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INSOMNIA AND ITS IMPACT ON PHYSICAL AND MENTAL HEALTH

Mohsina Mistry , Medical Student, Samarkand state medical university, Uzbekistan

Shaik Ariff Hussain , Medical Student, Samarkand state medical university, Uzbekistan

Abdul Azeez , Medical Student, Samarkand state medical university, Uzbekistan

Abu Saharat , Medical Student, Samarkand state medical university, Uzbekistan

Abstract

Insomnia is a common sleep disorder in which a person has difficulty falling asleep, staying asleep, or obtaining restorative sleep despite having adequate opportunity to sleep. It can occur briefly during periods of stress or persist over months, affecting concentration, mood, work, relationships and general wellbeing. This narrative review describes the nature and common causes of insomnia, its effects on physical and mental health, methods of assessment, and evidence-informed approaches to prevention and treatment. Persistent sleep disruption is associated with fatigue, impaired attention, irritability and reduced quality of life; chronic insomnia may coexist with anxiety, depression, pain and cardiometabolic conditions. These relationships can be bidirectional, meaning health problems may worsen sleep while poor sleep may make symptoms harder to manage. Assessment begins with a careful sleep and medical history, often supported by a sleep diary. Cognitive behavioural therapy for insomnia (CBT-I) is recommended as a first-line treatment for chronic insomnia in adults, while regular routines and a suitable sleep environment provide useful support. The review emphasises early help-seeking, avoiding unsupervised use of sleep medicines, and recognising that sleep problems are real health concerns rather than a personal failure.

Keywords: Insomnia; sleep disorder; physical health; mental health; sleep hygiene; cognitive behavioural therapy; CBT-I; fatigue; anxiety; depression.

1. Introduction

Sleep is a basic biological need. During sleep, the brain and body carry out processes involved in learning, memory, emotional regulation, tissue repair and everyday functioning. Yet for many people, bedtime becomes a period of frustration rather than rest. They may lie awake for hours, wake repeatedly, or rise too early and remain tired throughout the day. When these problems occur despite enough time and an appropriate setting for sleep, they may indicate insomnia [1,2].

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Insomnia should not be dismissed as simply having a few bad nights. Short-term sleep difficulty is common during examinations, family changes, illness, grief or work pressure. For some people, however, the difficulty continues and begins to affect health and daily life. Chronic insomnia is generally characterised by sleep difficulty at least three nights per week for three months or longer, with daytime consequences [1]. Understanding its effects matters because sleep and health influence one another: pain, stress and illness can disturb sleep, while ongoing poor sleep can increase distress and make coping with illness more difficult.

2. Types, symptoms and contributing factors

Insomnia may be short-term or chronic. Short-term insomnia can follow a stressful event, travel across time zones, a change in work schedule or an unfamiliar sleeping environment. Chronic insomnia persists over time and may become maintained by a cycle of worry about sleep, irregular sleep schedules, spending long periods awake in bed and trying harder to force sleep. The more a person fears another sleepless night, the more alert and tense they may become at bedtime [1,3].

Common symptoms include difficulty falling asleep, frequent waking, waking too early, feeling unrefreshed, daytime tiredness, irritability and difficulty concentrating. Contributors can include anxiety, depression, chronic pain, menopause, restless legs, thyroid disorders, certain medicines, caffeine, nicotine, alcohol, shift work, noise and bright light. Alcohol may initially make a person feel sleepy but can fragment sleep later in the night. Insomnia may also occur alongside other sleep disorders, such as obstructive sleep apnoea, so a broad assessment is important [2,4].

Factor	How it may affect sleep	Practical consideration
Stress and worry	Increases mental alertness and makes it harder to relax.	Use a wind-down routine; seek support if stress persists.
Caffeine and nicotine	Can delay sleep or increase alertness, especially when used later in the day.	Review timing and amount; individual sensitivity differs.
Alcohol	May bring sleepiness but can lead to lighter, interrupted sleep.	Do not use alcohol as a sleep treatment.
Irregular schedule / shift work	Can disrupt the body's sleep-wake rhythm.	Keep wake time consistent when possible; plan light exposure and rest.

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Pain, mood or medical conditions	Symptoms or treatments may interrupt sleep.	Discuss ongoing symptoms and medicines with a healthcare professional.
Bedroom conditions	Noise, light, heat or an uncomfortable bed may disturb sleep.	Make the room quiet, dark and comfortably cool where possible.

3. Impact on physical health

Insomnia can affect physical wellbeing first through the experience of fatigue. A tired person may feel physically drained, develop headaches, struggle to exercise, or find ordinary tasks more difficult. Attention and reaction time can decline, increasing the risk of mistakes at work, falls and road accidents. People who feel sleepy should not drive or operate machinery when they cannot do so safely [3,5].

Sleep is also connected with the regulation of several body systems. Research links chronic sleep problems with a higher risk of conditions such as high blood pressure, coronary heart disease and diabetes, although the relationship is complex and does not mean that insomnia alone inevitably causes these conditions. Poor sleep can influence stress responses, appetite, activity levels and the management of existing illnesses. In turn, physical illness and pain can make sleep more difficult, creating a cycle that may need attention on both sides [3,5].

Insomnia can also affect how people care for themselves. When energy is low, it may be harder to prepare balanced meals, remain physically active, attend appointments or follow a treatment plan. The impact is not identical for everyone: some people experience marked daytime sleepiness, while others describe exhaustion without easily falling asleep during the day. A clinician should consider the pattern and the individual's health history rather than relying on one symptom alone.

4. Impact on mental and emotional health

Sleep and emotional regulation are closely connected. After a poor night, small problems can feel overwhelming, patience may be reduced and concentration can become less reliable. Repeated sleep loss may affect memory, learning, decision-making and the ability to manage everyday stress. Relationships may also suffer when a person feels irritable, withdrawn or unable to participate fully in family and social activities [2,5].

Insomnia often occurs alongside anxiety and depression. Worry can keep the mind active at night, while repeated sleeplessness can increase negative thinking and reduce

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emotional resilience. The relationship is not one-way: mental health symptoms can cause or worsen insomnia, and persistent insomnia may make emotional difficulties harder to manage. Treating sleep problems can therefore be an important part of broader mental healthcare, but it does not replace appropriate assessment and treatment for a mental health condition.

People with ongoing insomnia sometimes blame themselves or feel embarrassed about needing help. In reality, insomnia is a recognised health problem with psychological, behavioural, environmental and biological contributors. A supportive response is more useful than telling someone simply to relax or try harder to sleep. If sleeplessness is accompanied by severe depression, thoughts of self-harm, or inability to function safely, urgent professional support is important.

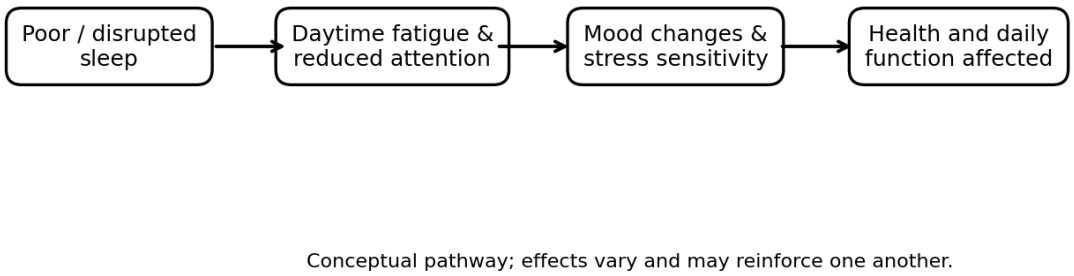


Figure 1. Conceptual pathway showing how poor sleep and daytime difficulties may reinforce one another. It is illustrative, not a quantitative causal model.

5. Assessment and diagnosis

Assessment usually begins with questions about the person's sleep pattern, when the problem started, how often it occurs and how it affects daytime life. Clinicians may ask about work shifts, stress, caffeine and alcohol, medications, pain, mood, snoring, gasping during sleep and restless sensations in the legs. A sleep diary kept for one or two weeks can record bedtime, estimated time to fall asleep, awakenings, final waking time, naps and daytime tiredness [1].

Not every person with insomnia needs a laboratory sleep study. Such testing may be considered when another disorder, such as sleep apnoea or a circadian rhythm problem, is suspected. Blood tests or other examinations may be appropriate if the history

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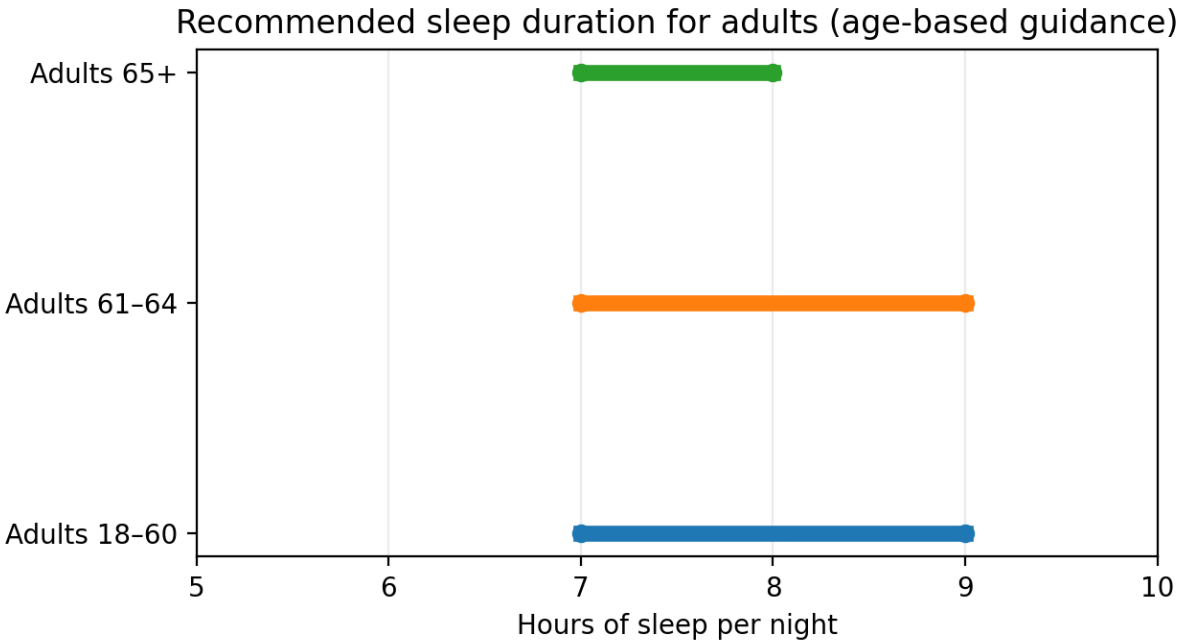
suggests a medical contributor. The aim is to understand the whole picture and identify factors that can be treated, rather than focusing only on the number of hours slept.

6. Prevention and treatment

Healthy sleep habits can support recovery and may help prevent some short-term sleep problems. Useful steps include keeping a reasonably consistent wake-up time, creating a quiet and dark sleeping environment, limiting caffeine later in the day, avoiding nicotine near bedtime, staying physically active during the day and setting aside time to wind down. Bright screens and stimulating work immediately before bed may keep some people alert, so a calmer routine can be helpful. These measures are supportive, but sleep hygiene alone may not be enough for chronic insomnia [3,4].

For chronic insomnia, cognitive behavioural therapy for insomnia (CBT-I) is recommended as a first-line treatment in adults. CBT-I is a structured programme that may include changing unhelpful beliefs about sleep, stimulus control, relaxation methods and carefully planned sleep scheduling. It is more than general advice to practise good sleep hygiene and can be delivered in person or through appropriate digital programmes [6].

Medicines may be considered in selected situations after an individual assessment, but they are not suitable for everyone and can cause side effects or interact with other medicines. Over-the-counter sleep aids and supplements should not automatically be assumed to be safe or effective. People should speak with a healthcare professional before starting or stopping a sleep medicine, particularly if they are pregnant, older, have other medical conditions or take several medicines.



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Figure 2. Adult sleep-duration guidance from the US CDC. Individual sleep needs vary; the ranges are general recommendations, not an insomnia diagnostic test [4].

Approach	Examples	Role and cautions
Sleep routine	Consistent wake time; relaxing pre-sleep routine; comfortable bedroom.	Helpful foundation, but may not resolve chronic insomnia by itself.
Behavioural strategies	Stimulus control and clinician-guided sleep scheduling.	Core elements of CBT-I; individualised guidance is important.
Psychological support	CBT-I; treatment for anxiety, depression or stress when indicated.	Addresses thoughts, behaviours and coexisting concerns.
Medical review	Review medicines, pain, breathing symptoms and other conditions.	Helps identify treatable contributors or another sleep disorder.
Medication when appropriate	A clinician may discuss a short-term or other tailored option.	Consider benefits, risks, interactions and duration; avoid self-medication.

7. Discussion

Insomnia is best understood as a health issue rather than a simple failure of discipline. Advice about routines and screen use can be useful, but it should not imply that every person can solve persistent insomnia alone. Work demands, caregiving, housing conditions, shift work, pain and emotional strain can make consistent sleep difficult. Prevention and treatment are more effective when advice is realistic and adapted to the person's circumstances.

Healthcare providers can improve outcomes by asking about sleep as part of routine care, screening for contributing conditions and offering evidence-based treatment. Public-health education can also help people recognise when sleep problems need assessment. Since sleep affects attention, emotional wellbeing and physical functioning, improving sleep may benefit not only individuals but also families, workplaces and communities.

Conclusion

Insomnia is a common and sometimes persistent disorder that can influence both physical and mental health. Its effects may include fatigue, impaired attention, mood changes, reduced daily functioning and associations with longer-term health

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conditions. Because insomnia can coexist with anxiety, depression, pain and other sleep disorders, assessment should consider the person's whole health and circumstances. Consistent sleep habits and a supportive sleep environment are valuable, while cognitive behavioural therapy for insomnia is a leading evidence-based treatment for chronic insomnia in adults. Medication may be appropriate in selected cases under professional guidance, but unsupervised use is not recommended. Most importantly, persistent sleep difficulty deserves understanding and appropriate care; it should not be dismissed as a personal weakness.

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