# Physical Medicine and Rehabilitation — International



#### **Review Article**

## A Brief Discussion on the Relationship Between Sleep Quality and Mental Health

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Received: June 06, 2025 Accepted: June 23, 2025 Published: June 25, 2025

#### **Abstract**

With the acceleration of socialization, people's work pressure is getting bigger and bigger, which has become an important influencing factor for the decline of sleep quality, and more and more people are suffering from the decline of sleep quality. In the clinic, many people begin to receive long-term medication, in spite of this, the problem of sleep quality has not been well improved. This study will systematically analyze the relationship between sleep quality and health, the influencing factors of sleep quality, and put forward suggestions for improvement in combination with current academic research results.

**Keywords**: Sleep quality; Mental health: Depression; Anxiety; Social interaction disorder

#### **Introduction**

Sleep quality refers to the degree of comfort, recovery, and fulfillment of physical and psychological needs experienced by an individual during sleep. It includes not only the duration of sleep, but also the rate of falling asleep, the depth of sleep, the sense of recovery after awakening, and the frequency of awakenings during sleep. Healthy sleep quality usually means a shorter time to fall asleep, a longer duration of deep sleep, and a good mental state upon awakening. In contrast, poor sleep quality is characterized by difficulty falling asleep, frequent awakenings, and feeling tired upon awakening [1].

On a physiological level, sleep is critical for cellular repair and immune responses, regulates metabolism, and helps the brain to remove waste products; sleep deprivation or poor quality can lead to decreased immune function, increase the risk of infections, and potentially exacerbate chronic diseases [2], and chronic sleep deprivation is strongly associated with cognitive decline, lack of concentration, and memory loss. From the psychological level, sleep deprivation and poor sleep quality often lead to mood swings, triggering anxiety and depression in individuals [3], reducing their ability to cope with stress, and even forming a vicious cycle that further aggravates emotional distress and affects quality of life [4]. From the social level, individuals with poorer sleep quality perform worse in

work and study, are prone to emotional instability, distraction, and delayed reaction [5], and may even lead to high stress levels, burnout, and impaired social interactions [6].

## Relationship between Sleep Quality and Health

The bidirectional relationship between mental health problems and sleep quality makes this area of research particularly important. Studies have found that anxiety and depression often exacerbate sleep problems. For example, individuals with depression and anxiety disorders often report significant sleep disturbances, most commonly early awakenings and inadequate sleep duration, and these sleep problems may lead to further deterioration of their psychological state [3,7]. In recent years, as overall sleep quality has declined across society, researchers have placed more emphasis on the factors that trigger a decline in sleep quality, and in general, individuals can help improve their overall health and sleep quality by adjusting their routine, reducing caffeine intake, improving their sleep environment, and reducing stress through meditation and relaxation techniques [8].

#### **Factors Affecting Sleep Quality**

Sleep quality is influenced by physiological, psychological, environmental, and lifestyle factors. First of all, the structure of

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sleep changes with age, and older people usually show shorter sleep duration, fragmented sleep, and an increase in light sleep [9]. Gender differences are also an important factor affecting sleep quality, and studies have found that women are more likely to experience sleep disorders than men, especially during the menopausal stage, when changes in hormone levels can significantly affect sleep quality [10]. In addition, some chronic diseases (e.g., heart disease, diabetes) can also lead to sleep disorders and affect the depth and continuity of sleep [11].

Secondly, the influence of psychological factors on sleep quality should also be emphasized. Anxiety and depression not only lead to difficulties in falling asleep, but may also lead to sleep fragmentation and early awakening [12]. Several studies have shown that patients with anxiety and depression are often unable to relax due to excessive worrying, which may lead to patients experiencing chronic sleep deprivation or hypersomnia [13].

Thirdly, the comfort of the sleep environment can also directly affect the rate and depth of sleep that an individual falls asleep. Noise and excessively high temperatures in the sleep environment can increase delay in falling asleep and lead to nocturnal awakenings [14]. Excessive use of smartphones, computers, or television before bedtime, especially exposure to blue light, suppresses melatonin secretion, which affects falling asleep and the quality of sleep [15].

Fourthly, a regular schedule helps to maintain a normal biological clock and avoid disruptions to sleep due to jet lag reactions or disturbances from night work [16]. When individuals consume too much caffeine, alcohol, or excessive food may lead to decreased sleep quality, while moderate physical activity helps to improve sleep depth and persistence [17,18].

#### **Conclusion**

Based on the above findings, we suggest that in the intervention process of sleep disorders, not only physiological factors should be paid attention to, but also psychological interventions and emotion regulation strategies should be emphasized to better improve sleep quality. In addition to this, lifestyle modifications can have a positive effect on improving sleep quality, especially regular work schedules and healthy eating habits.

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