

Insomnia

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Introduction

Insomnia is a common sleep disorder, categorised as difficulty in falling sleep, difficulty staying asleep, early wakening or feeling unsatisfied by sleep, despite adequate time and opportunity to sleep.

Adequate sleep is essential for good health and overall quality of life. It is an essential function that allows the body and mind to recharge, critical for the ability to think clearly, be vigilant and alert, and sustain attention. In fact, sleep has been proven to improve memory recall, regulate metabolism, and reduce mental fatigue.

In general, adults require between seven and nine hours of sleep every night. Studies have shown that a lack of or a disruption of sleep may affect immunity and increase the risk for disease. Modern lifestyles, such as busy work schedules, day-to-day stressors or a disruptive bedroom environment, can reduce the amount and the quality of sleep.

Symptoms of insomnia

Insomnia is associated with complaints of impaired daytime functioning, such as poor concentration, mood disturbance and daytime tiredness. People with insomnia may also complain of experiencing headaches, upset stomach, anxiety and depression. These symptoms may often affect work (absenteeism, poor work ability) and personal (social isolation) life.

Sleep disorders, such as insomnia, are classified by duration as transient (days), short-term (up to four weeks) or chronic (longer than four weeks). Patients with chronic insomnia should be referred to a doctor.

Possible causes of insomnia

- **Stress** from work, school, health, finances or family can keep the mind active at night, making it difficult to sleep. Stressful life events or trauma—such as the death or illness of a loved one, divorce, or a job loss, may also lead to insomnia.

- **Disruptive travel or work schedules** such as jet lag from travelling across multiple time zones, working a late or early shift, or frequently changing shifts can disrupt normal sleeping patterns.
- **Poor sleep habits** such as an irregular bedtime schedule, naps, stimulating activities before bed, an uncomfortable sleep environment, and using your bed for work, eating, or watching TV. Computers, TVs, video games, smartphones, or other screens just before bed can interfere with your sleep cycle.
- Certain **medications**, especially if they contain caffeine or other stimulants.
- **Substance abuse** or dependence on certain drugs, alcohol, nicotine, or caffeine.
- **Ageing** is associated with changes in sleep patterns, activity and health, all of which are linked to insomnia becoming more common as people age.

Treatment

The goal of treating insomnia includes improving the quality and amount of sleep, reducing distress and anxiety that occurs with insufficient sleep, as well as improving daytime functioning. A common approach to the management of insomnia involves a combination of cognitive behavioural therapy (CBT) and pharmacological treatment. In all patients, the cause/s of insomnia and possible coexisting disorders should be identified as part of the management strategy.

Non-pharmacological management

Cognitive behavioural therapy for insomnia (CBT-i) improves sleep outcomes with minimal adverse effects and is reportedly preferred by patients over medicines. CBT-i involves sleep hygiene education, cognitive therapy, relaxation therapy, stimulus-control therapy and sleep restriction therapy.

Pharmacological management

The main goal of medication for insomnia is to improve sleep quality and duration while minimising abuse, misuse and

addiction. The use of over-the-counter (OTC) medicines for insomnia should be considered after carefully reviewing the risks and benefits of treatment versus no treatment.

The choice of medicine should take into consideration symptom patterns, past treatment responses, patient preference, cost, comorbid conditions, potential drug interactions with concomitant medications and potential adverse effects.

Antihistamines: diphenhydramine, doxylamine

These are first-generation antihistamines that possess sedating properties and may be useful for those who find it difficult to fall asleep and/or who wake up often during the night. Patients treated with these antihistamines may experience anticholinergic side effects, such as dry mouth, urinary retention, constipation, dry mucous membranes, tachycardia, disorientation, dizziness and drowsiness.

Herbal medicines

Herbal medicines are often used to treat insomnia. However, their safety and efficacy for the treatment of this disorder remain uncertain. A review of mono-preparations containing valerian, chamomile, kava and wuling reported insufficient evidence to support their use for insomnia, despite their sedative properties, indicating a clear need for further research in this area.

The manufacturers' prescribing information regarding the use of an OTC product should be carefully read and observed. When using an OTC medication for insomnia, patients should always be advised to adhere to the recommended dosage, be made aware of the potential side effects, advised to avoid the use of alcohol, and avoid driving or operating machinery until their response to the treatment is known.

Table 1: OTC medicines for the treatment of temporary insomnia

	Dosage
Diphenhydramine (e.g. Betasleep®)	Adults and children > 12 years: 1–2 capsules (50–100 mg) at bedtime, about 20 minutes before retiring
Diphenhydramine (e.g. Sleepeze-PM®)	Adults and children > 12 years: 1–2 tablets (25–50 mg) at bedtime Do not use continuously for more than five days
Doxylamine (e.g. Somnil®)	Adults and children > 12 years: 1–2 tablets (25–50 mg) at bedtime For occasional use only

Patient counselling and the role of the pharmacist assistant

'Sleep hygiene' refers to healthy habits, behaviours and environmental factors that influence sleep.

Key points for sleep hygiene

To do

- ✓ Establish fixed times for going to bed and waking up (and avoid sleeping in after a poor night's sleep)
- ✓ Maintain a comfortable sleeping environment: not too hot, cold, noisy or bright
- ✓ Using thick curtains or blinds, an eye mask and/or earplugs can help prevent being woken up by light and noise
- ✓ Create a relaxation period before going to bed: take a warm bath or listen to calming music

Avoid

- ✗ Watching TV or using phones, tablets or computers shortly before going to bed as light emission can stimulate the brain to stay awake
- ✗ Using the bedroom for watching television or talking on the phone as it may become associated with activity, rather than rest and sleep
- ✗ Exercise within four hours of bedtime (exercise earlier in the day may help promote sleep)
- ✗ Napping during the day
- ✗ Caffeine, nicotine and alcohol within six hours of going to bed
- ✗ Eating a heavy meal late at night
- ✗ Watching or checking the clock through the night as this can cause anxiety

When to refer the patient to the doctor

- Suspected depression, alcohol or substance-related dependency
- Insomnia of a chronic nature, i.e. longer than four weeks
- Insomnia in children under 16 years
- Patients who complain of restless legs or breathing issues during sleep

Conclusion

For most adults, at least seven hours of sleep each night is needed to help keep the body and mind healthy. Insomnia is the most common sleep disorder, characterised by an inability to fall asleep or to maintain sleep. Assisting patients with insomnia goes beyond the recommendation of an OTC medication. It is important to discuss healthy sleep habits to help promote adequate sleep and equally important to identify patients that require referral to the doctor.

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