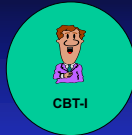


Overview

- Sleep Hygiene
- Addressing Arousal
- Cognitive Therapy (CT)

1

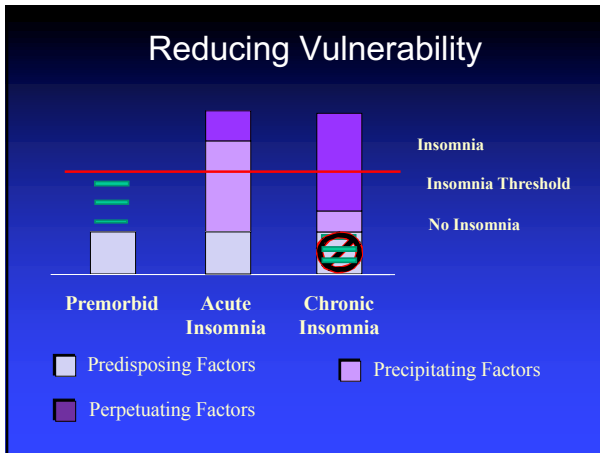
THERAPY



SLEEP RESTRICTION
STIMULUS CONTROL
SLEEP HYGIENE
COGNITIVE THERAPY

Sleep Hygiene

Healthy Sleep Practices
Necessary but rarely sufficient




Sleep Hygiene

Healthy Sleep Practices


1. Clock watching
2. Environment: lighting, comfort & safety
3. Sleep and eating/drinking
4. Exercise
5. Substances
6. Reducing Arousal

Goal: DECREASE VULNERABILITY
TAKING APART THE LADDER



SLEEP HYGIENE

CLOCK WATCHING



- CLOCK WATCHING AT BEDTIME LEADS TO MORE PRE-SLEEP WORRY AND LONGER SL

FINDINGS OF EXPERIMENT WITH RANDOM DIGIT MONITORING COMPARISON GROUP

- CLOCK WATCHING WHEN AWAKE DURING THE NIGHT LEADS TO LONGER WASO
- IMPLICATIONS FOR SLEEP DIARY
 - DO NOT WATCH THE CLOCK → JUST ESTIMATE

Adapted from the VA CBT-I Didactic Training

GIFT IDEAS FOR PEOPLE YOU HATE
WHO HAVE INSOMNIA





SLEEP HYGIENE



SAFETY

SAFE ENVIRONMENT ESP. RELEVANT FOR THOSE:

- WHO EXPERIENCED BED/NIGHT RELATED TRAUMA
- WHO LIVE ALONE

TEMPERATURE, SLEEPING SURFACE

- COOL BUT NOT COLD
- SLEEPING SURFACE ESPECIALLY IMPORTANT FOR PATIENTS WITH PAIN AND FOR OLDER ADULTS

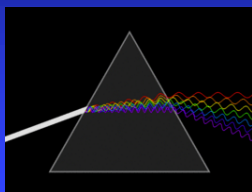
Adapted from the VA CBT-I Didactic Training

Sleep Hygiene: Environment

• Lighting

Bedroom should be dark

- Particularly important for "night owls"
- May need low lights with older adults (to prevent falls)



Adapted from the VA CBT-I Didactic Training

Sleep Hygiene: Lighting



Sleep Hygiene: Environment

- Noise

Bedroom should be free from noise:

- Low irregular noises can cause orienting response
- Avoid low radio or TV sounds



Adapted from the VA CBT-I Didactic Training

Sleep Hygiene: Noise



Sleep Hygiene: Environment

But first a story



- It is best to keep pets off the bed
- Especially true for hyper-proprioceptors
- Pets should remain on the floor or in their own beds- Take off collar tags

SLEEP HYGIENE-MEALS



It is generally not a good to eat a heavy meal too close to bedtime (within 4hrs)

The digestive system slows during sleep and foods not completely digested can cause discomfort that disturbs sleep

For some eating anything at all before bedtime or when when awake in the middle of the night is particularly important for patients with GERD

Because feeling hungry may also interfere with sleep, a light snack is OK

Adapted from the VA CBT-I Didactic Training

SLEEP HYGIENE-LIQUIDS



Patients should consider decreasing liquids in the evening.

Not often part of most Sleep Hygiene lists?

Starting point of no more than 4-6 oz. 3-4hrs before BT.

Pt should be encouraged to experiment.

Especially important for Pts with urinary frequency at night.

Sleep Hygiene: Exercise



- Traditional wisdom suggests no exercise within 4 hrs of BT?
- Exercise could be helpful to stay awake in evening
- Possibly can raise core body temp in ways that will aid in sleep onset
- Encourage experimentation

Adapted from the VA CBT-I Didactic Training

Sleep Hygiene: Alcohol Recommendations



- Alcohol is not a good sleeping aid
- Initially relaxing, but as it is metabolized sedating effects diminish, sleep becomes fragmented and restless (REM rebound)
- Abstinence can help with evening sleepiness

Adapted from the VA CBT-I Didactic Training

Sleep Hygiene: Caffeine



Caffeine is a stimulant with average 5 hours half-life

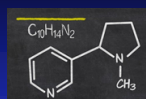
Caffeine binds to adenosine receptors – affecting sleep drive

Half-life impacted by

- Age: Caffeine is cleared more slowly from the body
- Liver function, body size, and amount ingested
- Pregnancy (longer 9-11 hours)

Adapted from the VA CBT-I Didactic Training

SLEEP HYGIENE NICOTINE



HALF-LIFE IS APPROXIMATELY 2 HOURS

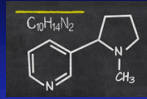
**BECAUSE IT LEAVES THE BODY FAIRLY QUICKLY,
CRAVINGS CAN OCCUR DURING THE MIDDLE OF
NIGHT**

**NICOTINE HAS A PARADOXICAL EFFECT
IT IS BOTH A RELAXANT AND STIMULANT**

Adapted from the VA CBT-I Didactic Training

SLEEP HYGIENE

NICOTINE



NICOTINE CESSATION IS DESIRABLE BUT OFTEN NOT REALISTIC → FOCUS ON NICOTINE USE CLOSE TO BT AND IN THE MIDDLE OF THE NIGHT

1. AVOID NICOTINE TWO HOURS BEFORE BEDTIME
2. AVOID NICOTINE IN MIDDLE OF NIGHT
3. IF NON-NEGOTIABLE, DOSE MATTERS

Adapted from the VA CBT-I Didactic Training

Sleep Hygiene Marijuana and Sleep

- Administration
 - Long half life (1-3 days)
 - Faster to sleep (but prone to tolerance)
 - More waking
- Withdrawal
 - Slower to sleep
 - More waking
- Recommendations similar to nicotine



Adapted from the VA CBT-I Didactic Training

Reducing Arousal: “Buffer Zone”

A time to unwind before bedtime

- Shedding day's excitements and tensions will allow sleep to unfold naturally
- Activities enjoyable on their own are better than those taken as a means to an end

Worksheet

- Helps patients come up with activities for unwinding
- Start with bedtime rituals

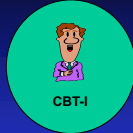
Adapted from VA CBT-I Didactic Training

HOW ABOUT A LIST?

RULES FOR BETTER SLEEP HYGIENE

1. **Check Waking:** Looking at the clock in the middle of the night only leads to more worry about sleep and leads to longer periods of wakefulness.
2. **Lighting:** Keep the bedroom dark as possible especially in the morning as the sun comes up. When entering bedrooms or closets use night, but a simple solution is to wear a sleep mask. Low lighting such as night lights, TV, and mood lights are OK.
3. **Noise:** A quiet bedroom is preferable. Stronger noises in the bedroom, even quiet ones, can be disruptive to sleep. White noise such as the sound of a fan or humidor, can drown out other more disruptive noises leading to less broken sleep. Ear plugs can also be helpful.
4. **Post:** Sleep away off the bed. Your movement on the bed can lead to increased awakenings. It's OK to have chairs in the bedroom, but keep them on the floor not your bed. Consider removing infants or dogs that might.
5. **Stages:** Sleep hygiene means close to bedtime. Things can disrupt your sleep. Therefore, a **bedtime** can be helpful before bedtime. Carbohydrates (e.g., crackers, bread, cereal, fruit) are best for a good night's sleep.
6. **Hydration:** A full bladder is likely to lead to sleep disruption in the middle of the night. Try to cut down on the amount of fluid consumed before bedtime. Try to drink smaller amounts in the evening. Try to drink no more than 4-6 oz. in the last 4 hours before bedtime. Everyone is different, so experiment with the timing of liquid reduction for best results.
7. **Exercise:** Do not exercise too late to go to sleep. Sometimes exercise can close to bedtime can be overly stimulating but this can vary from person to person. Sometimes exercise in the morning can help keep you alert and bedtime and lead to deeper sleeping. Experiment with the timing of exercise in the evening for the best results.
8. **Alcohol:** Although alcohol use before bedtime can help some people to fall asleep more easily, this has been shown to result in more fragmented sleep and more awakening during the night.
9. **Medication:** Nicotine is also a stimulant, and it has been demonstrated that chronic cigarette smokers have experienced significantly disrupted sleep when they quit.
10. **Bedtime:** It helps to set aside the last hour of the evening before bed for quiet relaxing activities. Try not to work or engage in anything stimulating close to bedtime.

THERAPY



SLEEP RESTRICTION
STIMULUS CONTROL
SLEEP HYGIENE
COGNITIVE THERAPY

COGNITIVE THERAPY



BASED ON THE THEORY THAT OUR

- 1) EMOTIONAL EXPERIENCES ARE INFLUENCED BY OUR BELIEFS, THOUGHTS, AND INTERPRETATION OF EVENTS
- 2) EMOTIONAL EXPERIENCE OF EVENTS IS DIRECTLY RELATED TO SYMPTOM SEVERITY OR TOLERANCE

THEREFORE THE AIM OF CT IS TO CHANGE BELIEFS AND THOUGHTS ABOUT EVENTS ASSOCIATED WITH PSYCHOLOGICAL AND PHYSICAL DISTRESS

Adapted from VA CBT-I Didactic Training

COGNITIVE THERAPY



- REDUCE
 - SLEEP EFFORT
 - CATASTROPHIC PREDICTIONS OF NEXT DAY EFFECTS
 - WORRY ABOUT SLEEP AND CONSEQUENCES OF POOR SLEEP
 - HELPLESSNESS RE DEALING WITH INSOMNIA
- CORRECT
 - MISATTRIBUTIONS ABOUT INSOMNIA
 - UNREALISTIC EXPECTATIONS "WHAT'S GOOD SLEEP"
- ENHANCE WILLINGNESS TO CHANGE SLEEP-RELATED BEHAVIORS AND ENGAGE IN COUNTER-INTUITIVE STRATEGIES

Adapted from VA CBT-I Didactic Training

Cognitive Therapy How Cognitions Impact Sleep

Situation: Morning after poor sleep

Jack: "If I do not get 8 hours of sleep my day is ruined"

Jill: "I functioned on 6 hours of sleep before and did OK"

The two will differ in how they:

- feel (anxiety level)
- will function that day
- will approach sleep that night
- Will adhere to CBT-I behavioral prescriptions

Adapted from VA CBT-I Didactic Training

TWO TYPES OF COGNITIVE THERAPY



1. General Cognitive Therapy
2. Targeted Cognitive Therapy

COGNITIVE THERAPY – GENERAL



TYPES

Education

Worry Time

Cognitive Therapy Education

Education about regulation of sleep changes erroneous beliefs

- Sleep drive promotes sleep
- Correct circadian placement promotes sleep
- Anxious thoughts oppose sleep drive and interfere with sleep
- Conditioned arousal

Education about the cognitive model

- Effect of thoughts and beliefs on
 - sleep-interfering behaviors (Safety Behaviors)
- Trying to sleep interferes with sleep (Sleep Effort)

Education about insomnia

- Realistic expectation about sleep
- Proper sleep need
- Normal sleep architecture
- Don't expect perfect sleep (Acute Insomnia)

VA CBT-I Didactic Training

COGNITIVE THERAPY: EDUCATION

PATIENT CONCERN: "IF I DO NOT GET ENOUGH SLEEP...."

RELEVANT FACTS TO ADDRESS PATIENT CONCERNS

- POOR SLEEP USUALLY REDUCES ONE'S RESOURCES FOR DEALING WITH EXTRA BURDEN BUT ROUTINE PERFORMANCE IS RARELY AS COMPROMISED AS FEARED
- CONSEQUENCES OF INSOMNIA ≠ CONSEQUENCES OF SLEEP DEPRIVATION FOR GOOD SLEEPERS
- PEOPLE WITH INSOMNIA ARE EXCEPTIONALLY EXPERIENCED IN COPING WITH INSUFFICIENT SLEEP

Adapted from VA CBT-I Didactic Training

Worry Time



PLANNING FOR WORRY



- Set aside a time and place and each day to do the thinking, worrying, problem-solving, and planning that may interfere with sleep.
- Do not schedule too close to bedtime/wake time or in the bedroom.
- If intrusive thoughts occur during your sleep period, postpone them to next scheduled worry time.

Adapted from VA CBT-I Didactic Training

RATIONALE FOR WORRY TIME



- Suppressing pre-sleep thought in not an effective method for quieting the mind.
 - Thought suppression requires mental effort
 - Continued attempts to suppress thoughts may lead to more intense worrying / White Bear
- Thinking through one's worries (e.g. examining their validity) may defuse them
- Thinking should be done during day and not in bed at night

Adapted from VA CBT-I Didactic Training

THE WORRY PROTOCOL

4 EASY STEPS



- Make a list of your worries, or just things you want to remember to do...
- Pick just one worry.
- Make the worry present and problem solve it.
- Work on same worry each day until quieted.

Adapted from VA CBT-I Didactic Training

COGNITIVE THERAPY – TARGETED



TYPES

- | | |
|---------------------------------|-----------------|
| DEBUNKING DYSFUNCTIONAL BELIEFS | - MORIN |
| DECATASTROPHIZATION | - PERLIS ET AL. |
| COGNITIVE RESTRUCTURING | - HARVEY |
| SAFETY BEHAVIORS | |
| BEHAVIORAL EXPERIMENTS | |

DEBUNKING DYSFUNCTION BELIEFS (MORIN CT)



HOW DO YOU KNOW WHAT PEOPLE THINK ?

ADMINISTER THE DBAS

DYSFUNCTIONAL BELIEFS & ATTITUDES ABOUT SLEEP QUESTIONNAIRE

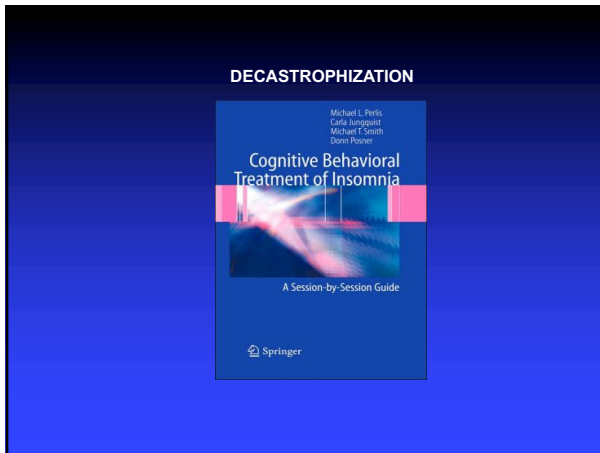
LISTEN AND WATCH !

PATIENTS FREQUENTLY DESCRIBE EXTREME BELIEFS ABOUT THEIR SLEEP NEED AND SLEEP ABILITIES AND OR THE CONSEQUENCES OF NOT MEETING THEIR SLEEP NEED

FOLLOW THE BEHAVIOR

PATIENTS WITH INSOMNIA FREQUENTLY ADOPT BEHAVIORS THAT ATTEST TO THEIR DYSFUNCTION BELIEFS

Adapted from VA CBT-I Didactic Training



Cognitive Therapy Decatastrophization

Validity

- What is the evidence a particular thought is true? Not true?
- Is there an alternative explanation?

Utility

- What is the effect of believing this thought?


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Cognitive Therapy Decatastrophization

Used to address anxiety caused by predictions of catastrophic or low probability negative outcome

- A series of questions that helps unveil an underlying catastrophic prediction
- Questioning the probability and/or validity of the catastrophic prediction
- Developing a genuine alternative prediction that lowers anxiety

SET THE FRAME OF MIND



"CLOSE YOUR EYES AND IMAGINE YOURSELF TRYING TO FALL ASLEEP. IT'S BEEN A WHILE. AND YOU START TO THINK "IF I DON'T SLEEP TONIGHT _____"

Cognitive Therapy Downward Arrow: Example

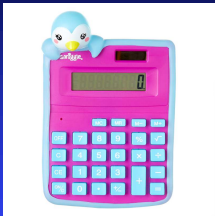
If I do not fall asleep by midnight I will not perform well at work tomorrow
And what will happen if tomorrow you are not at your peak performance?

I will get bad reviews
And if you get bad reviews, what will happen?

I will be fired
So if you lie in bed thinking you will be fired, how likely are you to be calm enough to allow sleep to happen?

But how can I stop thinking this?
Lets go back and see how likely it is that your reviews will be poor?.....

CALCULATE THE NUMBER OF DAYS WITH INSOMNIA ?



Number of years
Number of days per week
Weeks per year

SET THE FRAME OF MIND



When you're lying there awake for what seems like forever, and you start to worry "If I don't sleep tonight, then tomorrow I'll _____."

At that moment, how likely does it feel that _____ will happen?

You've had _____ nights of insomnia and how many times did _____ happen?

For that matter...ever had good nights and a worse day than expected?

Ever had a terrible night and a better than expected day?

Cognitive Therapy: When Thought Restructuring Was Ineffective...

- Patient may have failed to fully express evidence that supports thought (numbers)
- Patient may have discounted evidence due to safety behaviors

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SAFETY BEHAVIORS & BEHAVIORAL EXPERIMENTS (Harvey CT)



What are safety behaviors?

Overt and subtle attempts to cope with poor sleep
Attempts to control poor sleep

What are behavioral experiments?

Approach to challenge unhelpful beliefs about sleep
Testing alternative thoughts and behaviors
to bring about change in behavior

ADDRESSING SAFETY BEHAVIORS VIA BEHAVIORAL EXPERIMENTS

Patient expresses a negative belief:
Therapist proposes patient test belief during the week

Collaboratively decide how, when, where it will be tested
• Role-play a scenario in preparation, if needed

Therapist explores reaction if experiment does confirm patient's belief so they can devise a response in advance

Adapted from VA CBT-I Didactic Training

EXAMPLES BEHAVIORAL EXPERIMENTS

Belief	Alternative?	Experiment

Adapted from VA CBT-I Didactic Training

3 Pillars of CT-I



- Switch focus from quantity to quality
- Work on staying awake vs. getting to sleep
- Goal is good sleep over time-Tonight is sacrificed

Questions



BREAK