Using ACT to Optimize Cognitive Behavioral Therapy for Insomnia

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Credit to: Kathryn Lieber, MD, University of CO, Tracy Kuo Stanford Sleep Disorders Clinic
Objectives

Why care about sleep?

What is CBT-I

When CBT-I works

ID’d areas of growth
CE Credit?

Please Sign In
A Quick Note on Values
Insomnia in Clinical Context

4 Flavors of Insomnia

- Difficulty falling asleep
- Difficulty staying asleep
- Waking up too early
- Poor quality sleep

Impacts quality of life or daytime functioning...

- Fatigue
- Daytime Sleepiness
- Attention, Concentration, or Memory Impairment
- Poor work performance
- Irritability
- Headaches
- Anxiety
Why Target Sleep Directly?

PREVALENT

1 of ever 3 (100+ million) Americans have occasional bouts of insomnia.

1/3 go on to have chronic insomnia (~23% of US population)

Sleep loss associated with daytime impairment (50-70 million)
Why Target Sleep Directly?

UBIQUITOUS

• Virtually all psychiatric disorders are associated with sleep disruption
Why Target Sleep Directly?

RISK FACTOR

- For the development of medical illnesses (hypertension, heart disease, diabetes)
- Increasing evidence of its role as a likely mediating (causative) variable for the development of a new onset mental illness
Why Target Sleep Directly?

NON-RESPONSE

• Insomnia represents a risk factor for non-response to standard treatments for “primary” MH conditions
Why Target Sleep Directly?

RELAPSE RISK

• Untreated insomnia is a significant risk factor for relapse & recurrence of mental illness

• Doubling the chance of depression relapse (as a causal factor)
Why Target Sleep Directly?

IMPROVES COMORBID CONDITIONS

• Treatment has been shown to produce improvements in the “primary” issues of depression & chronic pain
Why Target Sleep Directly?

DOESN’T HAVE TO BE TIMED

• CBT-I has been found to be as effective for insomnia that occurs co-morbidly as it is with “primary” insomnia.
Why Target Sleep Directly?

Two (old) assumptions

– Sleep issues are usually are a symptom of something larger, not an independent issue
– Successful treatment of underlying primary disorder will result in amelioration of the sleep disturbance
Why Target Sleep Directly?

SUMMARY
• Shift in perspective → away from primary/secondary
• Significant factor in clinical response
• Significant factors in vulnerability to other MH processes
• Often needs focused, specialized treatment to improve
• Not directly targeting sleep symptoms = disservice
• Treatment exists!
  ...over 30 years of evidence suggests that CBT-I is the most effective
What is CBT-I?

- Multi-Component
- Non-Pharmalogical
- Robust Evidence
- Manualized & Idiopathc
Efficacy

- Short Term
- Long Term

CBT-I (over 50 clinical trials)
Sleep Meds
Target Areas

CBT-I is efficacious in:

• reducing time to fall asleep
• reducing amount of wake time during the night
• improving sleep efficiency

Note: CBT-I provides an improvement, not cure

It is estimated 20-30% return to “normal sleep”
Case Example?
Causes of Chronic Insomnia

**Medical disorders**: CHF, COPD, asthma, GERD, cancer, chronic pain, hyperthyroidism, BPH, Parkinson’s, fibromyalgia.

**Comorbid sleep disorder**: OSA, RLS, periodic limb movement disorder, circadian rhythm disorder

**Psychiatric disorders**

**Substance Abuse**

**Medications**: anticholinergics, antidepressants, antiepileptics, CNS stimulants, steroids
A Model of Chronic Insomnia

Predisposing Factors
- Biological traits
- Psychological traits
- Social factors

Precipitating Factors
- Medical illness
- Psychiatric illness
- Stressful life events

Perpetuating Factors
- Excessive time in bed
- Napping
- Conditioning

Insomnia "Intensity"

Threshold

Preclinical | Onset | Short-term | Chronic
Perpetuating Factors

- Excessive time in bed
- Increase in non-sleep related behaviors occurring in the bedroom
- Naps & stimulant use
- Sleep aids
- Unhelpful & dysfunctional sleep related
Behavioral Sleep Medicine
1. How long you’ve been awake

2. The Biological Clock
## Multi-Component Approach

<table>
<thead>
<tr>
<th>Technique</th>
<th>Purpose</th>
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<tr>
<td><strong>Sleep restriction</strong></td>
<td>Restrict time in bed to consolidate sleep and improve depth of sleep</td>
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<td><strong>Stimulus control</strong></td>
<td>Strengthen bed/bedroom as sleep stimulus via behavior recommendations &amp; focus on a consistent sleep-wake schedule</td>
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<td>Address thoughts and beliefs that interfere with sleep</td>
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<td>Relaxation training</td>
<td>Reduce arousal &amp; decrease anxiety</td>
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<tr>
<td>Psychoeducation</td>
<td>Education about factors (environment, health habits, &amp; sleep habits) that help/hurt sleep.</td>
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Stimulus Control  (Bootzin, 1972)

*aka de-program sleep-interfering associations*

1. Wake up at the same time (including weekends). Set alarm.
2. Use bed only for sleep and sex.
3. Go to bed only when sleepy
4. Get out of bed when unable to fall asleep
5. Avoid daytime napping
Sleep Restriction

Limit time in bed
   mild sleep deprivation \rightarrow sleep consolidation

How:
• Reduce time in bed to estimated total sleep
• Wake up time is fixed
• Adjust weekly based on response
Advantages & Disadvantages

Advantages of CBT-I
- Non-pharmacological option
- Explicit focus on causative factors over symptom reduction - skills and strategies to use over time
- Effects are durable over time

Disadvantages of CBT-I
- Meds are widely available & rapid (when effective)
- Attrition due to discomfort
- Improvements typically are not seen until 3-4 weeks
Cognitive Strategies

SLEEP OR DIE

Not getting the right amount of sleep each night can have serious health risks and can leave long-lasting effects on your body and mind.

Health Risks of Not Sleeping

Taken from yourlocalsecurity.com
Behavioral change is challenging.

Wanda was proud of herself for sticking to her one-cup-a-day limit...
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CBT-I initially focused on sleep-interpreting cognitive processes.

Effects of Sleep deprivation
- Irritability
- Cognitive impairment
- Memory lapses or loss
- Impaired moral judgement
- Severe yawning
- Hallucinations
- Symptoms similar to ADHD
- Impaired immune system
- Risk of diabetes Type 2
- Increased heart rate variability
- Risk of heart disease
- Decreased reaction time and accuracy
- Tremors
- Aches
- Other:
  - Growth suppression
  - Risk of obesity
  - Decreased temperature

Sleep is a **MUST** for Good Health!

theiasedrunner.com
CBT-I then augmented with sleep-interfering cognitive processes.

Level of cognitive activation

Pre-sleep processes
People with insomnia tend to use more thought control strategies (thought suppression, reappraisal, and worrying).

(Harvey & Payne, 2002)
People with insomnia are more involved in excessive verbal thinking that is counter-productive both with regards to sleep and daytime functioning.

(Nelson & Harvey, 2003)
People with insomnia tend to show more difficulty in letting go of verbal control both at night and during the day (researched via MSLTs).

(Lundh & Hindmarsh, 2002)
Poor sleepers have more hyper-arousal and anxiety.

Mindfulness optimizes CBT-I

A Randomized Controlled Trial of Mindfulness Meditation for Chronic Insomnia
(in press)

Jason C. Ong, PhD
Rachel Manber, PhD
Zindel Segal, PhD
Yinglin Xia, PhD
Shauna Shapiro, PhD
James K. Wyatt, PhD
It is frustrating when EBT’s are not effective.
CBT-I faces these challenges.

Engagement
Compliance
Response
Adherence is a concern.

![Adherence Chart]

- **Psychosocial/behavioral treatments**: 75%
- **Chronic medical treatments**: 66%
- **All sleep disorder treatments**: 65%
- **Completion of at least 50% of CBT-I**: 60%
- **CBT-I at one year**: 40%
Explanations for non-engagement.

- Self-efficacy
- Motivation for Change
- Level of Importance
- Tolerance for discomfort

Do or do not. There is no try. (Yoda)
Explanations for non-compliance.

- Psychiatric Illness
- Pre-treatment levels of sleepiness
- Pre-treatment disturbance severity
- Tolerance for discomfort

Experience is the teacher of all things. (Julius Caesar)
Adherence is contextual and often rule-governed.

“Adherence should be conceptualized as a set of interacting behaviors influenced by individual, social, and environmental forces.”

Controlling the Controlling is a problem.
Normal and automatic sleep processes become disrupted when individuals selectively focus on:

Attention to sleep  Intention to sleep  Effort to sleep
We are led to believe we can control sleep.
We cannot control sleep.
ACT supports a flexible relationship with CBT-I.

Control Agenda and fix-it mentality to change right now

Acceptance and compliance to support over time
ACT addresses challenges of CBT-I

- Excessive control strategies
- Inability to tolerate discomfort
- Fused relationship with verbal language
- Challenges with motivation
Context optimizes the model.

Identify the contextual nature of:
1. sleep
2. resistance
3. CBT-I interventions

Use psychological flexibility to navigate personalized CBT-I plan.
A person’s relationship with CBT-I matters.
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![Graph showing insomnia intensity over time: Preclinical, Onset, Short-term, Chronic, with a threshold line.](image-url)
Perpetuating Factors can be addressed via ACT/ACT-I.

Awareness to experience

Openness to uncomfortable experiences

Engagement with values
Current trial on ACT for insomnia

Quality of Life Improvements after Acceptance and Commitment Therapy in Primary Insomnia

Department of Psychiatry and Psychotherapy, University of Freiburg Medical Center, Germany; Interdisciplinary Pain Center, University of Freiburg Medical Center, Germany

The results suggest that ACT may improve important patient-centered outcomes in patients with PI. Specifically, a significant improvement of sleep-related QoL and subjective sleep quality was observed in non-responders to CBT-I with chronic PI directly after 6 weekly outpatient sessions of ACT and at three month follow-up.
We need research on the role of ACT in CBT-I.

Coming together is a beginning; keeping together is progress; working together is success.

Henry Ford
Challenges

Dissemination & Implementation on a large scale

...how to make the medical & psychological disciplines aware

...how to make the public aware

...how to make the required training & credentialing available
Want more?

Next steps…

– I’m kinda curious…
  • SBSM, books, articles

– I want to get training
  • Manuals
  • Practice ground, U Penn
  • Supervision 5-10 cases
Parting Words

Open opportunity clinically & research

Let’s continue this conversation

tinyurl.com/cbtiresources

srower@portlandpsychotherapyclinic.com

ehrnstromc@gmail.com
CE Credit?

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