SLEEP SUPPORT



A Sleep Handbook for Older People Living with Dementia



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IMPORTANT INFORMATION - PLEASE READ

The information and suggestions contained in this booklet are not intended to be used for diagnosis or treatment of any medical condition or to otherwise replace medical advice by qualified health professionals. Because each person and situation is unique, you should consult your doctor, support worker, or health professional to evaluate and guide you about your specific concerns or situation.

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WELCOME

We spend a third of our lives asleep. It is important to acknowledge that, for all ages, sleep isn't just time out from wakefulness, it is an important time for renewing our physical and mental state. Like food and water, we need sleep to survive.

Research has shown that sleep becomes more disrupted with ageing. Sleep problems have been identified as a key issue for people with dementia and those who support them, because disrupted sleep can have an impact on mood, behaviour and the ability to manage during the day.

The first section of this handbook provides an overview of sleep and how it changes during ageing, for people with dementia and their supporters. There is also specific information on common sleep disorders.

The second half of the handbook focuses on the factors which can affect sleep and offers advice and tips including activities, routines and changes you may wish to make to help improve the quality of your sleep and your partner's sleep.

It is important to identify what may be causing a sleep problem. For instance it could be the environment, the physiological changes from dementia, or maybe medications being taken. It is vital to identify the causes of the problem in order to decide which strategies may be best to try.

When incorporating the ideas and suggestions from this booklet, always consider safety within your home, for example making the bedroom dark enough to promote sleep but light enough to find the way to the bathroom.

How to use this booklet

This handbook provides detailed information concerning sleep, sleep disorders, as well as specific sleep disturbances for people with dementia and supporters, and strategies to improve sleep.

As you may not necessarily have time or be inclined to read all of the material at once, this booklet is designed for you to be able to dip in and out of it. Tips and summaries are highlighted throughout.

Boxes summarising key points and tips are highlighted throughout the text as a quick reference



<u>SECTION 1:</u> THINKING ABOUT SLEEP

This section gives an overview of sleep and the effects of sleep loss. The aim of this section is to give some background on how sleep works and what happens when it goes wrong. Some of the more common sleep disorders are outlined as well as the changes associated with ageing, dementia and being in a supporting role.

SLEEP FOR EVERYONE

Sleepiness (like hunger or thirst) is a signal from the brain that you are not meeting a vital biological need. However sleepiness is different, because if you keep ignoring this message, eventually you will fall asleep, whether you want to or not.



How much sleep is enough?

Despite the importance of sleep, sleep loss is a very common problem in society. Work and lifestyle choices, as well as responsibilities within the family, and poor health can all contribute to sleep problems. There is no magic number of hours that we 'should' be sleeping. The graph below shows the sleep durations of New Zealand (NZ) adults (30-59 yrs old). Some report usually getting 5 hours sleep a night whereas others report over 10 hours per night. However, over a third of these people report that they are not getting enough sleep.



The amount of sleep you need is best judged by how well you feel and function during the day. Do you feel better if you get an extra hour of sleep? How much do you need to feel well rested?

When you've have enough sleep, you can go through the next day without feeling tired. If sleepiness is affecting your ability to get on with your normal daily activities, you may not be getting enough or good quality sleep.

Data courtesy of Dr Ricci Harris (sample n=7,051)

The internal structure of sleep



Sleep is made up of 2 different states:

- Rapid Eye Movement (REM) sleep is the stage of sleep in which the brain is quite active but the body is very still (except for eye movements). It is also the stage in which vivid dreams usually occur
 - Non-REM is subdivided into four stages termed 1,2,3 and
 4 which represent the depth of sleep (1 being the lightest,
 4 being the deepest). As opposed to REM sleep, during
 Non-REM the brain is relatively inactive but the body can move.

Sleep cycles through these stages several times in the night, the first third of the night typically having more deep non-REM sleep, and the final third more REM sleep. The different stages and depths of sleep have different functions with regards to learning, memory and daytime functioning.

Sleep loss

Sleepiness can have severe consequences (Box 1). It reduces our capacity to perform physical or mental work. This is because sleepiness slows down our physical reaction time and mental processing, and also affects our memory. Like the effects of alcohol on performance and memory, sleep loss and sleepiness can lead to an increased risk of safety incidents and accidents at work.

BOX 1. Not enough sleep can lead to:

- Feeling tired, low energy
- Harder to concentrate
- Slower reaction times and poorer coordination
- Slower and more muddled thinking
- Feelings of irritability and/or depression
- An increased appetite (junk food)
- Weakens immune system (more susceptible to catching infections)

If you don't get enough sleep for several nights in a row, then the effects build up day-by-day. So if you don't recover your sleep 'debt' (for example on the weekends or through naps), the ability to function safely during the day becomes more difficult. When trying to recover from sleep debt, you do not literally need to replace each hour lost. Allowing yourself one or two prolonged, undisturbed sleeps will provide deeper, higher quality sleep, giving sufficient restoration for the following day.

SLEEP AND AGEING

Sleep is regulated by two processes. One process is the circadian body clock, a pacemaker in the brain that coordinates daily rhythms in many body

functions. The circadian body clock helps keep us alert in the daytime and asleep at night. It is sensitive to light (through being connected to a special network of cells in the retina of the eyes). This light sensitivity, along with sensitivity to patterns of physical activity, keeps the circadian body clock in step with the day/night cycle. The second process which regulates sleep is our natural 'drive' for sleep. This occurs as pressure for sleep that increases with time awake and is discharged across sleep. With normal ageing, sleep changes (Figure 1).



Figure 1. The two-process model of sleep and alertness (Redrawn from Wright & Frey, 2008). The circadian body clock's rhythm (solid lines) and the drive for sleep (dashed lines) become less defined as we age. The body clock may lose some of its sensitivity to environmental and the drive for sleep becomes less sensitive to prior sleep and wake patterns. These changes make us more susceptible to falling asleep in the daytime and waking up at night.

As we age, the quality of sleep also changes. We have less of the deep stages of Non-REM sleep which means that we become more susceptible to waking up in the night, and that sleep may be less restorative than when we were younger. Symptoms of menopause can often contribute to women's sleep problems, as can prostate problems for men.

In addition to aging of sleep itself, there are other things that can affect sleep (Box 2). Common medical conditions such as diabetes, respiratory disorders, obesity, pain, and depression can all contribute to a bad night's sleep (and can in turn be exacerbated by poor sleep). Medications used to treat sleep problems and other medical disorders often have side effects including daytime sleepiness and problems going to sleep. Factors affecting sleep will be addressed in more detail in part 2.

BOX 2. Other things that can affect sleep:

- Medical conditions and medications
- Activity during the day
- Light exposure during the day
- What and when we eat and drink
- How we feel
- The bedtime routine
- Sleeping environment

PROBLEM SLEEP

The prevalence of sleep problems and disorders increases as we age. Some of the more common problems and their prevalence from middle to older adulthood are shown in Box 3.

BOX 3. Prevalence of common sleep problems

Disorder	Symptoms	Middle-aged adults (40-59)	Older adults (60+)
Insomnia	Unable to get to sleep or stay asleep	4-12%	12-40%
Obstructive sleep apnoea	Snoring, pauses of breathing during sleep	2-5%	13-40%
Restless legs syndrome	Urge to move and discomfort in the legs when attempting to sleep	5-15%	9-20%
Visits to the bathroom	2 or more trips to urinate in the night	6-7%	27-32%

Insomnia

Insomnia is characterised by difficulty falling asleep or staying asleep, accompanied by daytime sleepiness. The prevalence of insomnia increases with age and is more common in women than men. Insomnia has been related to anxiety and depression, as well as poor physical health. Financial worries, social or family changes, bereavement and other medical conditions can all lead to symptoms of insomnia. Insomnia contributes to daytime sleepiness, poorer daytime functioning, and can have an impact on mood, concentration, and quality of life.

Obstructive sleep apnoea

Obstructive sleep apnoea (OSA) is defined as frequent pauses in breathing during sleep. Pauses in breathing are caused by obstructions in the airway, with airway collapse due to the weaker muscles and/or less effort to breathe. Loud snoring is often present at night, which stops during the breathing pauses. The prevalence of



OSA increases with the presence of other medical conditions such as heart problems, stroke, diabetes, and obesity. OSA can lead to more time awake at night, more trips to the bathroom, morning headaches, daytime sleepiness, as well as poorer daytime functioning associated with poor quality sleep and breathing.

Restless legs syndrome

Restless legs syndrome (RLS) presents as the urge to move the legs accompanied by unpleasant (some say crawling, burning, or painful) sensations in the legs. The symptoms increase in the early evening or at sleep onset. Symptoms are relieved by movement of the legs and worsen with rest. Therefore RLS prolongs the time taken to get to sleep. It is very common among older people, probably more so than indicated in box 2 as many people don't raise these symptoms with their doctor. It has also been associated with arthritis, anxiety and the side effects of medications.



Visits to the bathroom

The need to get up and urinate in the night increases with age. Reasons for this include more urine being produced in the night, and normal agerelated growth of the prostate gland in men, along with other medical conditions such as diabetes, heart trouble or obesity, and the side effects of medications. Needing to get up in the night not only causes disruption to sleep, but may also lead to fall-related injuries.

REM sleep behaviour disorder

REM behaviour disorder (RBD) is the presence of uncontrollable muscular movements in REM (dreaming) sleep. It is associated with vigorous and often violent dream enacting behaviour. This includes shouting, grasping, hitting out and vivid dreams. This can cause problems with injury of the sleeper as well as the bed partner. It is more common in males over the age of 50 years.



Advanced Sleep Phase Type

Advanced sleep phase (ASP) means that the timing of sleep is abnormally early compared to a conventional or socially desired schedule. People with ASP typically complain of early sleep time (between 6-9 pm) and early morning awakening (between 2-5 am). Being more of a 'morning type' increases with age and many do not complain of ASP as it does not necessarily interfere with day-to-day life.

If you would like further information concerning a particular sleep disorder, please contact the team at the Sleep / Wake Research Centre for a pamphlet or journal article

SLEEP AND DEMENTIA

People with dementia often have greater sleep disturbances than other people of their age. The cycle of the circadian body clock and the sleep drive can become less organised which contributes to disturbed sleep at night and daytime sleepiness. Sleep often becomes more fragmented as it is more difficult to go to sleep and stay asleep. Changes to sleep timing have been related to more rapid ageing of the circadian body clock with dementia compared to healthy ageing. These physiological changes begin during the early stages of dementia and progress with the disease. In the later stages a completely disrupted sleep/wake rhythm is often observed, with 1-2 hour naps occurring throughout the 24-hour day.

The likelihood of having a sleep disorder increases with dementia. For instance, sleep disordered breathing (including snoring and pauses in breathing) has been identified as two times more likely to be present in patients with Alzheimer's disease compared to a healthy population of the same age.



Sleep structure changes

The internal structure of sleep also shows changes, including less deep sleep and disrupted dreaming sleep compared to older people without dementia. These changes are thought to have effects on memory and daytime functioning. Furthermore, waking brain activity sometimes resembles that of sleep when people with dementia are behaviourally awake. This 'blurring of boundaries' may be lead to periods of agitation, confusion and hallucinations in the early evening which are typical symptoms of 'sundowning syndrome'.

Nightmares

Some people with dementia report having vivid dreams or nightmares. Such nightmares can disrupt sleep and contribute to feelings of anxiety during the day. The dreams may be related to attempting to emotionally adapt to life changes, and recurrent dreams in particular have been associated with dealing with anxiety, depression and general life stressors.

Some of the medications used to treat the symptoms of dementia have the potential side effect of nightmares. This possibility is an unfortunate outcome of treating the cognitive and behavioural aspects of dementia. If nightmares are a particular problem, it may be worth discussing the dose or timing of medications with your doctor.

Sleep can be further disrupted by aspects of dementia such as confusion in the night, medication side effects, and incontinence. Environmental cues to the circadian body clock are also reduced, with less time spent in situations with bright light, physical exercise or interacting in social activities. These more adaptable environmental influences will be covered in the second half of this handbook. Sleep disruptions for people with dementia are summarised in Box 4.

BOX 4. Sleep disruption of those with dementia:

- Disorientation and automatic behaviours at night (e.g. looking for things or dressing)
- More daytime napping (e.g. unplanned dozes after lunch or while reading)
- Some people report more vivid nightmares or hallucinations
- Sleep loss can contribute to poorer mood and functioning during the day
- Blurred boundaries between sleep and wake causes confusion and agitation in the day
- Weakening influence of the circadian body clock on sleep timing may mean that those with dementia feel like sleeping at less usual times of the day

SLEEP OF SUPPORTERS

Those supporting loved ones with dementia often sleep with one eye and ear open. For some it can be a bit like being a shift worker – needing to be alert both by day and night with inconsistent schedules. This on top of the age-related changes mentioned on page 5, as well as the stress and emotions related to providing care, increase the likelihood of sleep problems. Factors contributing to sleep problems for supporters can be found in Box 5 below.

Implications of sleep disturbances for supporters



Supporters of people with dementia get less sleep than nonsupporters and they also have more complaints about the quality of sleep and daytime sleepiness. This has substantial implications for waking function. As sleep deprivation builds up, our ability to concentrate, make sensible decisions, act quickly and mentally cope reduce. This can influence the health of both the supporter and their partner in terms of increased risk of falls, missed medications, coping with dementia-related behaviours, as well as everyday activities such as driving and maintaining a household.

As sleep becomes more disturbed, the ability to maintain quality support reduces. In fact sleep deprivation of supporters has been identified as one of the leading factors in deciding to move family members into institutionalised care. So sleep needs to be taken seriously, both for those with dementia and for their supporters in order to deal with the day-to-day symptoms of dementia.

BOX 5. Factors contributing to poor sleep of supporters:

- Sleep disturbances and behaviour of those with dementia
- Care giving responsibilities, changes to routines, or daytime sleepiness can lead to restrictions in social and physical activities which help cue the internal body clock
- Providing care contributes to being physically tired and having to perform tasks potentially around the clock
- Night time disruptions, especially if emotionally charged, can contribute to difficulties falling back to sleep
- Changes in mood (for example feelings of loneliness, depression, anxiety) can make it difficult to get to sleep or return to sleep
- Poor coping strategies for sleep disturbances, for example taking long naps in the daytime or drinking caffeinated drinks, can exacerbate sleep problems
- Poor management of own health (such as not taking sufficient respite or maintaining own medications) can lead to increased daytime sleepiness or increase the risk of developing a sleep disorder

<u>SECTION 2:</u> <u>FACTORS AFFECTING SLEEP</u>

This section covers some of the things which can influence sleep as well as advice on how you can make adaptations to help improve your sleep and the sleep of your partner. Bear in mind that some of the strategies covered in this package may take days or weeks to have an effect on your sleep. This is because it takes time for your body to adjust to the changes of routine. So it is important to stick with the changes you choose to make in order to see improvements.

Strategies to improve sleep can take days or weeks to have an effect so it is important to persevere

NAPPING

Some people like to take daytime naps, a preference which increases with age. Naps can be a good way to 'top-up' the sleep debt if you have had a poor night's sleep. However if you sleep too much in the daytime, or too late in the day, it can make getting to sleep at night more difficult. It is important to know that although you may not feel great after a short nap, you will be more alert and functional for several hours.

Dozing off or napping?

There is a big difference between unintentionally dozing off and taking an intended nap. The active "taking a nap" is often associated with preparing the environment for sleep, whereas when passively dozing off, the environment is often less conducive to sleep.

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When and how much to nap...



Humans have a biological tendency to feel sleepier in the afternoon. From infancy through to old age we are more likely to feel tired between 1-4 pm, and this is the optimal window of time for taking a nap. Naps will improve your waking function, however they may leave you feeling a little groggy. Shorter naps (less than 40 minutes) are less likely to lead to the groggy feeling. If you need a longer sleep it is best to allow about 2 hours in order to cycle thorough all of the sleep stages.

BOX 6. Nap tips:

- Learn to recognise the signs of sleepiness and schedule a timely nap rather than dozing off
- A schedule encouraging activity up to an intended afternoon nap can enhance post-nap functioning and mood.
- If you or your partner are having trouble getting to sleep at night, you may want to consider reducing your daytime naps



Timing of bright light



For those with dementia, a regular timed exposure to bright light in the day time is recommended to help keep the body clock synchronised to the day/night cycle. A good time to get this light exposure is <u>between 9-11am</u>. Research in care home facilities has shown that more regular exposure to bright light during the day has significant effects on sleep timing and quality as well as mood of residents with dementia. If you are exposed to bright light too early or late in the day it can affect your sleep timing. For example bright light

later in the afternoon or evening could make it difficult getting to sleep at night. However,, if you get your light exposure very early in the morning you might find you become sleepy earlier than you'd like in the evening.

What if the sun isn't shining?

Even on an overcast day, natural light is still very strong and will have an effect on the body clock. But if the weather is horrid or you are unable to get outside you can still reap the benefits of bright light in your own home. A light box can be used to provide a higher intensity light than normal room lights. You need to sit a few inches away from the light box and can carry on with whatever activity you were doing so long as the light reaches your eyes. This will have the similar effects on the body clock to going outside on a sunny day. Other light tips to try indoors include sitting closer to windows during the day, keeping curtains open to allow natural light into the house, and consider using brighter general lighting in living areas.

BOX 7. Light summary and tips:

- Light is the number one cue for our body clocks to keep in step with the day/night cycle
- The regularity and timing of light exposure is very important
- People with dementia often have poorer sleep timing, so daily scheduled bright light can help bring the sleep/wake cycle back in line
- If you feel sleepy in the day, try going outside into the light or think about brighter lighting options in the home
- If you cannot get enough natural light, consider using a light box for your light exposure
- Keep the curtains open to allow the natural light in during the day
- If you are waking too early, try to reduce your light exposure first thing, for example use heavier curtains in the bedroom to block the early morning light

LIGHT AND SLEEP

The circadian body clock is sensitive to light, which enables it to track the day/night cycle and helps consolidate sleep at night and waking during the day. With age our exposure to light is reduced, especially for those with physical or mental disabilities that make it more difficult to get out into natural sun light.

EXERCISE AND SLEEP

In addition to light, physical exercise is an important time cue to the body clock. The more active people are they less likely they seem to report sleep problems. Therefore regular physical exercise and social activities can be key in keeping your body clock in time and your sleep quality high.

Timing of exercise



Just 30 minutes of physical activity can have a significant effect on your sleep. Also like light, the timing of physical activities is important. A good time to do activities is in the <u>middle of the day and early afternoon</u>. If you perform physical activities late in the day it may make it harder to go to sleep at night. Early afternoon exercise may help dissipate the common symptoms of sundowning (such as agitation and confusion) for those with dementia. It could also reduce stress levels and work up an appetite for your evening meal as well as being an activity you can enjoy together.

Sometimes it may feel as though you don't have the time or energy for exercise, but it is important to allow this time for yourself. This may be a good opportunity to find a local fitness group or take a walk with friends.

If it is difficult to get outside or you are less physically mobile consider some stretches you could do indoors (see Box 8) If your fitness level is very low or you have any physical conditions which may affect your ability to perform physical activities (e.g. heart or joint trouble) you should consult your doctor before undertaking any new exercise programmes.

BOX 8.

Suggestions for light exercise:

- A walk around your local park or houses
- Some gardening or housework
- Gentle yoga, pilates or tai chi class
- Activities to music or a video (even from your chair)

More vigorous activities could include:

- Dancing
- Bowls
- Swimming

DIET AND SLEEP

What we eat and when we eat can have a significant effect on being able to go to sleep and stay asleep. When we have reduced sleep, we tend to feel more hungry. This is because we lack energy and our body is less able to regulate our appetite.

Timing of meals



When to eat is important. Going to bed with a full stomach can make it difficult to get to sleep, so it is best to eat a couple of hours before bedtime and make sure that your evening meal isn't too large. Likewise you don't want to lie awake hungry so make sure to have a small snack if needed in the final hour or two before bed. Also consider how much you drink in the evening, especially if you get up a lot in the night for the toilet. Aim to eat and drink enough that you are satisfied but not too much so that you're uncomfortable in the night.



Heart burn can be caused by certain foods if eaten later in the day. These foods include onions and garlic, spicy foods, (including curries or foods with mustard or chilli), tomato based foods and fatty foods (such as cheese). Keep an eye on when you eat these foods and whether they have an effect on you. Some individuals may not be so affected.

Caffeine is a stimulant that will make you feel more alert so it is best to avoid caffeinated products in the afternoon or evening. Caffeinated products include:

Product	Caffeine content (mg)	Watch out for other
Espresso	250	Watch out for other products containing
Coffee (percolated)	110	caffeine, even some
Instant coffee	75	medications (especially
Black tea	40-60	cold remedies) contain
Soft drinks	34-55	caffeine.
Dark eating chocolate	20	
Milk eating chocolate	6	
Hot or cold chocolate drink	5-6	

Be aware of how much caffeine you consume as it needs time to process. It can take several hours to process the caffeine from just half a cup of coffee. If you decide to stop caffeine, at first you may experience withdrawal effects such as headaches.



Alcohol makes you feel sleepier, however it disrupts the quality of your sleep. Alcohol before bed may help you relax and fall asleep, however it also suppresses REM sleep (dreaming sleep). This can lead to a rebound of REM later in the night, with vivid dreams and fragmented sleep. It takes your body approximately one hour to process each standard size drink you consume. Try to get your blood alcohol level to zero before going to bed.

MOOD AND SLEEP

The way we feel can have an impact on sleep, especially getting to sleep and being able to get back to sleep after a disturbance. Worry, anxiety and depression are common complaints with ageing. On the other hand, sleep deprivation and daytime sleepiness can lead to depression

and anxiety due to being less able to cope and live life normally when sleepy. Treatments for mood disorders can also impact sleep (some positively but others negatively), so it is important to recognise when anxiety or depression rears its head and address it with regards your sleeping as well as waking life.

Worry and anxiety

Despite feeling tired at night, worry or anxiety can keep us from getting to sleep. For those with dementia this may be due to feelings of disorientation or not being prepared for sleep. On the other hand, supporters may experience anxiety due to feeling the need to be vigilant 24-hours a day or worrying about the safety of the person they care for.

BOX 9. Tips for relaxing worry at night:

- Set aside some time for relaxing activities before bed (such as a warm bath, reading a book, talking to friends)
- Allocate a time of day for worry, if thoughts of anxiety creep up on you, try to push them aside until that time
- If you wake in the night, focus on calmly going back to sleep rather worrying and 'trying' to get back to sleep
- If you simply cannot get back to sleep at night, try getting up and doing a relaxing activity for a little while before returning to bed
- Make sure if you do get up in the night you keep the environment dimly lit
- Acknowledge that short disruptions are only minor glitches in what could be a an overall good night's sleep

Depression

Unfortunately depression is more common with age, especially when living with a medical condition or supporting a loved one who is unwell. Some people find that feeling 'blue' simply creeps up on them and, like disrupted sleep, can become the norm. Difficulty falling asleep, staying asleep and waking too early can all be caused by depression. On the other hand poor sleep, especially insomnia has been identified as a key predictor of depression. Mood and sleep have a "chicken and egg" like relationship, so it is important to focus on getting the best sleep you can to minimise mood disruption.

If you think you may

be affected by a mood disorder,

please consult your

doctor for advice

EVENING AND BEDTIME ROUTINES

Having a routine before bedtime helps your brain and body to recognise when it is time for sleep. By making some activities a regular night time ritual your mind will more likely associate these activities with feeling tired and promote sleep onset. These activities could then be used in the night if you are having trouble returning to sleep after a disturbance (see Box 8 for some suggestions).

Sleep timing



It is important to get plenty of sleep, however do not force yourself to go to bed if you are not drowsy as you will be less able to fall asleep. If you cannot get to sleep after 20 minutes or so, try getting up and winding down again outside of the bedroom. Beware you do not fall asleep outside of the bedroom! If you have disrupted sleep, acknowledge that catch up sleep may be needed and make some time for this as soon as possible.

BOX 8. Suggestions for evening and bedtime routines:

- A warm shower or bath an hour before bed
- Spend the hour or two before bed in dimmer light
- Try an non-caffeinated warm drink to soothe (e.g. camomile)
- After you are prepared for sleep (e.g. changed into bed clothes and brushed teeth), spend a few minutes relaxing before going to bed
- Dressing in nightclothes etc gives a non-verbal cue that its bedtime for those with dementia. Avoid placing the next day's clothes out as this could cue morning routines during the night
- In bed, rather than thinking about your day or what you need to do, try and focus on your body and breathing to relax
- Sleeping medications should be used conservatively (more details on page 19)

Although life may seem to be too busy to incorporate these sleep rituals, it is important to allow yourself even just 15 minutes to relax before bed. Likewise, try to avoid any exciting or stressful activities prior to bed.

In bed...

It is important to only go to bed when you're tired. If you spend too much time awake in bed, your body and mind begin to associate the bed with being alert and awake which will make it harder to sleep. Avoid any wake time activities (including your relaxing activities) whilst in bed, keeping it as a sleep haven. If you are a clock watcher, try turning the face of the clock away from you as glancing at the time continuously can contribute to worry about not sleeping, making it perpetually hard to get to sleep.

SLEEP ENVIRONMENT

It is important to consider the sleeping environment in order to optimise your sleep. Making the bedroom a sleep sanctuary cues the mind and body that this is the place mainly for sleeping. If you share your bed or bedroom consider whether you disturb each other in the night (through movement, trips to the toilet or snoring for example), or whether having one another nearby might have a positive effect on sleep. Likewise, if you share a bedroom with your pets, are they keeping you awake and restricting your space in the bed? Or are they a comfort at night?

Temperature

If the room is too hot or cold this can influence sleep. A hot bedroom can lead to more night awakenings, restlessness and more difficulty getting to sleep. On the other hand, a bedroom which is too cold can also be uncomfortable, leading to disturbed sleep.

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Your body temperature is also important to consider. You tend to cool down a

little prior to sleep. A hot bath may help to relax you in the evening and the cooling down afterwards can help you to feel suitably tired. However it is best to avoid hot baths immediately prior to bed. Vigorous exercise before bed is likely to raise your body temperature making it more difficult to get to sleep.

Light

Having a dark bedroom can help you to sleep, as light has an activating effect on the brain. If street lights are a problem, you might consider heavier curtains for the bedroom for night time.

For safety reasons you may like to keep some lights on overnight. Consider dim lighting for the bathroom or halls, using night lights near doors, or having a torch at the bedside. This way you don't have to subject yourself or those you live with to bright lights if you get up in the night, which in turn may affect everyone's ability to get back to sleep.

Noise

Noise at night can hinder getting to sleep and cause awakenings. Sudden noises such as traffic, snoring and noisy neighbours can all be problematic and difficult to control. You may consider using ear plugs or moving your



bedroom to a quieter part of the house. Another option is covering up the unpleasant noise, for example some people find listening to relaxing music, or sounds of ocean waves helps provide a steady sound to mask the neighbourhood racket.

For safety or comfort reasons, you may want to hear your partner at night. If you are in separate rooms, you might consider using a bell or alarm system if assistance is required. That way those supporting may not need to listen out for every movement.

Safety

When considering adapting the environment, bear in mind the safety issues in your home.Make the house a safe place for those with dementia to wander in at night. Below are some examples of things you may consider trying at night (depending on your situation):

- Dim lighting/night lights in the halls, bathroom or other places which may be accessed during the night
- Blocking or securing stairways
- Turning the gas off
- Locking windows and external doors
- Installing alarms on external doors
- Locking away dangerous implements around the house
- A personal bell or alarm



Respite for those supporting people with dementia is also important. Whether daytime or night, giving supporters some relief of their care-giving responsibilities will allow time to catch up on much needed sleep.

SLEEP AND MEDICATIONS

Medicines to help you sleep

Sleeping pills should be used with caution. Although they can be useful for short periods and in specific circumstances (for example, if suffering from insomnia after bereavement), they should not be relied on to get to sleep on a routine basis.

Sedating medicines taken at night can cause drowsiness or feeling groggy throughout the night and sometimes on into the morning. This has implications for safety (for example falls or driving), performance in the morning (due to the lasting effects of the medication), and ability to cope during the day.

Another important note for taking sleep medications is that they are masking the true reasons for not being able to get good sleep. Sleeping medications should not be taken for long periods (more than a couple of weeks) as it is easy to build up a tolerance and become dependent on them. Therefore it is always important to independently deal with the underlying cause (for example feelings of worry, poor sleep timing or noise) for long term improvements in sleep.

Other medications

Many prescribed medications can affect sleep. It is important to read the side effects of your medications and consider whether your sleep has deteriorated since taking the medicine.

For example drugs for asthma, respiratory or heart disease, arthritis, and depression, as well as medications for dementia can have a negative impact on sleep. Such side-effects can include insomnia, drowsiness, or nightmares.

It is worth recognising the effects medicines may have on you. If you do suffer from sleep disruption as a side effect from your medicine, it may be worth consulting your doctor. Changing the time you take medicines may make a difference, or in some cases there may be an alternative for you to try.

BOX 9. Medicine considerations:

- Use sleeping pills with caution they are best for temporary times of disturbed sleep rather than all of the time
- Be aware of the side effects of sleeping pills and other sedating medications, especially if you need to drive or need to be focused the next day
- If you are having sleeping problems it may be worth considering the side effects of any other medications you are taking
- Although you may not be able to change your medications, it is useful to be aware of their impact on sleep and consider the time of day they are taken

Section 2: Factors affecting sleep



If you are thinking about using sleeping pills or are concerned about the side effects of any medications you are taking, contact your doctor for advice.

CONCLUDING THOUGHTS

Congratulations! Through reading into the subject of sleep and learning about some key tips, you've taken some of the first steps to improving your own sleep. I hope you have found this booklet useful and you are feeling motivated to focus on your sleep. It may be that you are already doing a lot of what has been mentioned in this booklet. Remember, if you are taking on new routines or changing the environment, it may take some time before you see the changes in your sleep or your partners sleep, so please do persevere. Sleep is vital for functioning during the day, especially as we get older, so the suggestions outlined here may well make a difference to your life with regards to mood, memory, vitality and health.

Use the reference boxes throughout the handbook as a quick reminder of the main points or tips to improve your sleep. For further information consider the reading and internet sites on the next page or contact a member of the research team.

Good luck and pleasant dreams!

FURTHER READING

Books



- The promise of sleep. Dement, C. & Vaughn C. (1999). New York: Delacorte
- Geriatric sleep medicine. Eds. Avidan, A.Y. & Alessi, C. (2008). New York: Informa Healthcare USA
- All I want is a good night's sleep. Ancoli-Israel, S (1996). St Louis: Mosby
- Sleep in the 24-hour society. Gander, P. H. (2003). Lower Hutt: The Open Polytechnic of New Zealand.

The internet



 The National Sleep Foundation has a great website concerning sleep and health for all ages as well as sleep disorders and advice:

http://www.sleepfoundation.org/

- Sleep Web is a website providing information on sleep disorders and treatments. http://www.sleepweb.com/
- The Sleep Apnoea Association of New Zealand has a website providing more information on OSA : http://www.sleepapnoeanz.org.nz (phone 094821939)
- "Sleep: A critical but overlooked aspect of dementia" is a website developed by the University of Alberta with the Canadian Dementia Knowledge Translation Network which aims to inform supporters of people with dementia about sleep and what can be done to improve sleep http://www.wix.com/carybrown/sleep-dementia#!
- The American Alzheimer's Association and Alzheimer's Australia have websites with information on sleep: http://www.alzheimers.org.au/services/sleeping.aspx http://www.alz.org/alzheimers_disease_10429.asp

CONTACTS

If you would like further information on the content of this booklet or would like a pamphlet concerning a particular sleep disorder please contact the Sleep/Wake Research Centre:



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