SLEEP AND SLEEP HYGIENE

1. WHAT HAPPENS DURING SLEEP?

Sleep was once thought to be a period of total inactivity. We now know that that there are measurable body and brain changes, which occur during sleep. Sleep is divided into two parts, *REM sleep* and *non-REM sleep*. *REM sleep* or rapid eye movement sleep is described as the dream period characterized by intense brain activity. It is labeled REM because the eyeballs move actively under the lid during this period. *Non-REM* sleep is a period of restful sleep that consists of four stages. As the sleeper moves through the stages, the body becomes more relaxed and body functions such as the heartbeat slow down until the individual is in profound relaxation at stage 4 sleep. When a person goes through all of the *Non-REM* stages, s/he then begins the REM sleep stage. This is when we usually dream, and it can last 20 minutes. After the REM stage, the person will start all over with Stage 2 and go through the Non-REM stages of sleep again. When one goes through all of the sleep stages, he or she is said to have gone through a *sleep cycle*. The average person experiences 4-5 complete cycles of non-REM and REM sleep in a night.

The stages of Non-REM sleep occur in a predictable and repetitive way as follows:

Stage 1: This stage is described as very light sleep, with slow eye movement and some muscle activity. During this time the breathing and pulse become more even and the person may experience vivid imagery (not dreams) and sensations of falling or floating. People sometimes experience a falling sensation followed by sudden muscle contractions. If awakened at this time the person would deny that s/he ever slept.

Stage 2: During this stage, eye movements stop and brain waves as well as bodily functions show down. The person is asleep, but not deeply. There may be occasional bursts of rapid waves called "sleep spindles" and certain muscles may twitch during this stage. If the eyelids were opened during this stage of sleep, the person would not be able to see.

Stage 3 and 4: Deep Sleep. These are stages of deep sleep from which people do not easily awaken. There is little eye movement or muscle activity. The person has only very slow brain waves, called delta waves, interspersed with smaller, faster waves. This stage appears to be important to physical body restoration and repair.

Stage 5: REM Sleep: Rapid Eye Movement. During REM sleep, heart rate, eye movement and breathing increase. REM sleep is thought to be necessary for memory consolidation, revitalizing brain chemical functions, as well as psychological well-being. Most dreams occur during REM sleep.

Sleep cycles are repeated throughout the night with an average cycle of sleep lasting approximately 90 minutes. REM sleep generally becomes longer with each cycle while periods of deep sleep get progressively shorter.

Studies of patients diagnosed with posttraumatic stress disorder reveal that they often do not experience a normal sleep cycle. Besides difficulty going to sleep and their sleep is often interrupted by traumatic nightmares. Traumatized people may more quickly reach REM sleep, but it may have a shortened duration and less effective function. It may also be significant that traumatic nightmares do not necessarily occur during REM sleep.

Sleep deprivation leads to reduced productivity, poorer performance, difficulty concentrating, irritability, and depression. It is sometimes associated with medical problems such as reduced resistance to viruses and heart disease.

2. WHAT IS THE NORMAL LENGTH OF SLEEP?

This is like the normal shoe size. What is it? We all need different lengths of shoes and different lengths of sleep to feel comfortable. One man may need size 10 shoe and 5 hours of sleep through his adult years, while another may require size 13 shoe and 9 hours of sleep. However, under abnormal demands like stress and depression a person may *temporarily* need a greater amount of sleep. If a person feels rested and can function well during the day, he or she is getting enough sleep.

3. DOES SLEEP CHANGE WITH AGE?

The answer is yes. While the length of required sleep remains constant for the individual throughout most adulthood, after the age of 60, normal changes occur. These changes involve an increased time spent awake in bed. The older person may notice that it takes longer to fall asleep; that he awakens frequently throughout the night, and that he awakens earlier than he did in the past. It is rare for an older person to experience a full night of sleep without interruption. This is due in part to normal changes in the pattern of sleep with age. As we age, we spend significantly less time in stage four or deep sleep. The sleeper stays in lighter sleep stages longer and is awakened by things in the environment that would not disturb someone younger. Because of the disruptions, the person may also stay in bed longer, but in fact be getting the same amount or less sleep. Over time, the amount of REM or dream sleep is also reduced.

SLEEP HYGIENE

- 1. Maintain a **regular bedtime**.
- 2. Maintain a **regular waking time**. Avoid sleeping in. Get up at the same time each day even if you have not had a restful night of sleep.
- 3. **Do not nap** during the day—especially if you have trouble falling asleep at night.
- 4. **Regular exercise** in the morning or early afternoon may deepen sleep. Avoid strenuous exercise in the evening since it increases body temperature and activates the nervous system.
- 5. Maintain a **quiet, comfortable bedroom**. Find a comfortable bedroom temperature and maintain it throughout the night; avoid temperature extremes. (65 degrees is recommended for good sleep.) Be sure there are no disruptive lights or sounds. Use earplugs, eyeshades, a good mattress and pillow, and/or low background noise to help you sleep.
- 6. **Avoid heavy meals** within 3 hours before bedtime. A light snack at bedtime such as milk, cheese and crackers may help you sleep. However, in general, digesting food interferes with relaxing and it can increase the risk of reflux esophagitis (causing heartburn or sour taste in the mouth).
- 7. **Avoid stimulants and caffeine** (i.e. coffee, cola drinks, cocoa, chocolate, tea, many cold remedies) after 3 P.M.
- 8. **Avoid** any use of **tobacco**. (Nicotine is a stimulant.) It will increase you heart rate and blood pressure as well as stimulate brain activity. This interferes with sleep.
- 9. **If you have difficulty** falling asleep, **don't stay awake in bed for more than 30 minutes**. Instead, leave the bedroom and engage in some quiet activity such as reading until you become sleepy. Then return to bed. Do this as often as necessary.
- 10. **Wind down 2 hours** before bedtime. Engage in an enjoyable, relaxing activity such as listening to relaxing music or a relaxation tape. Avoid working, studying, arguing, or watching TV programming that is upsetting.
- 11. **Get enough daylight**. It's beneficial to spend 30 minutes outside each day, in natural sunlight. If this is impossible, spend 30 minutes in strong, artificial light.
- 12. **Associate the bedroom with relaxing**. Avoid clock watching or worrying. Establish bedtime rituals that are the same each night. Practice deep breathing, muscle relaxation or relaxing imagery while in bed.

Steps to Better Sleep Client Instruction Sheet

- 1. Place the new dream next to your bed.
- 2. 20 to 30 minutes before bedtime, turn off all noise such as the TV, radio, phone, or anything else you may think of that could be disturbing.
- 3. Do your deep breathing and gradually bring in your place of comfort. This will clear or clean the part of the brain from any disturbance from the past, future and present by grounding yourself to the here and now.
- 4. Go to bed and read the New Dream. Lie down and focus on your breathing noticing how the air goes in and out while bringing in the image of your place of comfort.
- 5. If you wake up during the night, just ask, "What do I want to happen next?" and repeat breathing with the focus on your place of comfort.
- 6. If you wake up without remembering any dream but you are in a pool of sweat, bed items tossed around, knowing you had a restless sleep; just follow **Step 5** before going to sleep the next time.

Daily Sleep A	ctivity I	log: Pa	ırt I				
During the next week, practice your dream rehearsal Sleep Activity Logs. On the log below, answer the qeach box. For Question 9, rate the distress you exhibit mare.	uestions	by plac	$\dot{\mathbf{Y}}$	for Yes	or an N	N for N	o in
Usual time I go to bed: (within a half-hour)							
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1. Did you consume coffee, soda pop, or caffeine tea within six hours before bedtime? (Y/N)							
2. Did you go to bed at within a half-hour of your usual bedtime? (Y/N)							
3. Did you use a relaxation procedure before going to bed? (Y/N)							
4. Did you take all your medication as prescribed? (Y/N)							
5. Did you nap at all during the day? (Y/N)							
6. Did you dream your target nightmare ? (Y/N)							
7. Did you feel any sense of control in your nightmare? (Y/N)							
8. Did the target nightmare change in any way? (Y/N)							
9. How disturbing was your target nightmare, if you had it? (Rate 1 - 10 with 10 being the most disturbing.)							
10. Did you have a different nightmare than your target nightmare? (Y/N)							

_Date _____

NAME: _____

Name _	Da	ate

Daily Sleep Activity Log: Part II

Upon awakening each morning, block in the hours you slept during the night by darkening the boxes that correspond to those hours. If you took a nap or slept during the days, darken those hours also. You can designate half-hours by filling in only half of a box.

It is very important that you complete both Sleep Activity Logs for every night of the week.

Notice the Example at the right: This person is recording that on Monday night, Feb. 4, he went to sleep about 11pm, woke up at 3:30am, went back to sleep for an hour at 6am, then slept for two hour between 1-3pm. On Tuesday, Feb. 5, this person went to sleep at about 11:30pm, woke up this time at about 5am, went back to sleep at 9am for one hour, then slept for 1 ½ hours between 2:30-4pm.

Night of	Mon	Tues	Wed	Thur	Fri	Sat	Sun	EXAMPLE	
Week								Mon	Tues
Date:								2/4	2/5
7pm									
8pm									
9pm									
10pm									
11pm									
12midnt									
1am									
2am									
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10am									
11am									
12noon									
1pm									
2pm									
3pm									
4pm									
5pm									
брт									

Name	Date
	GET NIGHTMARE
sights, smells, and tastes, thoughts you were the beginning of your nightmare and describe it u	hinking and emotions you were feeling. Start at the very p to the moment when you usually wake up. (If you dream escribe the most common version or the most distressful

SUGGESTIONS FOR DREAM CHANGES

The purpose of this handout is to assist you in generating ideas for changing your dream. Whatever changes you decide on should provide you with an increased sense of mastery over your dream. This list offers some options but you may be able to think of many others.

Remember, there is no limit to how you can change your dream because it is only a dream.

- 1. Devise alternate endings to the dream. The alterations in the ending may range from minor to extreme differences.
- 2. Insert reminders into the dream that prompt different ways of viewing the events of the dream. For example, you may place meaningful objects into the dream that remind you that you survived. You may want to place other people you know in the dream who remind you of your strengths or you may wish to see a spiritual being in the dream that represents safety or peace.
- 3. Transform threatening weapons into harmless objects.
- 4. Distance yourself by viewing the dream through a screen or TV that you can switch off or change the channel.
- 5. Remind yourself in some way that this is only a dream and not real.
- 6. Transform what is frightening in the dream to something harmless or helpful.
- 7. Visualize yourself transported to a place of safety or peace.
- 8. Make peace with whatever is trying to harm you.

NEW DREAM

In the space provided below, please describe your new dream in as much detail as possible. Describe the feelings, images and thoughts associated with this dream.

Traumatic Nightmare Resolution Examples

Original Nightmare: Symbolic Bizarre Nightmare

A gigantic monster is chasing me. The monster has a human head but it has great claws, giant wings and a beak with large teeth. As it chases me it often changes shape and size as if by magic. It is black and brown in color and terrifying. I run as fast as I can and try to shoot at it whenever possible. However, I am always sure it will devour me and I wake up soaked in sweat, with my heart racing.

Changed Dream:

As the monster is chasing me, I turn and face it. I ask it to stop chasing me and promise I will stop trying to kill it. The monster shrinks down and turns into a beautiful palomino horse with a white mane and white tail. I leap on its back and ride triumphantly away. I can feel the strength of the horse beneath me and feel very powerful and safe.

(This patient stopped having his traumatic nightmare from the time he began the imagery rehearsal therapy. He reported feeling empowered by the repeated visualization which he practiced often throughout the day.)

Original Nightmare: Historical Nightmare

I am in "a chopper" in Iraq. We are flying over a hot zone and we are shot down. The chopper is on fire and begins to go down. The chopper hits the ground and rolls over several times. We get out and discover are not seriously injured. We think we hear enemy soldiers nearby. I am terrified that I will be shot. I call for help on the radio and a rescue chopper arrives soon. We all get on board and are taken back to the base camp.

Changed Dream: (Group generated options)

- 1. You have an automatic foam system on board that is activated and the fire is quickly put out. You do not crash.
- 2. You crash to the ground but the soldier you see has no arms and cannot hurt you.
- 3. You crash to the ground but when you look up into the sky all you see are soft clouds.
- 4. You are in a chopper that lands safely after you are hit. Other choppers land with you and rescue all of you.
- 5. You hear a thump on the side of your chopper but nothing happens. You do not catch on fire and do not crash.

Symbolic Meaning of Dream Elements

- **chase or attack**: The pursuer usually represents a fearful aspect of our shadow, and hence an exaggerated version of a denied or inhibited portion of our own personality that would benefit us if integrated and appropriately expressed.
 - (ideal outcome: standing our ground, facing and dialoguing with our pursuer, and eventually, acceptance and embrace)
- **falling dream**: Am I feeling heavy, unsupported, worried about something? How can I feel freer, lighter? Also, do I need to be more grounded?
 - (ideal outcome: feeling safe, landing, floating or flying)
- **car out of control**: Is life too hectic, out of control? How could I slow down, act more peacefully and "enjoy the ride"?
 - (ideal outcome: driving well & within speed limits, walking peacefully)

- unprepared, late for or failing an exam: Am I feeling unprepared for some upcoming event? Unconfident about my performance? Am I worrying needlessly or do I actually need more preparation in order to feel confident and do a good job?
 - (ideal outcome: feeling assured about oneself, performing well)
- stuck in slow motion, unable to move or make any noise: Where am I feeling stuck in life, like I'm getting nowhere or unable to voice my true feelings? What can I do to change it?
 - (ideal outcome: relaxation and acceptance, and eventually, peaceful action & self-expression)
- embarrassed to be nude or naked in public, though nobody seems to notice or mind: Where in life am I feeling unconfident, embarrassed, unskilled? This type of dream is usually pointing out, by the fact that the other characters in the dream don't seem to notice, that we are the only one viewing our self this way, and usually mistakenly so.
 - (ideal outcome: comfortable with oneself as is, confident)
- **personal injury, dismemberment**: What part of my life not usually the physical body have I been neglecting, mistreating, forgetting i.e., disremembering as opposed to remembering?
 - (ideal outcome: healing)
- **trapped, locked in**: Where am I feeling trapped in life? How might I open myself up to a new perspective, and explore new courses of action?
 - (ideal outcome: breaking out, exploration)
- drowning, threatening waves, tsunami (tidal waves) or flooding: Am I blocking, denying or feeling overwhelmed by my emotions? How might I better acknowledge, accept, and feel these feelings—which often include vulnerability?
 - (ideal outcome: swimming, surfing, breathing underwater)
- helpless, abandoned, or crying baby, monkey, bunny or small animal: Have I been taking care of
 my "inner child"? Maybe I need to laugh more, play outdoors, express my creativity, be more
 spontaneous, or enjoy more personal warmth and intimacy?
 - (ideal outcome: caring for baby or animal, playing, simply having fun)

EMDR Nightmare/Dream Protocol

1. Install a calm state/safe/place of interest. Check for positive stabilization. Get the sleep history. You can use the Daily Sleep Activity Log for the history.

Have the client write the original nightmare in your presence on the "Target's Nightmare" sheet. There may be a high chance the client will re-experience the trauma so you need to be there for the stabilization.

Have the client rewrite the original nightmare by completing it with a new positive ending. The newly scripted dream should provide an adaptive resolution to the distress generated by the nightmare. Ask the client to start from the point of the dream where the client woke up or the most disturbing part. As needed, prompt the client by asking, "What do you want to happen next?"

Remember, the ending can be as bizarre as the client's brain wants.

If the client is unable to come up with an ending, use the provided suggested changes. Ultimately, the new ending should be sufficiently positive to include an "Aha, this feels much better" realization. When the ending is imagined, it should also have a positive gut-level feeling with little or no disturbance.

2. Once the dream has been crafted, ask the client how disturbing it is for her / him when s/he thinks of the new dream ending now on a scale from 0-10 (SUD) Complete a body scan bringing in the new image with the new ending, and scan the body for any feedback. It should be a comfortable zero (0), though one (1) is acceptable. If not, find a new dream ending.

RESOURCE INSTALLATION

- 1. Ask, "What is the image that describes that dream change best?" (Look for a still image that has the most positive affective resonance).
- 2. Ask, "Where do you feel it in your body?" (Look for the positive body state that is connected with the image)
- 3. "Get in contact with that image ... and the body feeling. Are you connected with it?"

If yes: "Think of that and follow with the eye movements." (set of 5-8 slower BLS)

If no: Ask "What keeps you from getting in contact with that image and body feeling?" You may have to engage in discussion to modify the changes out of client fear or secondary gain issue.

4. After a set of BLS, ask "How is it now?" Ask for the change in the body state.

If the positive body feeling gets stronger add another set of 5-8 eye movements.

If negative material (like negative arousal) comes up, change to another image that shows the positive change.

5. Follow the Client Sleep Hand-Out "Steps to Better Sleep" for the remainder of the Protocol.