Cognitive Behavioral Therapy for Insomnia

Joe Lasek, MD
Associate Medical Director, HowardCenter
Clinical Assistant Professor, UVM College of Medicine
Objectives

• Brief review of insomnia evaluation
• Review of data on CBT for insomnia
• Review of a multifaceted CBT for insomnia program
An Approach to Evaluating Chronic Insomnia (>4 weeks)

• Medical/Psychiatric Evaluation
  – Medical problems that may impact sleep
  – Psychiatric sx that may impact sleep: depression, anxiety, etc

• Carefully review
  – Sleep patterns (time to bed, lights out, wake up, etc)
  – Sleep hygiene (habits that may effect sleep)
  – Substance use (drugs, caffeine, alcohol, nicotine)
  – Medication use
  – Sources of increased stress
Types of Primary Insomnia

- Idiopathic insomnia (starting in childhood)
- Psychophysiological Insomnia (conditioned response often generalized from an event causing acute insomnia)
- Paradoxical Insomnia (marked mismatch b/w subjective/objective measures)

From International Classification of Sleep Disorders
Types of Secondary Insomnia

• More common than Primary Insomnia
• Adjustment Insomnia
• Inadequate Sleep Hygiene
• Insomnia due to a Psychiatric Disorder
• Insomnia due to a Medical Condition
• Insomnia due to a Drug or Substance

From International Classification of Sleep Disorders
Not Considered Forms of Insomnia

- Circadian Rhythm Disorders
- Delayed Sleep Phase Syndrome
- Voluntary Insufficient Sleep Syndrome

From International Classification of Sleep Disorders
Rule Outs

- Obstructive Sleep Apnea
- Periodic Limb Movements of Sleep
- Restless Leg Syndrome
- Pain Disorders
Cognitive Behavioral Therapies for Chronic Insomnia

• American Academy of Sleep Medicine Task Force (1999 & 2003)
  – 80-90% fall asleep faster
  – 50%-70% have better total sleep time, number of awakenings, duration of awakenings, sleep quality
  – 50% become ‘normal sleepers’

• ‘Empirically validated’
  – Stimulus Control
  – Progressive Muscle Relaxation
  – Paradoxical Intention
  – Sleep Restriction
  – **Multifaceted CBT**

• ‘Probably Efficacious’
  – Biofeedback
Cognitive Behavioral Therapies vs Medications

- Medication may work quicker: placebo effect significant (many people fall asleep before medicine even absorbed)
- Medications and psychotherapy similar at 4 to 8 weeks, but CBT may be better at decreasing onset latency
- Longer term (6 to 24 months): CBT more beneficial after cessation of treatment
Cognitive Behavioral Therapies vs Medications

- Medications appear to interfere with the effectiveness of CBT (especially BZDs and BZD receptor drugs)
- CBT may be effective in helping taper medications (including in older patients)
- CBT as effective in secondary insomnia as in primary insomnia
CBT for Insomnia
Session 1

- Introduction to Program
- Sleep, Insomnia and Rationale for a CBT Approach to Treating Insomnia (30 min)
- Discussion of cognitive restructuring techniques (60 min)
- Wrap up (10 min)
Session 1: Cognitive restructuring

- Discuss placebo effect
- Introduce Negative Sleep Thoughts (NST) and Positive Sleep Thoughts (PST)
- Connection between NSTs, stress and anxiety/dysphoria/depression
- PSTs as an “antidote” to stress, mood problems and insomnia
Session 1:
3 Areas of Cognitive Restructuring

• The effects of insomnia on health
  – Available evidence: insomnia probably not harmful
  – Sleep need is individualized

• The impact of insomnia on daytime functioning
  – People can function well with limited sleep
  – Concepts of “core” and “optional” sleep

• Subjective estimates of sleep versus objective measurements of sleep
  – Insomniacs overestimate the time it takes to fall asleep by 30 minutes
  – Insomniacs overestimate total wake time at night by 60 minutes
Session 1-2 Intersession Homework

• Read selected chapters from book and adjunctive articles
• Use weekly sleep log to track sleep daily
• Takes about 2 minutes
• Front of sheet: 7 days with several sleep parameters and habits which may affect sleep
• Back of sheet: cognitive restructuring worksheet
Session 2

• Review & discuss sleep logs (20 min)
• Sleep medication & tapering techniques (30 min)
• Sleep scheduling techniques (50 min)
Session 2: Sleep Medications

- Medications do not treat the underlying causes of insomnia
- Medications associated with increased mortality
- Medications appear to interfere with the effectiveness of CBT (especially benzodiazepines)
Session 2: Sleep medication tapering

- Tapering is gradual and self-paced
- **Once you go down, don’t go back up!**
- As sleep improves with CBT, it’ll be easier to reduce sleeping pills
- Use cognitive restructuring on medication reduction nights
- These techniques have helped 90% of patients reduce or eliminate sleep medications
Session 2: 
Sleep Scheduling Techniques

• **Goal:** increase sleep drive by increasing prior wakefulness and increasing sleep efficiency

• **Limit time in bed:** no going to bed early or sleeping in

• **Set a regular arising time** and get up within 30 min.
Session 2:
Sleep Scheduling Techniques

• Use a sleep diary for 1 week to figure out average sleep time, then...
• Add 60 minutes to average time, then...
• Count back from arising time and this is new bedtime
• Once sleep efficiency (time in bed/time asleep) reaches 85% for 2 weeks, increase time in bed by 30 minutes
• Nap or relax up to 45 minutes a day between 1 and 4 p.m.
Session 2-3 Intersession Homework

• Pick sleep time (no less than 5 hrs/night) including waketime and bedtime and try to stick to them
• Read selected chapters from book and adjunctive articles
• Use weekly sleep log to track sleep daily
• May try medication tapering
Session 3: Stimulus Control

• Review sleep log
• Review cognitive restructuring/medication tapering/sleep scheduling techniques (20 min)
• Introduction of the Relaxation Response and relaxation exercise (30 min)
• Stimulus Control Techniques (50 min)
• Cognitive Refocusing Techniques (10 min)
Session 3: Stimulus Control

- **Goal:** learn to associate the bed with drowsiness and sleep
- Use bedroom for sleep, sex & relaxation exercises only
- Go to bed only when you feel drowsy
- If you do not fall asleep within 20 minutes (or awaken during the night and don’t fall asleep within 20 minutes), don’t lie in bed trying to sleep
Session 3: Stimulus Control

• Instead, get out of bed and engage in a quiet, relaxing activity (such as reading, listening to quiet music, doing RR exercise) until drowsy, then attempt to sleep again

• Repeat this process as often as necessary until asleep

• Stimulus control is not an excuse for clock watching, therefore 20 minute guideline should be estimated
Session 3: Cognitive Refocusing

- People with insomnia often report that they can’t “turn off their mind” at bedtime.
- Nature, not frequency of thoughts, problematic.
  - Negative thoughts produce negative emotions, increase wakefulness.
  - Positive/emotionally neutral thoughts are associated with good sleep.
- Trying to stop thoughts increases thoughts.
- However, unwanted thoughts can be replaced by an engaging/interesting thought-related task.
Session 3: Cognitive Refocusing

- Choose 3 possible scenarios on which to focus at bedtime which are:
  - Compelling and Engaging
  - Emotionally Neutral or slightly Positive
- After turning out the light, choose 1 of the 3 scenarios
- Become absorbed in that thought & imagine with all senses
- Allow feelings of peace and contentment to arise naturally
- Allow breathing to slow and become more abdominal
- Whenever mind wanders, redirect attention to the scenario
Session 3-4 Intersession Homework

- Add stimulus control techniques
- Add relaxation exercise during day (not at night to avoid performance anxiety before bed); pick specific time of day
- Add cognitive refocusing if needed
- Read selected chapters from book & adjunctive articles
- Use weekly sleep log to track sleep daily
Session 4: Relaxation Response

- **Goal:** learn to induce relaxation response to aid sleep
- People with insomnia suffer higher levels of stress and autonomic hyperarousal
- RR is inborn response that quiets the mind and body and counteracts the stress (fight or flight) response
- Does not occur automatically in response to psychological stress, so we must learn to consciously invoke the RR
Session 4: Relaxation Response

• Teach multiple forms of relaxation response in group
  – Several guided meditation exercises
  – Sitting/lying meditations

• Four components of RR:
  – Quiet and pleasant place
  – Comfortable position
  – Repetitive mental focus
  – Passive disregard of everyday thoughts
Session 4: Relaxation Response

• “Minis” are brief RRs that can be practiced for a few seconds or minutes
  – Involve a brief body scan and abdominal breathing and can be practiced with eyes open or closed, while standing or sitting
• Effective reminders to practice minis include:
  • Red stoplights
  • A note on the refrigerator or mirror
  • A colored tape on watch
Session 4-5 Intersession Homework

• Add bedtime relaxation exercise (in addition to daytime relaxation exercise)
• Read selected chapters from book & adjunctive articles
• Use weekly sleep log to track sleep daily
Session 5: Sleep Hygiene

• **Goal**: learn habits that promote good sleep

• Bright light in the morning improves sleep by setting circadian (melatonin) clock (but light later in day can cause sleep problems)

• Minimize time in front of TV, computer or other screens especially within 2 hrs of bedtime

• Limit caffeine to 2 cups of coffee before noon

• Exercise either first thing in AM or about 3-5 hours before sleep helps sleep (any closer to bedtime can impair sleep)
Session 5: Sleep Hygiene

- A 30 minute bath improves sleep 1 hour before bedtime
- A small snack of complex carbs and protein can help sleep (1 hr before sleep)
- Cooler temperatures improve sleep
- Avoid noise (though for some white noise or instrumental music may be needed)
- Avoid sugar, liquids and big meals within 2 hrs of bed
- Use a conditioned stimulus (transitional object) present only at bedtime: blanket, stuffed animal, etc
Post-program guidance

• Continue to encourage practice
• Provide “coping card” with summary of what has been covered to cue skill practice
• Studies show further gains as long as techniques practiced
• Encourage return to group for refresher if needed
Conclusions

• Ideally, CBT is first line treatment for most forms of insomnia
• CBT safer & more efficacious for treatment of insomnia medium & long term
• Well-established, easy to administer, multifaceted CBT programs currently exist to allow for immediate implementation