

# 16

## Other Sleep Disorders

Some people who have insomnia symptoms such as difficulty falling asleep, or night-time awakenings may have another sleep disorder that affects their ability to get a good night's sleep. If you think you have one or more of these disorders, you should consult your doctor. You may need to be referred to a Sleep Disorders Centre or Clinic for an overnight sleep recording for diagnosis and appropriate treatment.

### *Sleep apnoea and snoring*

It's quite a common disorder, and it particularly affects middle-aged, overweight men but is also common in women after menopause. One of the main symptoms of sleep apnoea is loud snoring. It's more likely to occur if you lie on your back and if you have had some alcohol before bed.

Upon falling asleep the airways can collapse partially or completely and prevent breathing. After several seconds this will cause an arousal to a lighter stage of sleep or even to full consciousness that opens the airways and re-starts normal breathing – often with a snort – although you may not be aware of this. This can occur hundreds of times throughout the night, resulting in non-restorative sleep and daytime sleepiness.

Individuals with sleep apnoea may also experience sleep maintenance insomnia. For example:

---

*Colin is 56 years old and works full time in the Public Service. He sits at a desk all day and often feels sleepy and exhausted. Sometimes he actually sits in his car after lunch for a nap. Colin is overweight but feels too tired to do any exercise.*

*While watching TV in the evening, he falls asleep and usually wakes himself up with a loud snore. His wife often nudges him awake.*

*Colin goes to bed about 10:30 p.m. and has no difficulty falling asleep, however he wakes a few times*

*during the night, especially later in the night. He snores loudly, especially when lying on his back and his wife has noticed he sometimes stops breathing.*

*He wakes at 6:30 a.m. often with a headache and feeling very unrefreshed. He feels like he could sleep longer at that time in morning but must get up for work.*

Colin has sleep maintenance insomnia as well as the signs of sleep apnoea.

Colin should be referred to a Sleep Disorders Centre for an overnight sleep study to determine the presence and severity of his sleep apnoea and insomnia and establish the appropriate treatment. This would include treatment for his apnoea **and** his insomnia.

### ***Treatments for Sleep Apnoea***

- ▶ Lifestyle changes
  - ▶ Losing weight with diet and exercise can improve symptoms
  - ▶ Avoiding alcohol or other medication that relax the muscles of your throat and lead to snoring
  - ▶ Sleeping on your side may help especially if you tend to snore mainly on your back. There are some devices becoming available to signal when you are on your back and encourage you to shift to your side. These may be indicated if your sleep apnoea is almost exclusively associated with sleeping on your back.
- ▶ CPAP (Continuous Positive Airway Pressure) is usually very effective for moderate to severe Sleep Apnoea. The CPAP machine uses a mask that fits over your nose. The pump gently blows air into your throat to keep your upper airway passages open. This promotes more normal sleep and better daytime alertness and energy.
- ▶ Dental (oral) appliances. A device fitted by a dentist may be suitable for mild to moderate sleep apnoea. The device can bring your lower jaw forward and reduce obstruction to airflow during sleep.
- ▶ Surgery. There are different types of surgery than can widen your airway.

### ***Periodic limb movements in sleep (PLMS)***

Some people, especially older adults, experience involuntary jerky leg movements during sleep (lasting 2 to 3 seconds each time). These Periodic Limb Movements in Sleep (PLMS) can occur every 20 to 40 seconds and up to hundreds of times a night. These jerks are often associated

with a very short awakening of which you may not be aware, but which is enough to disturb your sleep (and that of a bed partner).

### ***Restless legs syndrome (RLS)***

If you experience an unpleasant creeping, crawling, or tingling sensation in your legs then you may have Restless Legs Syndrome. These unpleasant feelings occur more commonly in the evening when you are resting such as sitting while watching TV or at the theatre or lying in bed trying to fall asleep. These unpleasant feelings can usually be relieved, but only temporarily, with exercising the muscles. Many people with RLS also have PLMS.

Moderate to severe RLS can make it difficult to get to sleep or get back to sleep after night-time awakenings. This difficulty can lead to the development of conditioned insomnia as well. In addition to the restless legs feelings if you also experience an over active mind and feelings of frustration or worry while attempting sleep, you are likely to have sleep onset and /or sleep maintenance insomnia and benefit from Chapters 9, 10,11.

If you suspect that you have PLMS or RLS and have daytime symptoms of fatigue or sleepiness, referral to a sleep disorders centre for diagnosis and treatment would be advisable.

---

### *What happens during an overnight sleep recording?*

*During a sleep recording, your brain waves, breathing and movements are recorded. Small electrodes (sensors) are attached to your head, and face (near your eyes, chin) to monitor your sleep stages or whether you are awake. Since the main concern in the recording is to measure breathing and limb movements during sleep, it doesn't require much sleep time to get an accurate diagnosis. So don't worry about having more difficulty sleeping under these conditions. You will probably be surprised that you get more sleep than you expect.*

### ***Nightmares or sleep terrors?***

Nightmares are common in children and then start to decrease after about 10 years of age. However, many adults report experiencing a nightmare once in a while. They are vivid and disturbing dreams that occur in REM sleep and therefore tend to occur in the later part of your sleep – near the morning. You wake up, feeling alert and perhaps anxious and you can clearly recall what the dream was about.

On the other hand, sleep terrors arise from deep sleep and most often occur in the first third of the night. Sleep terrors are more common in children. The child may sit up in bed, scream, become agitated and look scared with wide eyes. This is more distressing to the parent than the child. However, despite the intensity of these episodes, there is no evidence that they indicate any deep seated psychological disturbance. They are considered relatively benign events for the child.

Because sleep terrors occur in deep sleep, it is hard to wake the child. Once awake the child will be confused and, the next day, not remember what happened. While these are fairly common in children aged 5-10 years, only about 1 in 50 adults ever experience sleep terrors.

Because these occur in deep sleep and sleep is deeper if there is greater sleep pressure from earlier insufficient sleep, extending your sleep can help both conditions. If they occur frequently and you are concerned, seek help from your doctor.

### *Sleep walking*

Sleep walking also occurs during the deeper sleep stages, most often in the first third of the night. Since normal sleep walking arises from deep sleep, not REM sleep, it is not an acting out of a dream. Remember, our bodies are effectively and temporarily paralysed during REM sleep.

Again, sleep walking is more common in children but if you are one of the 4% of adults who sometimes sleep walk and it causes a problem, that is, you are at risk of injury, then seek help from your doctor.

### *Grinding teeth (Bruxism)*

Grinding or clenching your teeth during sleep, if frequent and severe, can lead to jaw pain, worn teeth enamel or even earache. It has been associated with stress, anxiety, caffeine, smoking, alcohol before bed, and Sleep Apnoea. Stress reduction may reduce Bruxism as well as all strategies mentioned in Good Sleep Practices (Chapter 10). To protect your teeth, a dentist may recommend an oral appliance such as a mouth guard.

### *Narcolepsy*

Narcolepsy is a rare disorder that causes excessive daytime sleepiness. In severe cases the person can fall asleep involuntarily – sleep attacks - at inappropriate times of the day (when talking to someone), and with little warning. Other symptoms can include

- ▶ Sudden muscle weakness (cataplexy) usually triggered by emotions such as laughing, anger, surprise.
- ▶ Hypnagogic hallucinations which are dream-like hallucinations occurring in that transition

period between wakefulness and sleep.

- ▶ Sleep paralysis which is that feeling of not being able to move for a few minutes when falling asleep or after awaking.
- ▶ Disturbed sleep at night such as tossing and turning and awakenings, nightmares.

Narcolepsy can be managed with medication and scheduled naps throughout the day.

Your doctor will refer you to a Sleep Disorders Unit for diagnosis and treatment. For further information and support, you may like to contact the group NODSS:

### **Narcolepsy and Overwhelming Daytime Sleepiness Society of Australia**

Phone : (03) 9761 9767

Fax : (03) 9761 9727

Website: [www.nodss.org.au](http://www.nodss.org.au)

Email: [info@nodss.org.au](mailto:info@nodss.org.au)

There are also local State branches.

### ***Shift Work Survival***

More than 20% of the workforce has to work some schedule of shift work different from the normal 9:00 to 5:00 work day. Working the night shift seems particularly difficult for most people. In addition to the disruption to family and social life, working the night shift has other negative consequences arising from the work/sleep schedule being 'out-of-sync' with our circadian rhythms.

Trying to function across the night as we go through our circadian low around 4:00 to 6:00 a.m. is almost impossible to be efficient and is fraught with mistakes and danger. Research has found that people's performance at that time (3:00 to 6:00 a.m.) is as impaired as it would be with a blood alcohol level high enough to make it illegal to drive a car.

The personal cost to the night shift worker can be high.

- ▶ Daytime sleep during the circadian alert phase is usually shorter and lighter than nighttime sleep.
- ▶ Therefore, there is an accumulation of sleep debt and sleep pressure over a succession of work shifts at night.
- ▶ This increased sleep pressure contributes to the still present circadian sleepy phase in the early morning hours (3:00 to 6:00 a.m.).

- ▶ Caffeine is often consumed during this time to try to stay awake until the end of the night shift and on the way home. However, since caffeine stays in the body for many hours, it will tend to lighten the day sleep even more.
- ▶ The insomnia-like symptoms of daytime sleep and the worry about the negative impact of insufficient sleep on both work performance and family life can lead to the development of conditioned insomnia and a chronic sleep problem even after stopping shift work.

Unfortunately, there is no easy solution to this 'out-of-sync' problem. One alternative is to limit the number of successive night shifts to no more than two before allowing days off and return to day shift. However, individual workers usually have little control over shift work scheduling.

### *Some hints for the night shift worker*

For permanent night shift workers with many (more than three) successive night shifts, it can help to partially adjust their circadian phase so they are more alert during the night shift and also get better quality sleep during the day.

- ▶ This could be achieved with the use of bright light during the late evening or the first part of the night shift for a couple of nights.
- ▶ In addition try to avoid bright light on the way home before bed.
- ▶ This would delay the circadian rhythm to the point where the circadian low would occur after the night shift and in the early part of the daytime sleep.
- ▶ This should reduce the hazard of impaired performance on the night shift and improve the quality of sleep to reduce the accumulation of sleep debt.
- ▶ Minimize the potential disturbances to your daytime sleep, blacking out daylight from windows, take the phone off the hook or put your mobile phone on silent mode, make it clear to family and friends that you will be sleeping between certain hours and should not be disturbed.
- ▶ Night shift workers also find it useful to catch another nap in the early evening before work to help reduce the sleep debt and to improve alertness on the job.
- ▶ However, remember that on "days off" the preferred sleep period would then be delayed somewhat (for example, 2:00 a.m. to 10:00 am) but not unlike an evening type person.
- ▶ Also, remember to avoid caffeine in those early morning hours.

### *In Conclusion*

In this book we have explained the process of sleep and what can go wrong. There are many kinds of insomnia and different things that contribute to it. Therefore, in order to be effective,

the treatment should be tailored to your specific sleep problem.

You may have had insomnia for many years so it can take many weeks to re-establish a better sleep pattern. Remember, the important thing is how you feel during the day – that is the best indication of the quality of your sleep.

If your insomnia should return at any stage in your life, at least you will now have the knowledge and skills to tackle the problem and again improve your sleep and the way you feel during the day. You can tame the insomnia tyrant, get a better quality sleep, feel better during the day, and improve your quality of life.

### *Useful contacts*

Sleep disorder centres now exist in all states of Australia and New Zealand as well as most countries around the world. Access to these centres is through a referral from your doctor.

For a list of sleep centres and sleep therapists in Australia and New Zealand or information about sleep, contact:

#### **The Australasian Sleep Association**

Website: <http://www.sleep.org.au/>

Phone: (0)2 9920 1968

Email: [admin@sleep.org.au](mailto:admin@sleep.org.au)

If your insomnia is associated with a distressing event, anxiety or depression, you may wish to seek counselling. For a list of psychologist who can help in these circumstances contact:

#### **The Australian Psychological Society**

Website: <http://www.psychology.org.au>

Toll Free: 1800 333 497

Email: [contactus@psychology.org.au](mailto:contactus@psychology.org.au)

Finding a sleep disorders center in the United States of America via the web:

**American Academy of Sleep Medicine** <http://www.aasmnet.org>

For those in the United Kingdom:

**British Sleep Society** <http://www.sleeping.org.uk/>

For other European countries:

**European Sleep Research Society** [http://www.esrs.eu/cms/front\\_content.php?idart=255](http://www.esrs.eu/cms/front_content.php?idart=255)

## About the Authors

Leon Lack is a Professor in Psychology at Flinders University in South Australia. Since 1980 he has conducted basic and clinical sleep research with the frequent support of the Australian Research Council and National Health and Medical Research Council of Australia. He has numerous research publications in the areas of circadian rhythms, bright light therapy, insomnia, and its treatment. Dr. Lack is often invited to speak about sleep and treatments of insomnia to medical practitioners, psychologists and the general public. Since 1990 he has also conducted an insomnia treatment clinic in the multidisciplinary sleep unit, Adelaide Institute for Sleep Health. He was a founding member, past president, and continues active involvement in the Australasian Sleep Association.

Helen Wright was a Research Fellow at Flinders University, South Australia and a Psychologist working in insomnia treatment programs in hospital based Sleep Units. She has been involved with basic and clinical sleep research since 1990, and has co-authored articles on sleep, insomnia, circadian rhythms and bright light therapy. With Professor Lack, she has developed the Insomnia Management Kits that have been used extensively by GPs throughout South Australia.

Dr Lack and Dr. Wright hold national and international patents as co-inventors of the Re-timer.