

Sleep advice for people with insomnia

A resource for
healthcare professionals

Foreword by Dr Alan Wade

Sleeping problems can affect many people; some may wrongly decide to accept it as part of life, whilst some people will seek the help of a healthcare professional.

Sleep is necessary for a healthy and balanced life. In today's society sleep can become compromised, and this will have a knock-on effect on other aspects of health, on daily functioning and wellbeing. Sleep, being the most natural of biological functions can, however, be one of the most challenging to put right when it goes wrong.

In some cases, your patients may present with poor sleep due to natural changes in sleep patterns. For others there will be an underlying physical or mental health condition causing it. There are limitations to pharmacological treatments in terms of side effects and dependency risks. Certainly, it is important to aim to treat the underlying cause of insomnia rather than just treat the symptoms. Managing insomnia as holistically as possible will help achieve the best patient outcomes.

For some patients, advice on how to manage their lifestyle better to improve sleep (commonly known as sleep hygiene) can help. NICE guidance recommends that healthcare professionals should offer non-pharmacological advice as the first intervention to patients.

This resource has been developed with these factors in mind and to help healthcare professionals offer practical advice to help people overcome insomnia.

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This booklet is designed to assist primary healthcare professionals manage insomnia in adults. Information included in this booklet will help practitioners talk confidently to patients about insomnia and the role of non-pharmacological sleep advice.

Included with this resource are:

- **Patient information leaflets** to help patients understand their sleep problems and how they can manage it with sleep advice
- **Patient sleep diaries** that will enable your patients to keep a personal record of sleeping patterns and daily activities
- A **sleep assessment tool** to assess the severity of the patient's sleep problem and the impact it has on daily life from their point of view.

Insomnia – a common patient complaint

Recent data have shown that up to 37% of patients presenting at general practices in the UK have insomnia.¹ A government run survey of Psychiatric Morbidity has also found that sleep problems were the most common neurotic symptom with 29% of adults experiencing problems with sleeping.² Insomnia becomes more prevalent with increasing age, and is highest in adults aged over 65 years.³

Insomnia can, at times, be difficult to manage. The cause of your patient's insomnia may not be clear-cut,⁴ patients may make repeat visits, and certain drugs can pose side effects, and can only be used in the short term.⁵ All this contributes to the challenges of diagnosing and treating insomnia.

Managing poor sleep naturally can be a better option for some patients. Offering advice on sleep hygiene is an important early intervention,⁵ allowing patients to achieve better quality sleep and better daytime functioning, so they can get back to a normal rhythm of sleep.

NICE Health Technology Appraisal: Guidance on the newer hypnotics for the short-term management of insomnia (2004)⁵

NICE recommends that doctors should consider non-medical treatments, including simple techniques and appropriate advice to encourage good sleep (for example, avoiding stimulants and maintaining regular sleeping hours with a suitable sleeping environment), before prescribing drug therapy for insomnia.

About insomnia

Insomnia is a recognised sleep disorder. It is characterised by poor sleep quality with the following factors:⁶

- A difficulty in initiating or maintaining sleep, or non-restorative sleep
- Difficulties last for at least one month
- Patients report clinically significant distress
- Patients report impairment of social, occupational and other important areas of daytime functioning.

Insomnia can be defined into two different subgroups – ‘primary’ and ‘secondary’ – according to aetiology and presence of risk factors:

Primary insomnia

Primary insomnia is defined as insomnia without a specific underlying physical or mental health condition, or as a result of a substance, such as medication, alcohol or street drugs. Primary insomnia may be caused by a negative conditioning to sleep.⁴

Primary insomnia accounts for up to 10% of all insomnias,⁶ and is included in the overall cohort of neuropsychiatric conditions that contribute to overall disability* as reported by WHO.^{7, 8}

Secondary insomnia

Secondary insomnia is caused by an underlying physical or mental health condition, or by the direct physiological effects of a substance.^{6, 9}

The effect of age on sleep

The prevalence of insomnia generally increases with age, with the highest incidence in adults aged over 65 years;³ this can be due to sleep related physiological changes, which occur naturally with age.^{10, 11}

* Overall disability is expressed in terms of DALY – a measure calculated as the sum of years lost due to premature mortality and equivalent ‘healthy’ years lost due to disability⁸

These changes can predispose to sleep disorders, such as primary insomnia. Older adults are also more likely to suffer co-morbidities, which can make them susceptible to developing secondary insomnia, and explain the increase in insomnia prevalence in older adults.⁴

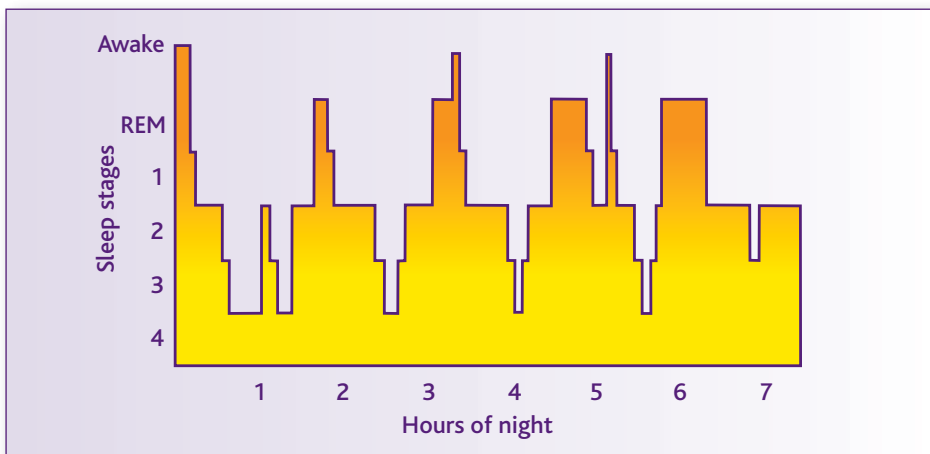
Sleep architecture

Normal sleep consists of five successive stages of sleep that together make up the *sleep cycle*. During a night's sleep an individual will go through the sleep cycle several times. There are also several short periods of waking for one to two minutes, but this is not usually remembered. Stages 1 to 4 are part of non-rapid eye movement (NREM) sleep, and Stage 5 is rapid eye movement (REM) sleep.

Stages 1 and 2 are known as 'light' sleep and stages 3 and 4 as 'deep' sleep.^{12, 13}

- **Stage 1:** light sleep, half awake and half asleep.
- **Stage 2:** onset of sleep when there is disengagement from surroundings.
- **Stage 3:** deep sleep, which is the restorative phase of sleep.
- **Stage 4:** more deep sleep from which it is difficult to wake.
- **Stage 5:** this is REM sleep and usually begins about 90 minutes after the onset of sleep. The duration of REM sleep increase within each successive sleep cycle. REM sleep is essential for daytime alertness.

Hypnogram for a normal adult¹⁰



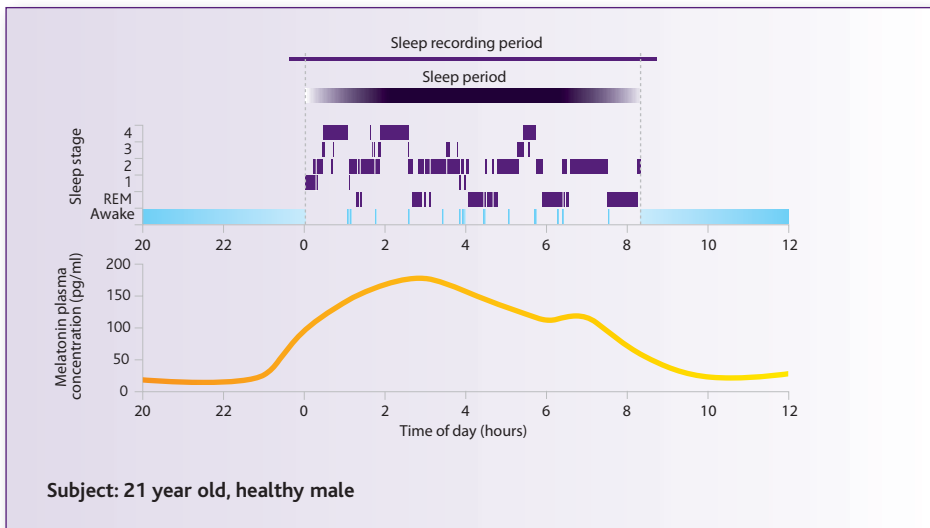
These sleep patterns will change with age, and in the elderly it becomes particularly fragmented. Furthermore with age, there is a progressive decrease in the amount of deep, restorative sleep, which could explain the increased complaint of insomnia from older patient populations.¹⁴

The role of melatonin in sleep

Our understanding on the function of melatonin in the circadian rhythm, and its role as an important physiological regulator of sleep, has increased over the years.^{15, 16}

Melatonin, released by the pineal gland, is stimulated by darkness and acts as a sleep anticipation signal. It promotes sleep onset, and its release during the stages of light sleep ensures the induction of the stages of deep sleep and prevents awakening in the night.¹⁷ Studies have shown that the amount of deep sleep within the sleep cycle declines in older people with insomnia. There also appears to be a relationship between increasing age, declining melatonin production and increasing insomnia prevalence.¹⁷

Melatonin levels during normal sleep hours¹⁸



The importance of quality sleep on quality of life

The goal of managing insomnia is to improve the quality of life for individuals by enabling them to achieve better quality sleep. Insomnia impacts greatly on normal functioning, having a negative effect on alertness, responsiveness, cognitive function and memory.¹⁹⁻²¹ In real life terms, insomnia can impact on working life, social life and on relationships and family life.¹⁹

Studies have also shown that people with insomnia suffer more from symptoms of anxiety and depression than people without, although the cause-effect direction of this relationship is not known.¹⁹

Poor quality sleep is non-restorative and correlated with a negative quality of life.¹⁹ Going through the full sleep cycle several times a night and spending enough time in deep sleep is important in achieving quality sleep that is restorative and results in good next day functioning.

Patients should be reminded that there is no rule for how much someone should sleep; older patients may need less sleep. Ensuring that your patients get good quality sleep is as important, if not more so, than getting a greater quantity of sleep.

Insomnia therapies – pharmacological as well as non-pharmacological – should aim to improve the quality of sleep experienced, thereby making quality of life better for individuals who suffer from sleep disorders.

Diagnosing insomnia

Reaching a diagnosis of insomnia is predominantly based upon the patient's medical history, and querying of lifestyle habits or use of any substances that may be affecting their sleep.²² Sleep assessment tools and patient diaries can also help with differential diagnosis.^{22, 23}

A diagnosis of *primary insomnia* is reached with the following:

- The main complaint is difficulty falling or staying asleep, or feeling un-refreshed after a night's sleep, for at least one month⁶
- The sleep disturbance (or the daytime sleepiness that results from it) is worrying him or her, compromising day-to-day activities, or affecting relationships⁶
- The sleep disturbance is not linked to physical health problems like arthritis pain⁶
- The sleep disturbance is not linked to mental health problems like depression or anxiety⁶
- The sleep disturbance is not linked to other sleeping problems such as narcolepsy, sleep apnoea, circadian rhythm sleep disorder, or a parasomnia⁶
- The sleep disturbance is not a side effect of medication or substance abuse.⁶

Sleep assessment tools

Differential diagnosis can be further clarified by the use of sleep assessment tools. These are particularly useful in assessing the patient's change in **quality of sleep**, in response to treatment.²³ Improving and treating for better quality of sleep, rather than quantity of sleep, is the key to achieving optimum patient outcomes. See section 'The importance of quality sleep on quality of life' on page 7 for more details.

Subjective sleep assessment using patient rated questionnaires and patient diaries are useful in diagnosing, assessing and treating insomnia. They also provide a picture of the impact poor sleep has on quality of life.

Leeds Sleep Evaluation Questionnaire (LSEQ)

The LSEQ is a standardised instrument for the measurement of subjective changes in sleep, and daytime functioning following medication. The four following domains of sleep and morning behaviour are measured by patient response:²³

- Ease of getting to sleep (GTS)
- Quality of sleep (QOS)
- Ease of awakening from sleep (AFS)
- Integrity of early morning behaviour following wakefulness (BFW).²³

The LSEQ was developed in 1978 and has been validated in a recent study in patients aged 55 or older, therefore it is a valuable tool in monitoring the treatment of sleep problems in the older patient.²⁴

Using the LSEQ

The LSEQ comprises ten questions that retrospectively assess changes in the four domains of sleep including morning behaviour.²³

All four domains are independent of each other and can be used separately to achieve total scores for each variable. Patients respond to questions by making a vertical mark on a 10cm visual analogue scale ranging from 0–10. Responses at 5cm represent no change and a change of 1cm is clinically significant.²³

A pad of sleep assessment forms is included with this resource for you to use with your patients.

Patient sleep diaries

Sleep diaries provide a subjective assessment of the patient's experience of sleeping problems and provide a way to assess the impact insomnia has on daily life.^{15, 16} They can also be used as part of the diagnosis process.

Asking patients to fill in a patient diary alongside the start of any treatment or sleep advice is a useful means of demonstrating results and improvements in symptoms over the course of management. Patients can also obtain a clear picture of how their own symptoms and levels of day-to-day functioning improve, by comparing diary entries from the beginning to end of treatment.

Patient Sleep Diaries are included with this resource for your patients to complete.

The importance of sleep advice for patients

Sleep advice educates patients on how to promote better quality of sleep through changes in lifestyle in terms of diet and exercise, and through alterations within the sleep environment.^{25,26} Emphasis is made on how activities during the day can influence the level of sleep at night. Patients are encouraged to alter habits that may influence their sleeping patterns.

It is important to offer sleep advice as an early intervention for patients with insomnia,⁵ particularly in primary insomnia where there is no obvious underlying factor or medical condition causing the symptoms. This technique of non-pharmacological treatment may be helpful when combined with other therapies.

Your patients should be advised to:^{25,26}

- Keep good sleeping habits, such as keeping to a regular bedtime routine and not using the weekend to catch up on sleep
- Avoid caffeinated drinks, smoking, alcohol, heavy meals and heavy exercise before bedtime
- Ensure that their bedroom environment is made right for sleep; not too hot, cold or noisy, and that it is only used for sleep – not for watching TV or working in
- Get in the mood for sleep by learning how to relax and wind down before bedtime.

Other non-pharmacological advice

As there is a link between cognitive and behavioural factors in insomnia,⁴ interventions such as cognitive behavioural therapy (CBT) and relaxation techniques can also be helpful.⁵ Even if there is little provision for these types of therapeutic techniques locally, some patients may be able to access them privately or use self-help books or CDs that offer this kind of help.⁵

The accompanying patient information booklet *Getting back into the rhythm of sleep* contains a list of sleep advice tips to give to your patients.

Conclusion

Insomnia can pose a challenging condition to manage. For your patients, poor sleep impacts on everyday life and general wellbeing. Sleep advice can be beneficial and offer a natural management option for some patients, who may find that simple changes can improve their quality of sleep and make a difference to their quality of life.

Online resource

To download a PDF copy of this information please visit www.sleepadvice.co.uk/hcp

Copies of the patient leaflet and sleep diary are available to download at www.sleepadvice.co.uk/public

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Sleep Assessment Tool

(adapted from the Leeds Sleep Assessment Questionnaire (LSEQ), Parrott & Hindmarch 1978)

This sleep evaluation questionnaire is a standardised and widely used self-reporting instrument comprising ten 10cm visual scales that relate to the ease of **getting to sleep** (GTS), **quality of sleep** (QOS), ease of **awakening from sleep** (AFS) and alertness and **behaviour following wakefulness** (BFW).

Each of the following questions is answered by placing a vertical mark on the answer line. If no change was experienced then place the mark in the middle of the line. If a change was experienced then position the mark relative to the nature and extent of the change, i.e., large changes near the ends of the line, small changes near the middle.

Ease of getting to sleep (GTS)

How would you compare getting to sleep using the medication with getting to sleep normally, without medication?

- | | | |
|--------------------------------|-------|-----------------------------|
| 1. Harder than usual | _____ | Easier than usual |
| 2. Slower than usual | _____ | Quicker than usual |
| 3. Felt less drowsy than usual | _____ | Felt more drowsy than usual |

Quality of Sleep (QOS)

How would you compare the quality of sleep using the medication with non-medicated sleep?

- | | | |
|---|-------|---|
| 4. More restless than usual | _____ | More restful than usual |
| 5. More periods of wakefulness than usual | _____ | Fewer periods of wakefulness than usual |

Awakening from sleep (AFS)

How did your awakening after medication compare with your usual pattern of awakening?

- | | | |
|------------------------------|-------|-------------------------|
| 6. More difficult than usual | _____ | Easier than usual |
| 7. Took longer than usual | _____ | Took shorter than usual |

Integrity of early morning behaviour following wakefulness (BFW)

How did you feel on awakening?

- | | | |
|----------|-------|-------|
| 8. Tired | _____ | Alert |
|----------|-------|-------|

How do you feel now?

- | | | |
|----------|-------|-------|
| 9. Tired | _____ | Alert |
|----------|-------|-------|

How was your sense of balance and coordination upon getting up?

- | | | |
|----------------------------|-------|------------------------|
| 10. More clumsy than usual | _____ | Less clumsy than usual |
|----------------------------|-------|------------------------|