I-CAN SLEEP: Cognitive-Behavioural Therapy for Individuals with Insomnia and CANcer

Chapter 2

In this chapter you will:

- Learn about the biological and psychological aspects of sleep
- Find out about sleep disturbances and cancer
- Learn the technique of sleep restriction as a method of improving the quality of your sleep

Goals for the chapter:

1) To acquire a basic understanding of the sleep process, and to become familiar with terms such as sleep efficiency, sleep stages, slow-wave sleep.
2) To recognize and understand the controllable and uncontrollable factors that effect your sleep.
3) To understand the rationale behind the behavioural strategies for managing sleep disturbances
4) To master the technique of sleep restriction

A FEW FACTS ABOUT SLEEP

Introduction

To benefit fully from this program, it is important that you know of some basic facts about the function of sleep and some of the things that are known to affect sleep. The aim of this discussion is to demystify the process of sleep and increase your understanding of what actually happens while you are asleep. There are a number of reasons for doing this. First, it will be helpful for you to be familiar with some of the terms we use when discussing sleep. You are already familiar with some of the words used to describe *how much* sleep you are getting (e.g., sleep efficiency). Other terms will be introduced shortly and will become more important later in the program.

Second, it is also important that you know more about the problem that has given you so much frustration. Providing people with such information is one of the first steps in providing them with some control over their problem. You can probably learn to sleep better, but you need to know what to do and why you are doing it.

Why Do We Need to Sleep?

We spend almost one third of our lives sleeping, so it is no wonder that quality sleep is an important part of our lives. No doubt everyone is aware that sleep is largely an involuntary process. Although we may have some control in prolonging the onset of sleep (e.g., staying up late to watch a good movie), one way or the other, we eventually need to sleep.

People differ in the amount of sleep they require to function adequately. Although the average for healthy adults is about 7 to 8 hours per night, this is by no means ideal for everyone. The range of sleep time that people find refreshing is between 6 to 10 hours per night. Thus, the notions of 'oversleeping' or not getting enough sleep are highly personal. For example, a person who habitually sleeps 6 hours per night and then sleeps 8 hours on one particular night may actually feel that he or she has overslept.

The precise functions of sleep are highly complex and not yet fully understood but many ideas have been proposed. The theory of sleep that has received the most attention and scientific support is the notion of sleep as a *restorative* process for the body. In essence, it is proposed that during sleep we recover the physical and mental energy expelled during the day.

What Happens to the Brain When You Sleep?

It is difficult to determine if someone is sleeping or not. In fact, the only way to definitively determine whether, and how deep, a person is sleeping is to monitor the electrical activity of their brain, or their brainwaves. Refer to figure 2.1. There are five distinct stages to human sleep, each responsible for different things. Sleep stages are broken into 4 non-REM stages and one REM sleep stage (REM stands for Rapid Eye Movement).

Non-REM sleep stages are numbered to indicate progressively 'deeper' sleep; that is, stage 1 is the lightest form of sleep while stage 4 is the deepest.

Stage 1 can be thought of as "light sleep" since a person in this stage can be awakened more easily than during slow-wave or REM sleep. Stage 1 sleep only comprises about 5-10% of your total sleep per night and is often associated with the subjective feeling of falling asleep. Sometimes people will experience what are called 'hypnic jerks' during stage 1 sleep. These are involuntary muscle movements that may or may not stimulate an awakening. You may have seen these jerking movements in other people or experienced this yourself.

Stage 2 sleep comprises the majority of your total sleep and is a period where the brain's electrical activity alternates between low voltage (bursts of concentrated electrical activity demonstrated by sleep spindles) and high amplitude waves (slow waves demonstrated by K-complexes). In this way, stage 2 sleep is a go-between for periods of lighter and deeper sleep.

Stages 3 and 4 sleep are referred to as 'slow-wave' , or 'delta' sleep which is the technical name for the slow, low frequency brain waves observed on someone's EEG during these stages. During slow-wave sleep, a person is quite still and breathing very slowly. It is very difficult to wake someone up from slow-wave sleep. If you have ever tried to wake someone up and found it took a lot of poking and shaking, the person was probably in stage 3 or 4 sleep. Most sleep walking and sleep talking occurs during slow wave sleep. Stage 3 and 4 sleep plays an important role in the repair and restoration of bodily functions.

REM sleep is sometimes called paradoxical sleep because of how active our brains are during this time. If you refer to Figure 2.1 you will notice that our brain waves during REM sleep look very similar to our brain waves when we are awake. This is because our brains are busy organizing the events of our lives during REM sleep, which is often why it is associated with dreaming. One might imagine that during REM sleep, little men with

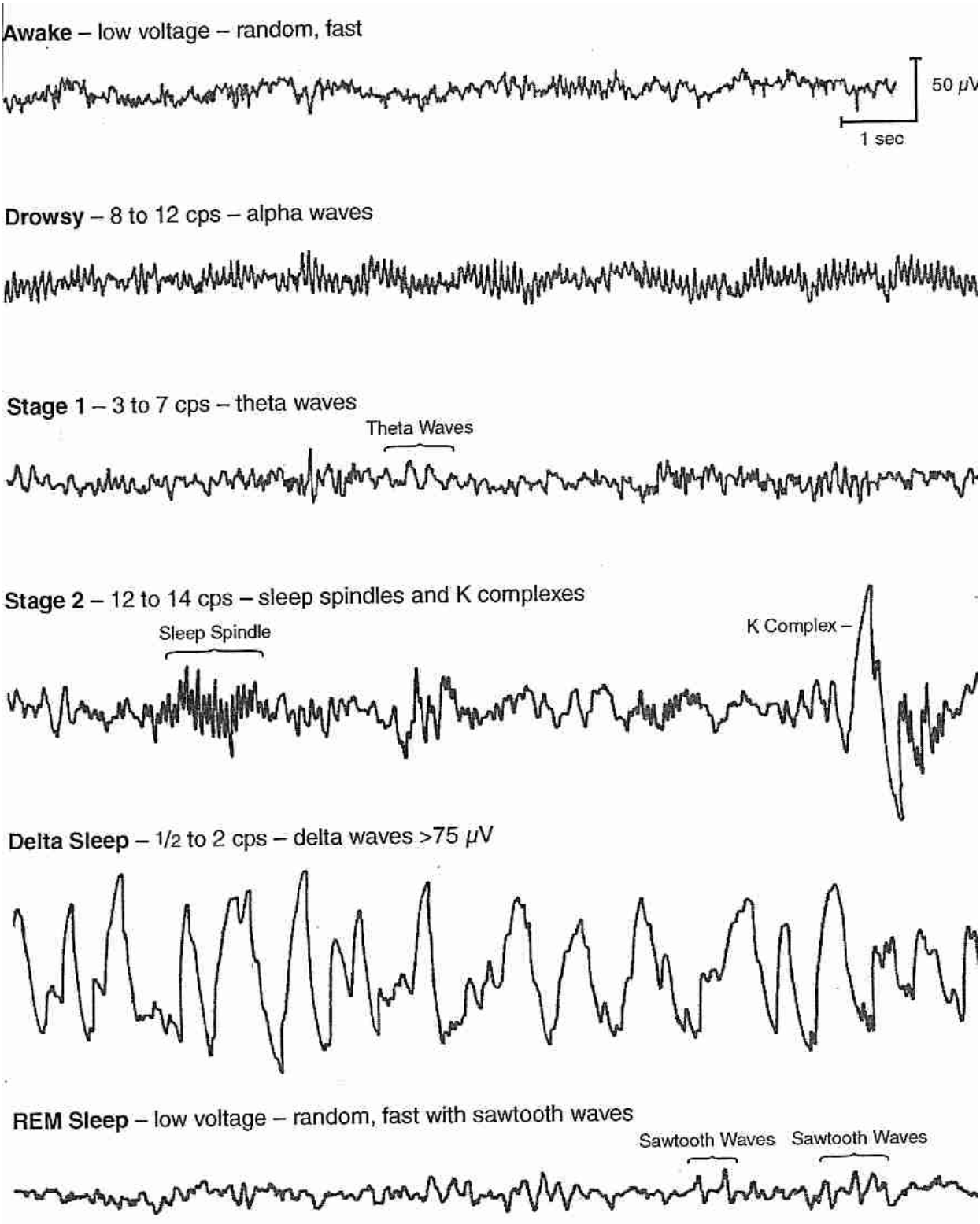
stacks of files are busy organizing our experiences, moving certain files of information from short term memory to long term memory and consolidating the large amount of information we take in during the day. This may be why our dream content is sometimes a jumbled combination of different experiences, some of which may be from the past, present, or future. We are able to dream in non-REM sleep as well but these typically do not have the same vivid and emotional content as dreams that arise out of REM sleep.

Another interesting thing happens when we are in REM sleep: our bodies become unable to move and are in effect paralyzed. Although this may seem strange, imagine if you were having a very vivid dream about jumping off tall buildings and flying through the sky. It would be quite dangerous if you were able to move your major muscle groups during this time, allowing you to act out your dreams. In rare cases, this protective mechanism does not work properly and they can engage in very complex behaviors like driving a car. When this malfunctions it is called REM Sleep Behavior Disorder (RBD). This type of behaviour is very different from sleep walking because the person who is sleep walking is not likely to report detailed dream content, whereas the person with RBD will be able to provide a detailed recall of their dreams, which tend to accompany strong emotions of fear and anger. More commonly, people will experience brief episodes of sleep paralysis. This represents a delayed shutoff of the protective mechanism upon awakening from a REM sleep episode whereby the individual wakes up but for a brief moment feels unable to move their body. Although frightening, this experience is common and does not indicate that anything is wrong.

Altogether, non-REM sleep comprises approximately 75% of the night with REM sleep making up the other 25%.

It is important to know that our brain and body will compensate for a reduction in a certain stage of sleep by increasing the time spent in this stage on a subsequent sleep episode. This is known from sleep deprivation studies in which volunteers over a number of nights are deprived of certain stages of their sleep. On subsequent nights when they are allowed to sleep as much as they want, depending on what stage of sleep they were deprived of, they spend more time in slow-wave or REM sleep than usual. In this way, our sleep acts somewhat like a homeostat, whereby a reduction in one aspect is met by an increase in another, eventually balancing out over time. We often lose trust in our body to self-regulate, especially after a cancer diagnosis. Rebuilding this trust is one of the things we will work on developing during this program.

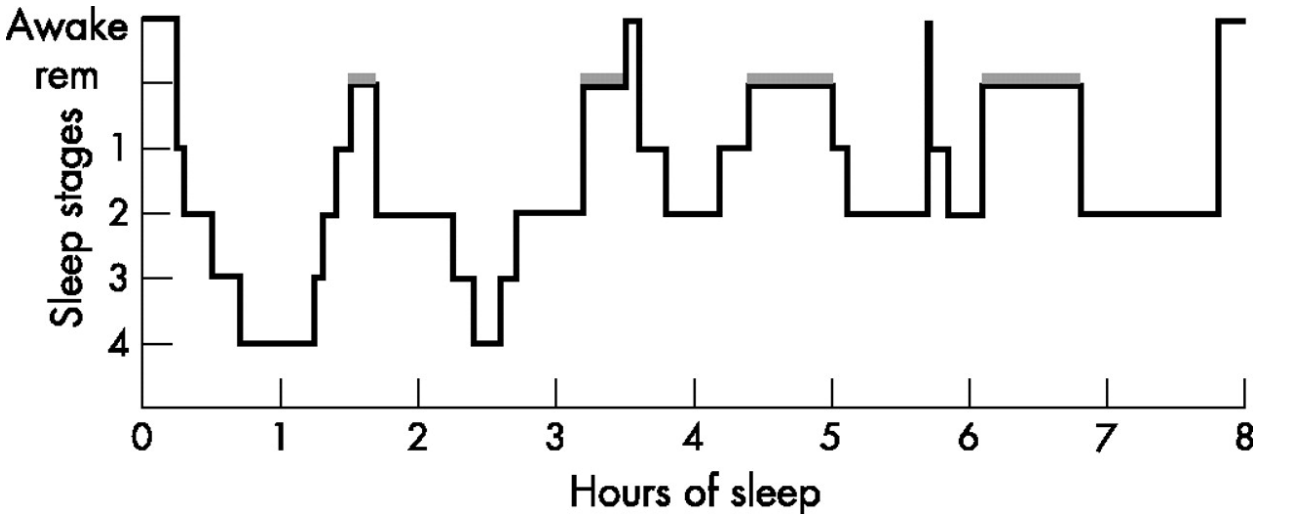
Figure 2.1: Stages of Sleep



http://www.benbest.com/health/sleep.html

Now you know that the process of sleeping is not as simple as being awake or asleep. You might now wonder how your body organizes all these different sleep stages. It is actually not that complicated. Your body cycles through the five stages of sleep on an interval of approximately 90 minutes (see Figure 2.2 on next page). You can use the occurrence of REM sleep as a marker for this cycle. Thus, every 90 minutes or so, you enter the REM or dreaming stage of sleep.

Figure 2.2: This graph shows how your body cycles through the five stages of sleep (REM & Stages 1-4) approximately every 90 minutes while you sleep.



http://evolutionarypsychiatry.blogspot.com/2011/01/sleep-architecture.html

Discussion Question

1. What might be some advantages of cycling through the different stages of sleep?

_____
_____
_____
_____
_____

2. If you were to draw an imaginary line down the middle of the figure 2.2, around the 4th hour of sleep, do you notice any differences between the first and second halves?

_____
_____
_____
_____
_____

3. You may notice in Figure 2.2 that the person has two awakenings during the night. Why might it be beneficial to be able to arouse ourselves from sleep?

_____
_____
_____
_____
_____

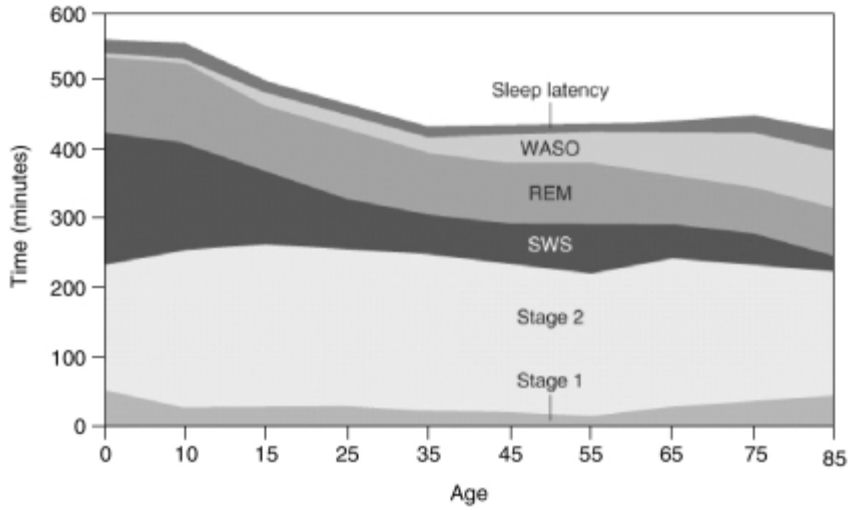
Remember, waking up is normal: staying awake is problematic.

Things That Affect the Quality of Your Sleep

There are many things that can influence the amount and quality of your sleep. Many of these things, such as sleep routine, medications, exercise and diet, you have control over and we will discuss them in more detail in the next few chapters.

Your **age** can affect your sleep. Between the ages of thirty and sixty, most people start to notice that they have more awakenings and that they are getting less sleep. Moreover, it is more difficult to sleep straight through the night. This is because as you get older the amount of time you spend in slow-wave sleep decreases while the time spent in the lighter sleep stages increases. For some people, these changes can also result in a decline in their sleep quality and they may feel that their sleep is no longer as refreshing to them. On the other hand, there are lots of people in their 60's and 70's who experience no problems with their sleep quality, thus illustrating again the highly variable and individual nature of sleep.

Figure 2.3: Age and sleep stage concentration

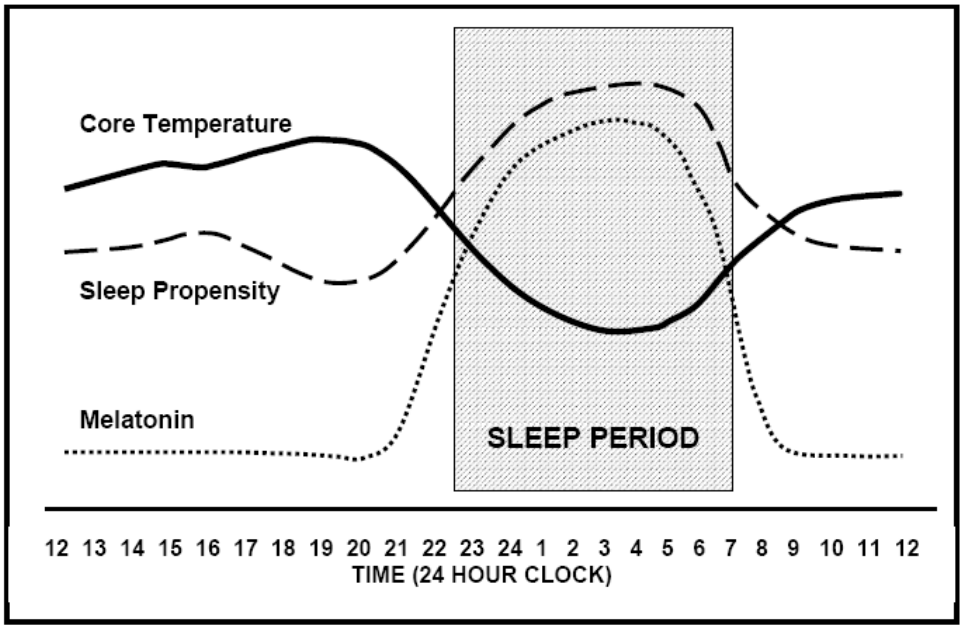


Carskadon MA, Rechtschaffen A. Monitoring and staging human sleep. In: Kryger MH, Roth TT, Dement WC, editors. Principles and Practice of Sleep Medicine. 4th ed. Philadelphia: Elsevier Saunders; 2005. pp. 1359–1377.

A variety of **circadian factors** can influence sleep. The first circadian factor that affects sleep is variation in **core body temperature**. As core body temperature decreases, the inclination to sleep increases and vice versa. These changes are very small (less than 1 degree) and hardly noticeable to us. The most noticeable time that this occurs is mid afternoon, when people tend to feel less motivated, energetic and alert. As you can see in Figure 2.4, there is a slight dip in our body temperature in mid afternoon. This is met by a light increase in our **sleep propensity**, or in other words, the subjective feeling of wanting to sleep. Instead of giving into the increased urge to nap, we can easily get through this time by doing something to raise our body temperature like going for a brisk walk! The drop in our body temperature happens to a larger extent again in the late evening. This explains why we are often cold before bed so we pile on the covers, only to kick them off in the early morning hours when we are too hot. This is also why having a warm bath can sometimes help with falling asleep. A warm bath superficially raises your body temperature and as soon as you get out of the bath, your body temperature drops serving to trick your brain/body into thinking it is time to sleep!

A hormone of considerable importance to sleep is **melatonin**. This is a hormone produced by the pineal gland only in the absence of light. This is quite evident in Figure 2.4 as the level of melatonin is negligible until the onset of darkness, after which it increases steadily, peaking in the middle of the night and slowly dropping until daybreak. The changes in daylight that come with the seasons have a large impact on our melatonin production and this explains why people tend to sleep longer in the winter when there is less daylight and shorter in the summer when the hours of daylight are longer. You may want to keep this in mind when you consider your evening routine. Are you on the computer right before bed? Are all the lights on in your house? These environmental conditions may be impacting your ability to sleep!

Figure 2.4: Circadian Rhythm of Body Temperature, Melatonin and Sleep Propensity



Sleep and Cancer

Now that you have a basic understanding of the sleeping process, we can turn our attention to what we currently know about cancer and insomnia. It must be emphasized that you are not alone with your sleep problem. Insomnia is a very common complaint; in fact, about 10% of North American adults report having serious insomnia. Among people with cancer, the rate is even higher: about 30 to 50%.

There are several reasons that individuals diagnosed with cancer are at a higher risk for sleeping difficulties. The first, and probably least surprising, reason is the psychological impact of a cancer diagnosis. No matter what the prognosis, a diagnosis of cancer can be an extremely upsetting. Especially in the first few weeks, the worry and fear of what is in store for you can lead to a hike in your levels of anxiety and stress. These 'what if' questions often continue to play out in our minds at night and make it difficult to sleep.

The second reason that individuals with cancer are at a higher risk for insomnia is by virtue of the effects of the medical therapies used to treat cancer. For some people, their sleep problems began with their surgical hospital stay. During this time, sleep can be significantly disrupted by hospital routines and nursing duties that must be carried out while the narcotics used to control pain can disrupt sleep architecture. For those individuals receiving chemotherapy, there is some evidence to suggest that chemotherapy can temporarily disrupt circadian rhythms, not to mention the impact that the side effects of chemotherapy can have on sleep. Many people are prescribed steroid medications (e.g.

prednisone), drugs intended to suppress the immune system, to improve treatment effectiveness or prevent treatment side effects. These medications have the common, but problematic, side effect of producing insomnia. Even once chemotherapy and/or radiation treatments have been completed, long-term hormonal treatments can produce disruptive and pesky hot flashes. Other treatment consequences that can disrupt sleep include: frequent nocturnal bathroom trips, cancer-related daytime fatigue, and persistent pain, among others.

The final reason that individuals with cancer have higher rates of insomnia is the disruption that cancer and its treatment can have on your regular routine and activity schedule. Many individuals take time off work while receiving treatment, reduce their regular activities such as exercise, and keep a less structured sleep schedule. Without the regular anchors of work and daily routines, our sleep schedule can become less predictable, especially if we spend time napping or use our bed and bedroom for activities other than sleep. Regardless of whether the cancer was successfully treated, many people maintain the worry of a possible recurrence in the future.

HOW DOES INSOMNIA DEVELOP?

The development of sleep difficulties can sometimes be immediate and dramatic with a noticeable cause. In other cases, sleep difficulties can sneak up on you gradually. In order to understand how insomnia can develop and the ways in which it is maintained, we are going to walk through Figure 2.5. In the pre-morbid stage, the sleep difficulties have not yet developed but each of us has predisposing factors that may increase the likelihood we may struggle with sleep, especially if we have many predisposing factors! These predisposing factors stay constant throughout the model because these are things that we cannot change, like our age, gender, and genetics.

A precipitating factor is usually a stressful event, or a combination of events, that put us over the threshold for developing difficulty with sleep. This is the acute stage. For some of you, this may have been your cancer diagnosis and for others, your diagnosis and treatments may have made a pre-existing sleep problem worse. This period is also often called adjustment insomnia in order to emphasize the role of either adjusting to the stressor or removing the stressor in order to improve your sleep.

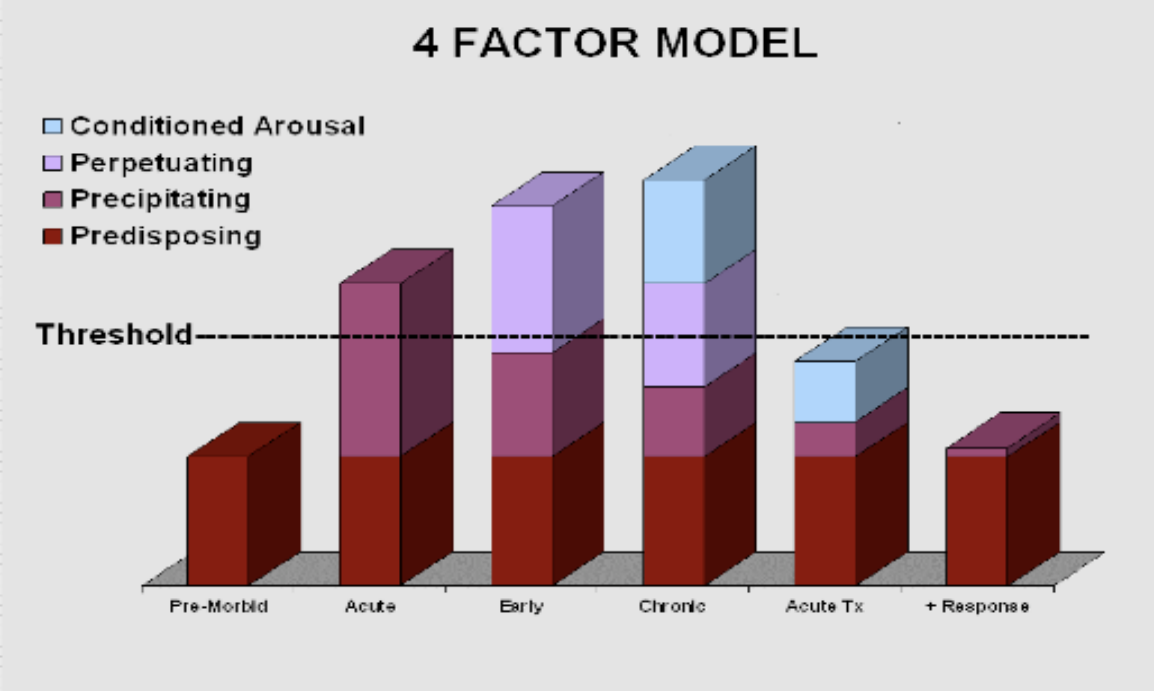
The problem becomes a bit more complicated when the stressor is longer-lasting and more difficult to adjust to. In the early stages of sleep difficulty, we often try to solve our difficulty with well-intentioned solutions like: going to bed earlier; cancelling our next days activities and sleeping in; taking over-the-counter or prescribed sleeping medications; having a few extra drinks with supper; etc. Although these efforts are intended to relieve some discomfort in the short term, many of them serve to actually perpetuate the problem. For example, how many of you have tried to solve your sleep difficulties by going to bed earlier and trying harder to sleep? Was this effective? Most likely you answered, no. In fact you probably realized that going to bed earlier and trying extra hard to sleep only serves to make you more frustrated about sleeping and less likely to sleep.

The chronic stage of insomnia eventually develops after the bed has been repeatedly paired with unsuccessful sleep attempts over many nights and conditioned arousal sets in. Have you ever been so tired that you fall asleep on the couch, wake up and make your way to bed only to find that when you get there, you are wide awake? This is because you can eventually condition your brain and body to associate that time of the evening and/or the sleeping environment with physical and mental arousal instead of sleep. We condition ourselves to associate certain places with specific activities all the time. Think of your kitchen… Just being in your kitchen is sometimes a powerful enough cue to send you rummaging through the fridge, looking for something to eat, not because you are hungry, just because you are in the kitchen. When you repeatedly pair your bed with arousal producing activities like planning or strong emotions like anxiety or frustration, eventually your bed becomes the trigger to elicit these sleep incompatible behaviours and feelings. This is why people with insomnia will often report that they "just

can't turn their mind off".

In the acute treatment stage of Cognitive Behavioural Therapy for Insomnia, the perpetuating factors are actively targeted and modified in order to begin to achieve successful sleep experiences. With response to treatment and time, we can reduce the conditioned arousal by repeatedly pairing the bed and associated sleep stimuli with positive and restorative sleep experiences.

Figure 2.5. The 4 Factor Cognitive Behavioural Model of Insomnia



Perlis, Pigeon and Smith; Principles and Practice of Sleep Medicine Chapter 60

The objective of this portion of the program is to limit perpetuating factors that contribute to insomnia and other problematic sleep activities as much as possible. By doing this, you are attempting to *break* the vicious cycle of conditioned arousal. Of course, this isn't a cure for your sleep disturbances but rather a well-established technique to short-circuit the vicious cycle and stabilize your sleep pattern.

Over the next three weeks we will introduce you to the following coping strategies for attaining better sleep:

1. Sleep restriction
2. Stimulus control
3. Relaxation training

All of these techniques have been well researched and found to be effective with people suffering from similar chronic sleep problems. These techniques are not meant to cure your sleep problems, but rather to correct some of the factors that may be maintaining your insomnia. We'll start with the sleep restriction method.

Review of Daily Sleep Diary

Before proceeding, you should review your Daily Sleep Diary. You may start to notice things about your sleep that you were not aware of previously. For example, do your sleep problems persist through the entire week, or do you actually experience a number of good and bad nights? Do your bad nights tend to cluster together around the same time of the week--weekends for example? Do you sleep better when you are away from home?

Focus on your good nights now. Try to remember if you did anything different on those days as compared with your bad nights. Try to remember general things for now--were you more active on your good days, for example? The point of this exercise is to identify those behaviours which may be having an influence on your sleep. Finding such behaviours is the first step to realizing that your sleep problems are at least partially under your control. Recognizing that some sleep problems are reactions to your own actions implies that you can do something about them. That is, by changing your behaviours you can improve the quality of your sleep. This attitude is central to the self-management philosophy of this program.

SLEEP RESTRICTION PROCEDURES

Introduction

The goal of sleep restriction is to gradually concentrate your sleep into a shorter period of time spent in bed. This will be done by getting you to limit the amount of time you spend in bed, shortening it and bringing it closer to the amount of time you actually spend asleep. Recall from our discussion in the previous chapter the difference between time in bed and time spent sleeping. Recall also that the ratio of time in bed and total sleep time is sleep efficiency. The goal of sleep restriction is to increase your sleep efficiency by decreasing your time in bed.

The rationale behind this procedure derives from the fact that many people spend too much time in bed at night not sleeping. For example, you may try to compensate for your sleep loss by spending extra time in bed. You may continue your habit of spending 8 hours in bed no matter how much sleep you get. The fact is there is no need for you to spend time in bed if you are not sleeping. If you can only sleep 5-1/2 hours a night, then spending 9 hours in bed is only making your sleep problems worse. Those extra hours are probably being spent getting frustrated, more anxious and upset, rather than sleeping. Over time, your body comes to recognize that your bed is a place where you stay awake rather than get to sleep and perpetuates the conditioned arousal.

As a starting point, try the following exercise. Review your Daily Sleep Diary records for the past week. Try to find two or more occasions when your time spent sleeping was similar, but your time in bed was very different. Your sleep efficiency ratio must have been higher on the nights you spent less time in bed. Now check your ratings for sleep quality and feeling refreshed on those nights. Did you rate your sleep quality as higher on the nights you spent less time in bed? Even if your sleep quality was the same, you have just made an important realization: **spending more time in bed doesn't make you sleep better**. Most people with insomnia try to cope with their inability to get enough sleep by spending more time in bed with the hope of recovering the lost sleep. Ironically, this is the worst thing you can do since it only strengthens the association of the bed being a place to lay awake. Even if you do recover some sleep, it will be fragmented, light and ultimately unsatisfying. Research has shown that a shorter period of uninterrupted sleep is more refreshing than the same amount of sleep spread over a longer period in bed. Think of what you do with those hours spent in bed not sleeping!

How Does Sleep Restriction Work?

One of the reasons why this procedure works well is that it actually **concentrates your sleep** into a shorter time period in bed. By delaying your bedtime, you strengthen your sleep drive which serves to decrease the time it takes you to fall asleep. It also pushes you into a longer and deeper sleep, which squeezes out the amount of time you spend awake in the night. Although you are sleeping about the same amount of time, your sleep will be more efficient, less fragmented, and ultimately more refreshing. When you get up in the morning and recall the night's sleep, you will remember sleeping most of the time while in bed. You won't remember that long period when you lay in bed trying to get to sleep.

To illustrate the benefits of having 'concentrated' sleep, consider the following. Have you ever had a really refreshing short nap? That is, a time you were very tired, lay down for an hour, and slept the whole one hour through? You probably woke up feeling a little tired, but generally feeling refreshed. The reason is that you just had a 'concentrated' sleep session. It probably didn't take you long to fall asleep and you probably didn't wake up much. Well, ideally you would like your night-time sleep to resemble this 'concentrated' short nap (except longer of course!). We will discuss naps and their advantages and disadvantages later in the program.

Sleep restriction works even better when combined with other personal coping strategies and techniques. Sleep restriction and stimulus control, for example, complement each other well and should be practiced together. We will discuss stimulus control procedures in the next chapter.

Step-by-Step Procedure for Sleep Restriction

Before beginning this procedure, you should have a good understanding of the sleep measures **time in bed, total sleep time**, and **sleep efficiency**. You should know how to calculate each of these measures for your own sleep. If you don't, go back to Chapter 1 and review the material on these measures.

Step 1: Look at your progress chart from last week and calculate your average sleep efficiency for the past week. This value is your present sleep efficiency. The object of the sleep restriction procedure will be to increase this value to your target goal value (e.g., > 85% sleep efficiency).

NOTE: IF YOU CALCULATE YOUR AVERAGE SLEEP EFFICIENCY TO BE GREATER THAN 90% THEN STOP! YOU DON'T HAVE TO CONTINUE WITH THIS PROCEDURE

Step 2: Again, from your progress chart, calculate your average nightly total sleep time (TST). This is your current sleep ability.

Step 3: Pick a wake up time that you will be able to keep consistent every day of the week. Take your current sleep ability, add 30 minutes, and count backwards from your wake up time to determine your new bedtime For example, if you decide to wake up at 7am everyday and your current sleep ability is 6 hours (plus 30 minutes is 6.5 hours), your new bedtime would be 12:30am. When you are trying to improve your sleep, one of the best things you can do for yourself is maintain a consistent rising time, regardless of how well you slept the night before. The time you get up in the morning is an important determinant of what time you will get sleepy, based on the principle of sleep pressure. The way this works is simple… If there are 24 hours in a day and your current sleep ability is 6 hours, 18 hours remain in the day. If you wake up at 8am, you are not likely to get sleepy until 18 hours have past… bringing your sleep time to 2am! The intention at this point is to stabilize your sleep schedule, improve the quality of your current sleep ability and re-condition your bed with successful sleep experiences. Not to worry, this will not be your sleep schedule from now on! As we progress in the program, we will gradually increase your sleep quantity as well.

NOTE: NEVER GO BELOW 4.5 HOURS FOR YOUR SLEEP WINDOW; IF YOUR AVERAGE NIGHTLY TOTAL SLEEP TIME IS LESS THAN THIS AMOUNT, THEN USE 4.5 HOURS AS YOUR STARTING SLEEP WINDOW.

Step 4: Implement a 90 minute bufferzone before your designated bedtime. If your new bedtime were 12:30am, your bufferzone would start at 11:00pm. This is a time for your body and brain to wind down and adjust from being awake to being asleep so it is important to engage in activities that are conducive to sleep. This means that the activities you choose should be pleasurable, relaxing, and sedentary. You should also be careful to give your brain the clear signal that it is time to start producing melatonin (your body's natural sleep hormone) by performing your bufferzone activities in dim light. This especially means **absolutely no use of computers or backlit devices** during this time!!

Step 5: Each week, we will review your sleep diary and if your sleep efficiency

remains somewhere between 85% and 90%, we can increase your sleep window by 15-30 minutes. Make sure to maintain your sleep diary so you can track your sleep efficiency. Each week that you are successfully achieving a sleep efficiency of 85% or higher we can keep increasing the amount of time in bed until you reach your desired sleep window.

Step 6: It is important that you do not nap during the day. You may feel like you are not getting enough sleep during the first week of this procedure but you should not try to compensate by napping. This will decrease the amount of sleep pressure building up throughout the day and may make it more difficult for you to fall asleep at night.

MY NEW SLEEP PROGRAM

My current sleep efficiency is (From your week 1 sleep diary calculations):

_____

My current sleep ability is (Your average time spent sleeping in week 1):

_____

My new wake up time is going to be:

_____ (7 days a week!)

Based on my wake up time and my current sleep ability (+30 min), my new bedtime is:

_____

This means that my 90 minute bufferzone will begin at:

_____

The activities I will engage in during my bufferzone are:

_____
_____
_____
_____

Tips for Applying Sleep Restriction Procedure

1. Use the steps as guidelines but use your own judgement as to how much you increase your time in bed each week (e.g., 15 or 30 minutes). Try to use increments of 15 minutes (and not less than 15 minutes) to make it easier to track your progress.

2. Similarly, follow a schedule of gradual increases that you are comfortable with. For example, if a one-week step is too quick, increase your time in bed every two weeks. Don't rush!

3. As mentioned previously, you should avoid altering your arising time in the morning. Decrease your time in bed by going to bed later. If you are now in the habit of arising at 6:00 a.m. every morning, stick to that. Make sure this is a time you will be able to adhere to 7 days per week!

4. Initially, your sleep may seem worse. Or, it may seem as though you are fighting sleepiness in order to comply with your sleep window. Don't let this discourage you! Keep in mind that it takes several weeks for you to adjust to the new sleep schedule. Just remember that a little short-term discomfort now is a small price to pay for long-term satisfaction.

5. Another common reaction to sleep restriction during the first couple of weeks is that you may feel sleepy during the day. However, you should avoid napping during the day. This will disrupt the sleep rhythm you are trying to develop with the procedure and lessen its benefits.