Learning Objectives

- Define insomnia according to ICSD criteria
- Identify the prevalence and consequences of insomnia
- Determine who is a good candidate for CBTi
- Conduct CBTi with supervision

Basic Principles of Cognitive Behavioral Therapy for Insomnia (CBTi): The model and the techniques

Training workshop for Alameda County Behavioral Health Care Services
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Trainers: Poorni Otilingam, Ph.D., M.P.H. and Jocelyn Sze, Ph.D.

Insomnia 101: Definition

- Per the International Classification of Sleep Disorders, Revised (ICSD-2):
  - Secondary Insomnia
  - Insomnia associated as a symptom of another condition
  - Primary Insomnia
  - Insomnia as its own distinct disorder
  - Not a symptom or side effect of another condition

References: National Heart, Lung, and Blood Institute, 2011; American Sleep Disorders Association, 1997; Silber, 2005.

Insomnia 101: Etiology

- Secondary insomnia
  - Medical: Restless legs syndrome, chronic pain, dyspnea, nocturnal cough, overactive thyroid, gastrointestinal disorders, menopause
  - Neurological: Dementia (especially of the Alzheimer’s type), Parkinson’s disease, stroke
  - Behavioral: Inadequate sleep hygiene, lifestyle habits that impair sleep (e.g., shift work)
  - Emotional: Depression, anxiety, posttraumatic stress disorder (PTSD), active psychosocial stressors/adjustment issues
  - Drugs: Caffeine, alcohol, prescription and/or illicit drugs

References: National Heart, Lung, and Blood Institute, 2011

Insomnia 101: Confused Pairs

Regulated Sleep                  Insomnia

References: National Heart, Lung, and Blood Institute, 2011
Insomnia 101: Common Symptoms

- Difficulty falling asleep
- Interrupted sleep
- Waking up prematurely
- Poor quality of sleep
- Light sleep

References: National Heart, Lung, and Blood Institute, 2011

Insomnia 101: Epidemiology

- **MOST** common sleep-related complaint in adults
- 30% of population has one or more symptoms of chronic insomnia
- 252.7 million days of lost work performance each year in U.S. alone due to untreated insomnia (excluding comorbid disorders)
- $63.2 billion dollar loss correspondingly
- **AGE** and **GENDER** are the most clearly identified demographic risk factors

References: CDC, 2013; Roth, 2007

Insomnia and Physical Health

- Obesity
- Diabetes
- Impaired glucose tolerance
- Cardiovascular disease
- Hypertension
- Stroke
- & Falling

References: National Academies Press, 2006; National Heart, Lung, and Blood Institute, 2011

Insomnia and Mental Health

- Attention and concentration problems
- Depression
- Anxiety
- Irritability
- Alcohol use

References: National Heart, Lung, and Blood Institute, 2011

Insomnia 101: Public Health Consequences

- Mortality and morbidity
- Accidents/Driving risk
- Injuries
- Errors in judgment and performance

References: CDC, 2013; Miller, 1980; National Academies Press, 2006; National Heart, Lung, and Blood Institute, 2011
When to Consider CBTi

YES

Insomnia d/t problems with bed-sleep pairing

NO

Insomnia d/t untreated sleep apnea OR nightmares

STOP

General CBT Model

- Collaborative, team-based
- Time-limited
- Present focused
- Socratic method
- Structured and directional
- Goal/Problem-solution focused orientation

Basic CBTi Model

- 5+ session format
- Learn and practice sleep techniques
- Tracking
- Problem solving
- Stimulus control
- Sleep restriction

Session 1: Motivational Interviewing & Intake Evaluation

- Psychoeducation
  - Goals of treatment
  - Process by which treatment will happen
  - Why use CBTi
- Motivational interviewing
  - Establish rapport
  - Elicit change talk
  - Establish commitment language

Session 1: Intake Evaluation

- Insomnia Severity Index (ISI)
  - Seven items
  - Takes 2-3 minutes to complete
  - Compute total score by adding individual item scores
  - 11 or higher = Cutoff score for referral to Behavioral Health
  - Significant progress = When a patient changes in their ISI by 6 points

Insomnia Severity Index (ISI)

- The ISI is provided in your training materials
- Also, it is available as an open source measure by Googling "Insomnia Severity Index", or by visiting:
  https://www.myhealth.va.gov/mhv-portal/web/anonymousportal?_nfpb=true&_pageLabel=healthyLiving&contentPage=healthy_living/sleep_insomnia_index.htm

References:
- Miller & Rollnick, 2012
- Morin, 2011; Yang, 2009
Session 2: Treatment Initiation

• Stimulus Control

• Sleep Restriction

Stimulus Control

1. Go to bed only when you are sleepy
2. Only use your bed for sleep (or sex)
3. Leave the bed when you are unable to fall asleep after about 15 minutes
4. Hide the clock
5. Wake up at a regular time regardless of how well or how long you slept
6. Avoid/reduce naps

Sleep Restriction

• To limit time in bed to the actual amount of sleep obtained in order to increase sleep efficiency
Why Sleep Restriction?

**SLEEP DEBT**
- Sleepiness

**SLEEP EFFICIENCY**
- Sleep

SLEEP DEBT = Sleepiness

SLEEP EFFICIENCY = Sleep

Sleep Efficiency = Time Asleep ÷ Time in Bed

- If patient spent 4 hours asleep and 8 total hours in bed last night, his/her sleep efficiency would be 4 ÷ 8, or 50%
- Our goal is to increase the percentage of time patient spends asleep in bed
  - Goal: Sleep Efficiency > 90%

Sleep Restriction

- Most effective sleep hygiene technique available (and as effective as sleep medication) with a longer lasting effect
- Time intensive
- Initial increased sleepiness

Sleep Restriction How-To’s

- Patient stays in bed as long as he/she is typically able to sleep
  - At first, he/she will get even less sleep than normal
  - But, this will help increase sleep debt and make it easier to fall asleep the next night
  - May need 2 or 3 nights of added sleep debt before he/she falls asleep quickly

Session 3: Continued Application of Sleep Restriction

- Adjust Time in Bed (TIB) Window
  - If last week’s average sleep efficiency > 85%:
    - Increase Time in Bed by 15 minutes
  - If last week’s average sleep efficiency < 80%:
    - Decrease Time in Bed by 15 minutes
  - Otherwise, maintain Time in Bed Window

Session 3: Sleep Hygiene
(and Continued Application of Sleep Restriction)

- EXCEPTIONS:
  - You may not want to decrease TIB window if:
    - TIB is already <5.5 hours
    - Patient reports High Sleep Need
      (See HANDOUT: Sleep Need Questionnaire)
    - It would be otherwise unsafe to do so (older adult patients, etc.)
Session 3: Sleep Hygiene
(and Continued Application of Sleep Restriction)

- Daily sleep hygiene behaviors are necessary to maintaining healthy sleep patterns

- **HANDOUT**: Sleep Hygiene Guidelines (p. 5 of manual)

Session 3: Sleep Thieves

- Turn off TV, laptops, smart phones 1 hour pre-bedtime

Session 3: Sleep Thieves

Certain things we consume can interfere with sleep:

- Sleeping pills
- Caffeine
- Alcohol
- Eating

Session 3: Sleep Promoters

- Bedtime ritual: 1-2 hr buffer zone before bed
- Bedtime environment: dark, quiet, and cool
- Exercise
  - Not too close to bedtime
- Early AM light exposure
  - 15 min of bright light
- Hot baths
  - Within 1-2 hours of bedtime

Session 3: Sleep Hygiene review

Review from Session 2: Stimulus Control and Sleep Restriction behaviors

For example:
- Limit time in bed
- Avoid naps and compensatory behaviors
- Wake up at a regular time

Session 3: Setting Behavior Change Goals

Is My Goal **SMART**?

- Specific and small
- Measurable
- Action oriented
- Realistic
- Time stamped
Session 4: Cognitive Therapy for Insomnia

- **Sleep Thief Thoughts**: thoughts influence sleep – e.g., “If I don’t get enough sleep, X will happen”

**Handout**: Dysfunctional Beliefs about Sleep (DBAS) assesses for sleep thief thoughts

Session 4: Common sleep thief thoughts

1. If I don’t get enough sleep, something bad will happen
2. I need to try harder
3. I need to get X hours of sleep
4. I need to stay in bed and play catch up
5. If I get out of bed, I’ll deprive myself the chance to sleep
6. I can’t sleep!

**Session 4: Challenging sleep thief thoughts**

<table>
<thead>
<tr>
<th>Sleep Thief Thought</th>
<th>Alternative Thought</th>
</tr>
</thead>
<tbody>
<tr>
<td>“If I can’t sleep, my whole day will be shot.”</td>
<td>“Even if I don’t sleep well, I’ll survive. And the more active I am, the easier it will be to sleep.”</td>
</tr>
</tbody>
</table>

**Session 4: Other Strategies for Quieting Overactive Minds**

- When anxious/upset, leave the bedroom and come back when sleepy
- Schedule constructive worry
  - 15-30 min per day, at least 2 hrs pre-bed
- Stress reduction strategies
  - Slowing down breathing

**Sessions 5+: Titration and Compliance**

- **Titration**: continuing to adjust/maintain Time in Bed windows until
  - **Goal**: Sleep Efficiency > 90%
  - Patient shows improvement in sleep quality, quantity, and/or energy level
    - On Insomnia Severity Index, 6-point reduction associated with “significant progress”

Reference: Yang, Morin, et al., 2009
**Sessions 5+: Titration and Compliance**

- Compliance
  - Problem solving difficulties patients face complying with CBTi strategies
  - If within provider’s scope of practice, addressing other behavioral health issues impacting compliance (e.g., anxiety, depression, pain)

**Session 6: Relapse Prevention**

- Remember, sleep hygiene is like dental hygiene
- Anticipate challenges
- Identify Triggers
  - E.g., Relapsing into inconsistent rising time, returning from traveling, increased stress, etc.
  - Patients’ cues for when to implement their Action Plan

**Session 6: Relapse Prevention**

- **HANDOUT**: Action Plan for Addressing Insomnia
  (p. 20 of manual)
  - Set consistent wake time
  - Don’t try too hard!
  - Get out of bed more
  - Wind down before bed
  - Don’t compensate
  - Exercise (early), etc.
  - Practice relaxation

**Session 6: Cognitive Mantra**

Think: "I may sleep poorly tonight, but I’ll survive. Plus, I’m increasingly likely to sleep better tomorrow night."

**Session 6: Two Behavioral Commandments**

1. Don’t stay in bed awake for more than 20 minutes
2. Don’t compensate for a bad night

**Session 6: If your patient wants more**

1. **HANDOUT**: Sleep Resources
   1. Books, websites, etc.
2. Sleep Study
   1. If patient has untreated sleep apnea, daytime tiredness will likely remain
3. Further treatment
   1. Imagery Rehearsal Therapy for Nightmares
   2. Trauma-focused therapy and other mental health treatment
   3. Behavioral health (weight management, etc.)
Session 6: If your patient wants more

Patients may want to consult their doctor if other sleep-related problems persist, e.g.:
- loud snoring
- breathing pauses, gasping or snorting during sleep
- falling asleep unintentionally
- creepy-crawly sensations in legs
- waking up in panic
- chronic, repeating nightmares
- any other unusual new sleep experiences

References