

Preface



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Guest Editor

Many things—such as loving, going to sleep, or behaving unaffectedly—are done worst when we try hardest to do them.

—C.S. Lewis (*British Scholar and Novelist, 1898–1963*)

The need to sleep and obtain adequate rest is an essential bodily function from birth to death. Like eating and breathing, sleep is necessary for human survival. Sleep patterns evolve as one moves from infancy to childhood and into adulthood. It should be no surprise, then, that sleep parameters also evolve as the body enters the oldest decades of life.

Insomnia is a subjective report of insufficient or nonrestorative sleep despite the opportunity to get adequate rest. A person's perception of "inadequate sleep" may in fact be erroneously affected by culture, societal norms, and misinformation about aging. In the United States, the prevalence of sleep disturbances ranges from 30%–60% [1,2]. As with many symptoms attributed to "just getting old," one must be cautious about assuming that poor sleep is an aging-related phenomenon.

Many sleep parameters do change with aging, but should not inherently result in fatigue or disrupted daytime functioning. It is necessary for clinicians to understand the physiology of sleep in older adults and the differences between expected aging and disease. This information can then be used to educate patients and their families on typical sleep patterns of older adults. Establishing appropriate sleep expectations and correcting misperceptions can alleviate sleep anxiety and reduced dissatisfaction with insomnia management.

Aging-related changes in any body system are influenced by genetically predetermined physiology, environmental stressors, and accumulated disease states. The need for sleep, like other bodily functions, is affected throughout the lifespan by these forces. Primary sleep disturbances such as sleep apnea and restless legs syndrome are seen with increasing frequency in the elderly. Comorbid diseases also increase with age and can impact sleep primarily or secondarily. Dementing illnesses and certain medications alter the normal neurohormonal balance, disrupting the circadian cycle of sleep. Other illnesses and medications may contribute to pain, dyspnea, or other symptoms that subsequently preclude restful sleep.

Conversely, inadequate or dysfunctional sleep results in a multitude of physical, functional, and cognitive impairments in both quality of life and longevity. An increased rate of falls, cognitive decline, and even death has been associated with poor sleep in older adults [3–5]. Discerning those conditions that contribute to, and those that result from, poor sleep may be challenging. Cause and effect may be intertwined, not unlike many complex conditions of the elderly.

Causes of poor sleep may be intrinsic, involving disease and medications, or extrinsic, of environmental or behavioral origin. Perhaps it would be better to designate insomnia in the older adult as one of many geriatric syndromes to conditions of multifactorial etiology requiring a multidimensional approach to diagnosis and management. Without identifying all possible contributions to poor sleep, and instituting a multifaceted management strategy, successful treatment for insomnia may be elusive.

Nonpharmacologic interventions such as cognitive-behavioral therapy (CBT), alteration in sleep environment, and treatment of sleep-disrupting disease symptoms can be quite effective in managing sleep disturbances. With proper education and a motivated participant, improvement in sleep with these techniques can be attained with older adults. Morin and colleagues conducted a randomized-controlled trial of CBT versus conventional pharmacologic treatment for primary insomnia in 78 adults (mean age = 65). A 55% reduction in nocturnal awake time was seen with CBT compared with a 47% reduction in the medication group. Sustained sleep improvement was greater in the CBT group [6]. A meta-analysis of both pharmacologic and nonpharmacologic treatments for insomnia also demonstrated short-term sleep benefits with CBT similar to those seen with pharmacologic treatment [7].

For many conditions, including insomnia, pharmacologic treatment is an effective and efficient means of alleviating disease symptoms. Many classes of prescription and nonprescription drugs alter the sleep cycle and induce a more satisfactory sleep quality. A recent meta-analysis demonstrated that sedative-hypnotic medications are effective in improving sleep quality in older adults with an odds ratio of 0.14 (95% CI, 0.05–0.23) compared with placebo [8].

However, like most pharmacotherapies in older adults, side effects are more prevalent and potentially more dangerous. The intended sleep side effects of fatigue and drowsiness are also risk factors for confusion and dizziness in older adults. In this same study, adverse cognitive events with sedative-hypnotic use were reported with an odds ratio of 4.78 (95% CI, 1.47–15.47). The mantra “start low, go slow” is even more true when using sleep-inducing medications in older adults.

For the clinician, managing insomnia requires understanding aging-related sleep physiology, conditions resulting from poor sleep, and diseases (primary and secondary) that are detrimental to sleep quality. Managing the comorbidities that contribute to poor sleep is necessary but may not be sufficient in treating insomnia in older adults. Finding a balance between pharmacologic and nonpharmacologic strategies is part of a multi-dimensional treatment plan for older adults. When pharmacologic intervention is indicated, balancing the potential side effects with realistic benefits can lead to a more satisfactory and sustained result for the patient.

In this issue of *Clinics in Geriatric Medicine*, “Sleep Disorders in Older Adults,” the spectrum of sleep-related changes and disease states is discussed. Evaluation of insomnia is summarized in the context of the elderly individual. Sleep disturbances are specifically reviewed in various care settings and disease states. Finally, this issue discusses both pharmacologic and nonpharmacologic management of sleep disorders to provide a multidimensional array of treatment options for the medical provider.

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