,11).

Conclusions

In older adults, insomnia is very common. Clinicians can diagnose and treat insomnia in our rapidly aging population by using the history, physical exam, and insomnia scales. In comparison to hypnotic drugs, behavioral and cognitive behavioral therapies are advised as first-line treatments for insomnia in older persons because they give very effective longer-term care.

Declaration of interest:

The authors report no conflicts of interest.

Funding source:

No funding was required

Ethical approval:

No need for reviews

Acknowledgments:

No

Contributions

Research concept and design: **OK**

Data analysis and interpretation: **OK**

Collection and/or assembly of data: **OK**

Writing the article: **OK**

Critical revision of the article: **OK**

Final approval of the article: **OK**

References

1. Riemann D, Spiegelhalder K, Feige B, Voderholzer U, Berger M, Perlis M, et al. The hyperarousal model of insomnia: a review of the concept and its evidence. *Sleep Med Rev.* 2010;14(1):19–31.
2. Vitiello MV, Moe KE, Prinz PN. Sleep complaints cosegregate with illness in older adults: clinical research informed by and informing epidemiological studies of sleep. *J Psychosom Res.* 2002;53(1):555–9.
3. Ohayon MM. Epidemiology of insomnia: what we know and what we still need to learn. *Sleep Med Rev.* 2002;6(2):97–111.
4. Foley DJ, Monjan A, Simonsick EM, Wallace RB, Blazer DG. Incidence and remission of insomnia among elderly adults: an epidemiologic study of 6,800 persons over three years. *Sleep.* 1999;22(Suppl 2):S366–72.
5. Ohayon MM, Carskadon MA, Guilleminault C, Vitiello MV. Meta-analysis of quantitative sleep parameters from childhood to old age in healthy individuals: developing normative sleep values across the human lifespan. *Sleep.* 2004;27(7):1255–73.
6. Jausset I, Bouyer J, Ancelin ML, Akbaraly T, Pérès K, Ritchie K, et al. Insomnia and daytime sleepiness are risk factors for depressive symptoms in the elderly. *Sleep.* 2011;34(8):1103–10.

7. Palagini L, Bruno RM, Gemignani A, Baglioni C, Ghiadoni L, Riemann D. Sleep loss and hypertension: a systematic review. *Curr Pharm Des.* 2013;19(13):2409–19.
8. Morin CM, Colecchi C, Stone J, Sood R, Brink D. Behavioral and pharmacological therapies for late-life insomnia: a randomized controlled trial. *JAMA.* 1999;281(11):991–9.
9. Montgomery P, Dennis J. A systematic review of non-pharmacological therapies for sleep problems in later life. *Sleep Med Rev.* 2004;8(1):47–62.
10. Roth T, Seiden D, Sainati S, Wang-Weigand S, Zhang J, Zee P. Effects of ramelteon on patient-reported sleep latency in older adults with chronic insomnia. *Sleep Med.* 2006;7(4):312–8.
11. Zammit G, Wang-Weigand S, Rosenthal M, Peng X. Effect of ramelteon on middle of the night balance in older adults with chronic insomnia. *J Clin Sleep Med.* 2009;5(1):34–40.