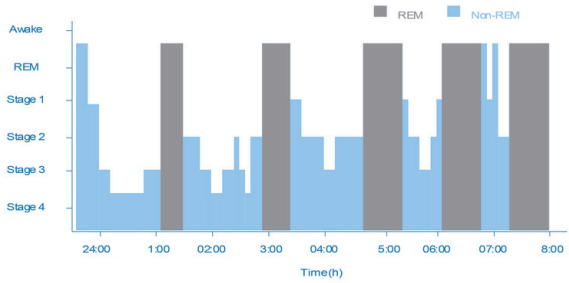
MANAGING SLEEP PROBLEMS

NORMAL SLEEP

On average, adults sleep six to eight hours per 24 hour cycle, while infants and teenagers sleep more. As we get older, we need less sleep.

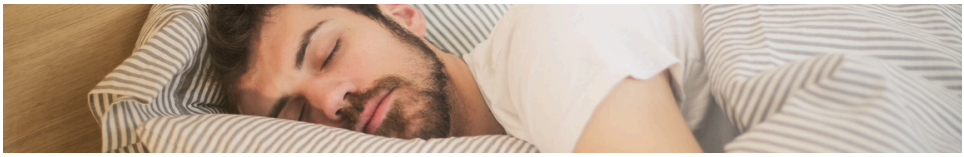
Our normal sleep pattern looks something like this figure:



Stages 1-4 are periods of increasingly deep sleep. REM (rapid eye movement) sleep refers to the rapid eye movements that occur during this time. It is also called 'paradoxical' sleep because the muscles are fully relaxed but the brain is still active. Most dreaming takes place during REM sleep.

INSOMNIA

The technical term for a poor sleep pattern is insomnia. It is usually seen from a person's own viewpoint: if they think their sleep is inadequate or abnormal, then they are considered to have insomnia. About a third of adults report insomnia at some time during each year, and around half of these people see their problem as serious. Sleep disturbance increases with age and is more common in women than in men.



Even though it is widespread, many people don't seek help for insomnia, so it often goes untreated. Insomnia can often be a sign that something else is wrong in a person's life. However, sometimes it is simply part of their lifestyle, for example:

- Shift workers' sleep disorder.
- Jet lag syndrome.
- Irregular sleep/wake pattern.
- Sleep disorders due to alcohol or other drugs (e.g. stimulants such as amphetamines).

In other cases, insomnia may be due to a stressful time or event, such as an exam, a job interview, or work stress. Usually these problems are short-lived (around one week) and rectify themselves naturally or require short-term treatment only (see 'treatments' below). Sometimes, if the stress is more intense (e.g. grief), it might last longer, from one to three weeks. Again, treatment is usually symptomatic.

Of more concern are long-term sleep problems, which tends to be when it last for more than one month. These may be primary or secondary conditions:

PRIMARY

Sleep apnoea syndrome -This is more common in overweight people,
when the air passages collapse during REM sleep, leading to snoring, sudden frequent wakening in the night, and sleepiness during the day.
Restless legs syndrome - Difficulty sleeping because one feels an incessant urge to move.

SECONDARY

Depression - Difficulty falling asleep and classically waking three to four hours before normal waking time.
Anxiety - Difficulty falling asleep and restless, unrefreshing sleep.
Mania - Feeling less need for sleep combined with excessive energy.
Psychosis - Often results in a reversed sleep-wake cycle (needing to sleep during the day and staying awake at night).
Substance abuse - Stimulants decrease sleep, while alcohol produces short-term unsatisfactory sleep.

ASSESSMENT OF SLEEP PROBLEMS

A 'sleep diary' is a very useful way to monitor sleep patterns. It should include time spent asleep, time to get to sleep, and any daytime naps. It is also useful to record use of caffeine, meals, alcohol, and exercise.

POLYSOMNOGRAPHY

This is a type of sleep study and is performed in sleep laboratories. It involves measuring brain waves, eye movements, muscle movement, and airflow.

HELPING YOURSELF GET A GOOD SLEEP

Generally, the key to getting a good night's sleep is to establish a regular healthy day/night routine, and to ensure that bed is associated with sleep rather than being awake.

DO +

- Have a regular time for going to bed and for getting up in the morning (even if you feel tired).
- Have a darkened, quiet bedroom (or use eyeshades and earplugs).
- Relax before bed (have a hot bath, listen to relaxing music, do relaxation).
- Have a warm milk drink or herbal tea before going to bed.
- If you are lying awake for more than 20 minutes, get up, go to another room, do something relaxing, then go back to bed; repeat as necessary.
- Get up at a set time in the morning and get out into natural light, as the brain's 'clock' needs light to reset every day.

DON'T -

- Take day-time naps.
- Lie in late in the morning (even if tired).
- Drink tea or coffee within six hours of bedtime.
- Eat heavy meals close to bedtime.
- Use alcohol to help you sleep.
- Lie awake in bed for long periods.
- Watch TV in bed.
- Use bed for anything other than sleep and sex.
- Exercise vigorously too close to bedtime.

Specific relaxation techniques can help, such as Progressive Muscle Relaxation, which is described below.

PROGRESSIVE MUSCLE RELAXATION

1. Sit in a comfortable chair in a quiet room.
2. Put your feet flat on the floor and rest your hands in your lap.
3. Close your eyes and do slow breathing (about 10 breaths per minute) for three minutes.
4. After three minutes of slow breathing, start the muscle relaxation exercise (below).
5. Tense each of your muscle groups for 10 seconds, then relax for 10 seconds, in the following order:
    - **Hands** - clench your hands into fists, then relax.
    - **Lower arms** - bend your hands up at the wrists, then relax.
    - **Upper arms** - bend your arms up at the elbow, then relax.
    - **Shoulders** - lift your shoulders up, then relax.
    - **Neck** – stretch your neck gently to the left, then forward, then right, then to the back in a slow rolling motion, then relax.
    - **Forehead and scalp** - raise your eyebrows, then relax.
    - **Eyes** - close your eyes tightly, then relax.
    - **Jaw** - clench your teeth, then relax.
    - **Chest** - breathe in deeply, then breathe out and relax.
    - **Stomach** - pull your tummy in, then relax.
    - **Upper back** - pull your shoulders forward, then relax.
    - **Lower back** - while sitting, roll your back into a smooth arc, then relax.
    - **Buttocks** - tighten your buttocks, then relax.
    - **Thighs** - push your feet firmly into the floor, then relax.
    - **Calves** - lift your toes off the ground, then relax.
    - **Feet** - gently curl your toes down, then relax.
6. Continue slow breathing for five minutes, enjoying the feeling of relaxation.

As you get better at relaxation, it can be more interesting to combine these exercises with memories of relaxing situations (e.g. lying on a beach).

A full session of relaxation takes about 15-20 minutes.

WHAT ABOUT SLEEP MEDICATIONS?

Sometimes, no matter what we do, we simply can't sleep. In this case, medications can help re-establish our sleep pattern, but they are not a long-term solution and should generally be used at the lowest effective dose and for a limited time period (no longer than 10-14 days).

Medications include:
Benzodiazepines
Short acting e.g. temazepam, oxazepam
Longer acting e.g. diazepam, nitrazepam

These medications are addictive and should only be used for short-term treatment (max 10-14 days). Other side effects include muscle relaxation (which can lead to falls), cognitive impairment or hangover effect (more likely with longer-acting medications). These medications suppress REM sleep and when they are stopped, you can experience 'REM rebound', which causes vivid dreams.

Non-benzodiazepine hypnotics
Zopiclone, zolpidem

These newer medications have benefits over benzodiazepines because they don't generally cause other effects and they do not usually have 'hangover effects'. They are not as addictive as benzodiazepines but are potentially habit forming and should generally be used short-term (10-14 days max). They do not suppress REM sleep.

Zolpidem may be associated with potentially dangerous side effects including sleepwalking, sleep driving and other bizarre behaviours. It must not be taken with alcohol and extreme caution is needed when combine with other drugs. It should not be used for more than four weeks.

Other medications sometimes used for sleep

Melatonin - can be helpful for sleep, and many people use it for jet lag.
Sedative antipsychotics such as quetiapine and olanzapine - they have potentially problematic side effects and are indicated under the PBS only for psychotic and bipolar disorders.
Antihistamines – although their primary use is not for sleep, many have sedative side effects.
Barbiturates - very seldom used now because of significant side effects.