Psychiatric Illness and Sleep in Older Adults
Comorbidity and Opportunities for Intervention

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KEYWORDS

• Sleep disorders • Psychiatric illness • Suicide • Older adults

KEY POINTS

- Sleep disorders are prevalent among older adults.
- Psychiatric disorders are highly comorbid with sleep disorders, though much less work has been conducted specifically examining older adults.
- Sleep disorders have been shown to be associated with suicide risk among older adults even beyond the effects of psychopathology.
- Research is needed to examine the potential for sleep interventions to improve both sleep and psychopathology symptoms among older adults.

Psychopathology is common among older adults, with community prevalence rates as high as 15% for anxiety[1] and 13% for depression.[2] Further, although in recent years suicide rates have been higher in midlife than among older adults, older white men still have the highest suicide rate of any group.[3] Although some may think that the onset of depression and anxiety among elders is understandable given the health and financial difficulties that may accompany aging, quality of life remains high. In fact, when external factors are controlled, age is not associated with quality of life.[4] Thus, the development of psychopathology, or suicidal behavior, in late life is *not* inevitable.

There is a great need for research examining what factors lead older adults to develop psychopathology. One area that has received increased attention of late is sleep disorders. Sleep disorders are highly prevalent among older adults, and many increase in prevalence as we age. For instance, insomnia has been found to be more prevalent among older adults than any other age group.[5] Further, although prevalent, insomnia may be underreported, as many older adults change their view of acceptable sleep or assume that they should not be able to sleep as well as they could when they were younger.[6,7] In addition to insomnia, many other sleep disorders become

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more prevalent as we age, including obstructive sleep apnea,[8] restless leg syndrome,[9] and rapid eye movement (REM) sleep behavior disorder.[10] Lastly, although commonly thought of predominantly as a childhood disorder, research has demonstrated that nightmares can persist into late life.[11,12]

Although both psychopathology and sleep disturbances are prevalent among older adults, the extant literature examining their relation in older adulthood is not well developed. The present article reviews this literature, outlines areas where further research is necessary, and highlights opportunities for intervention.

SLEEP DISTURBANCES AND DISORDERS

From pain, to light, to things that go bump in the night, there are many factors that impact our sleep. Sleep disturbances include difficulty with initiating or maintaining sleep, waking too early, and dysfunctions that occur during sleep, such as sleepwalking or nightmares. The term *sleep disturbance* is used in a variety of manners. In its broadest usage, a sleep disturbance refers to any sleep problem, whether it is acute, chronic, or meets the diagnostic criteria as a sleep disorder. Here, the authors adopt the convention that sleep disturbances are problems with sleep commonly described as symptoms but that are not severe enough to be causing the individual significant impairment and/or to meet the diagnostic criteria for a sleep disorder. Once the individual is impaired and/or the symptoms associated with sleep disturbance are severe enough, then a sleep disorder diagnosis should be considered. Several classification manuals include sleep disorders, including the *International Classification of Diseases*,[13] the *Diagnostic and Statistical Manual of Mental Disorders*,[14] and the *International Classification of Sleep Disorders*.[15] There are 6 major categories of sleep disorders: insomnia, sleep-related breathing disorders, central disorders of hypersomnolence, circadian rhythm sleep-wake disorders, parasomnias, and sleep-related movement disorders.[15]

DEPRESSION AND SLEEP DISORDERS

Although depression is less prevalent among older adults than younger adults,[16] it is still a major concern for older adults, with approximately 13% to 15% prevalence in community samples.[2,17] Further, it is associated with decreased functioning and an increased risk of morbidity,[17] and more than half of all older adults who experience a depressive episode had their first episode 60 years of age or later.[18] Older adults who develop depression late in life are more likely to have vascular risk factors and cognitive deficits, whereas those who develop depression earlier are more likely to have a family history of depression and comorbid personality disorders.[17,19] Depression among older adults is more likely to present via physical complaints than affective complaints[20] and has higher rates of sleep complaints than depression in younger adults.[21] In fact, meta-analytic work has found that sleep disturbances more than double the risk of developing depression among older adults.[22]

Depression and Insomnia

Although commonly thought of as a symptom of depression,[14] numerous studies,[23–25] including those that focused on older adults,[26] have found that insomnia itself is a risk factor for developing depression (**Table 1**). Further, in the Improving Mood-Promoting Access to Collaborative Treatment (IMPACT) study, participants were between 1.8- and 3.5-times more likely to remain depressed than those who did not have insomnia.[27] The presence of insomnia also affects depression treatment, with less complete depressive symptom and suicidal ideation remission and higher rates of relapse in patients who have comorbid insomnia.[28,29] However, research on younger adults has found that adding cognitive-behavioral therapy (CBT) for insomnia to antidepressant treatment results in enhanced depression treatment outcomes.[30] Given this important finding, research examining the impact of treating insomnia on older adult depression treatment outcomes is warranted.

Depression and Obstructive Sleep Apnea

Obstructive sleep apnea (OSA) is a sleep-related breathing disorder characterized by excessive daytime sleepiness and frequent awakenings preceded by episodes whereby airflow is significantly reduced, or ceases entirely, despite the presence of respiratory effort.[15] The prevalence rates of OSA range dramatically (4%–50%) based on methodology, sex, and sample constitution; but epidemiologic studies all show an increase in prevalence rates with older age, with some plateauing within older age groups.[31–33] Results from mixed-sample studies of middle- and older-aged adults show that individuals with OSA often present with, or are at risk for developing, medical comorbidities (eg, cardiovascular disease, obesity) and have reductions in physical functioning and quality and frequency of social interactions, each of which can contribute to the onset or