



# Brief behavioural therapy: insomnia in adults

## Intervention

The provision of education about sleep hygiene and stimulus control strategies, and tailored advice about restricting the time spent in bed to change behaviours.

The rationale is that by modifying waking behaviours, the physiological systems that regulate sleep (ie homeostatic and circadian drives) can be modified.

## Indication

Physical health problems are present in about one-third of patients with insomnia.

Chronic primary insomnia in adults.

Primary insomnia is defined as repeated difficulty with sleep initiation, duration, consolidation or quality despite adequate time and opportunity for sleep, lasting for at least a month.

## Precautions

Ensure the diagnosis is most likely to be primary insomnia (ie there are no other conditions or causes such as anxiety, depression, excessive alcohol consumption or pain).

In patients reporting excessive daytime sleepiness, consider obstructive sleep apnoea.

Do not use sleep restriction strategies with patients who have bipolar disorder as this can precipitate manic episodes.

Sleep restriction may be contraindicated in people with unstable or untreated medical or psychiatric conditions, seizure disorders or excessive daytime sleepiness, or those who already demonstrate sleep restriction (<6 hours in bed).

Advise those who drive vehicles there may be an initial worsening of sleep deprivation. Workers who operate heavy machinery should consider starting treatment during holidays.

## Adverse effects

Patients may feel tired and sleep deprived during the first few weeks after beginning the intervention.

## Availability

This brief behavioural intervention can be performed in primary practice by GPs or practice nurses. It requires no specialist training or objective measures of sleep such as polysomnography (overnight sleep studies) and actigraphy (movement watches).

Sleep diaries are available online (refer to [Consumer resources](#)).



## Description

Two randomised trials that evaluated brief behavioural interventions for insomnia had some differences in their components and delivery.

### Intervention 1

In the trial by Buysse and colleagues (2011), patients received advice about restriction of time in bed and stimulus control strategies.

The intervention was provided in two face-to-face sessions (initial 45-minute session + a 30-minute follow-up session 2 weeks later). This was followed by two 20-minute telephone calls over a 4-week period.

### Intervention 2

In the trial by Fernando and colleagues (2013), patients received sleep hygiene instructions and advice about restriction of time in bed.

The intervention was delivered over two face-to-face sessions with the GP. Before the first consultation, patients completed a 2-week **sleep diary**. The information in the diary was used to provide **individualised instructions** on bedtime and wake time during the initial consultation.

After completing the 2-week sleep intervention, the patient has a follow-up visit to their doctor.

### Restriction of time in bed

This strategy aims to limit the number of hours in bed to improve sleep. This involves:

- identifying how many hours the patient spends in bed and how many hours they perceive they are asleep (average sleep time): this can be identified from the history or a sleep diary
- restricting the time in bed to the calculated average sleep time (minimum 5–6 hours) plus 30 minutes
- continuing this for 2 weeks before making any adjustments (patients monitor sleep quality using sleep diary).

Refer to the **Sleep intervention instructions**, which you can tailor for your patient.

If the patient is *sleeping and functioning better*, continue with the same schedule.

If the patient is *sleeping better but feels sleep deprived*, add 30 minutes to their time allowed in bed and continue to do this every week until feelings of sleep deprivation disappear.

If they are *not sleeping better*, try reducing time in bed by 30 minutes (but to no fewer than 5 hours)

Try each option for 2 weeks before making a change. If there is no improvement after additional 2 weeks, consider referral to a sleep specialist.



## Description

### Stimulus control strategies

These have the rationale that sleep is a learned behaviour which is contingent on the environment and involves reserving the sleep environment for sleep and sex.

Instructions for the patient include:

- Get up at the same time each day, regardless of the amount or quality of sleep.
- Go to bed only when sleepy.
- Stay in bed only when asleep. Get out of bed if you are unable to sleep after 15–20 minutes of going to bed or waking during the night. Choose, in advance, some relaxing activities to do (eg read a book, listen to music) while awake, but do not do these in the bedroom. Return to bed only when sleepy (repeat as necessary).
- Do not nap during the day.

### Additional sleep hygiene instructions

- Use the bed/bedroom only for sleep.
- Limit caffeine to 1 cup of coffee in the morning, avoid alcohol and cigarettes at night and limit other substances that can affect sleep.
- Regular exercise can help improve sleep but avoid exercise late at night.
- Ensure that the bedtime environment is comfortable and conducive to sleep (eg appropriate temperature, limited noise and light).
- Avoid looking at computer screens in the hours before bed, avoid looking at clocks during awakenings and consider changing sleeping arrangements if you are disturbing your partner's sleep.

## Tips and challenges

Consider providing patients with a written 'prescription' for their sleep behaviours, particularly about restricting time in bed.

Patients who do not respond to a brief behavioural intervention may require referral to a sleep specialist.

Behavioural therapy emphasises the behavioural elements of insomnia, rather than the cognitive components.

Cognitive behaviour therapy has been found to be effective for treating insomnia when compared with medications and may have more durable effects than medications. It combines behaviour strategies and cognitive therapy. However it is typically not feasible to be delivered by GPs as it is delivered over a longer number of sessions (6–8) and may require training.

## Grading

NHMRC Level 2 evidence

## References

Buysse D, Germain A, Moul D, Franzen P, Brar L, Fletcher M, Begley A, Houck P, Mazumdar S, Reynolds C, Monks T. Efficacy of brief behavioural treatments for chronic insomnia in older adults. *Arch Intern Med*, 2011;171(10): 887–95.

Falloon K, Arroll K, Ellery C, Fernando A. The assessment and management of insomnia in primary care. *BMJ*, 2011;342: 2899. DOI: 10.1135/bmj.d2899

Fernando A, Arroll B, Falloon K. A double-blind randomised controlled study of a brief intervention of bedtime restriction for adult patients with primary insomnia. *J Prim Health Care*, 2013;5(1): 5–10.



## Consumer resources

American Academy of Sleep Medicine, Patient sleep diary (2 weeks)

<http://yoursleep.aasmnet.org/pdf/sleepdiary.pdf>

Alternatively, the sleep diary used in the trial by Fernando can be downloaded.

## Downloads

[Sleep diary \(XLS 36KB\)](#)

[Sleep intervention instructions \(PDF 29KB\)](#)