Insomnia

by Will Luck

Treating Insomnia in a Family Health Team

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☒ **1. I do not have any potential conflicts of interest to disclose,**

OR

☐ **2. I wish to disclose the following potential conflicts of interest**

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Speakers' Bureaus	
Financial support	
Other	

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☐ **4. This talk presents material that is related to one or more of these potential conflicts, and the following objective references are provided as support for this lecture:**

Treating Insomnia in a Family Health Team

- Insomnia: What is it?
- Why pay attention to it?
- Recognizing it
- Treating it
- Insomnia and *your* FHT

Insomnia: What is it?

Insomnia

- *a complaint of difficulty initiating or maintaining sleep*

- *causes clinically significant distress or impairment in functioning*

- *often associated with fatigue*

American Psychiatric Association
American Academy of Sleep Medicine

“Chronic” Insomnia: at least 1 month

DSM-5 “persistent” insomnia: at least 3 months

Why pay attention to it?

Sleep Apnea	5%
Restless Legs Syndrome	5-10%
Insomnia	10-15%

Phillips BA, Kryger MH, 2011. Management of Obstructive Sleep Apnea-Hypopnea Syndrome. In Principles and Practice of Sleep Medicine.

Poewe W, 2009. General Introduction: Restless Legs Syndrome as a Neurological Conundrum. In W.A. Hening et al., Restless Legs Syndrome.

Morin CM et al., 2011. Prevalence of insomnia and its treatment in Canada. Can J Psychiatry 56(9):540-8

Insomnia

is the most common sleep disorder.

Prevalence

Primary Care

Simon et al., 1997; Terzano et al., 2004

Dissatisfied with sleep

50-65%

- affects functioning

- 1 month or more

15 - 30% ?

Mental health risk

Insomnia

- major depression **
- anxiety disorders
- substance abuse

Mellinger et al., 1985; Ford and Kamerow, 1989; Breslau et al., 1996; Chang et al., 1997; Roberts et al., 2000; Eaton et al., 1995; Baglioni et al., 2011

Mental health risk

Insomnia

- More visits to family physician
- More phone calls
- More lab tests
- More sick days

- Higher risk of Type 2 diabetes
- Higher risk of car crashes

Terzano et al., 2004
Cappuccio et al., 2010 (meta-analysis)

What patients who have sleep difficulty think

- Sleep is important
- Sleep difficulty needs greater recognition by health professionals
- Wish to receive more information about sleep and sleep difficulty
- Reluctance to report
- Integrate the assessment of sleep difficulties into routine care

Cancer patients: Davidson et al., 2007

The health professional most likely to hear *first* about a patient's sleep difficulties is the family physician.

Recognizing it

Recognizing it

- Ask about sleep
- Identify insomnia
- Recognize comorbid insomnia

Insomnia

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Comorbidities

- depression
- anxiety
- pain
- heart disease
- digestive - GERD, IBD, IBS
- COPD
- kidney disease
- diabetes
- obesity

Identify Insomnia

- Diagnostic criteria for insomnia
- Check that it is not something else – medication, substance, medical or psychiatric condition, other sleep disorder
- With insomnia, patient is usually *fatigued*, not sleepy

My creativity diminishes, my irritability increases, my disposition suffers, my outlook is gloomier, my muscles feel weaker, my energy is kaput some days. Some days I'm too tired to accomplish anything but still unable to nap or sleep. It's an odd sensation. I feel as if I've been deprived of sleep and am exhausted but at the same time, as if I had drunk 5 cups of coffee and were overstimulated.”

Individual with insomnia (courtesy of Dr. Dan Buysse)

Rule out sleep difficulty that is directly due to:

	Examples
substance	amphetamine, cocaine, energy drinks, caffeine, nicotine
medication	corticosteroids, bronchodilators, decongestants, some cardiovascular drugs, some antidepressants, some neurological drugs
medical disorder	hyperthyroidism, asthma, nasal/sinus allergies, GI problems, neurological
psychiatric disorder	hypomania, severe depression, PTSD

Be on the look-out for other sleep disorders

Obstructive sleep apnea:

→Snoring

→Observed apneas

→Excessive daytime sleepiness (Epworth Sleepiness Scale)

→…. to the sleep lab

Be on the look-out for other sleep disorders

Restless legs syndrome:

→ urge to move the legs, uncomfortable

→ begins or worsens during rest

→ relieved by movement

→worse at night

→ …family physician

EPWORTH SLEEPINESS SCALE

How likely are you to doze off or fall asleep in the situations described below, in contrast to feeling just tired? This refers to your usual way of life in recent times.

Use the following scale to choose the most appropriate number for each situation: -

0 = would never doze
1 = Slight chance of dozing
2 = Moderate chance of dozing
3 = High chance of dozing

Situation	Chance of dozing
Sitting and reading ……	_____
Watching TV ……	_____
Sitting, inactive in a public place (e.g. a theatre or a meeting) ……	_____
As a passenger in a car for an hour without a break ……	_____
Lying down to rest in the afternoon when circumstances permit ……	_____
Sitting and talking to someone ……..	_____
Sitting quietly after a lunch without alcohol ……	_____
In a car, while stopped for a few minutes in the traffic ……	_____
TOTAL……..	_____

0 – 10 Normal range / 10 - 12 Borderline / 12 – 24 Abnormal

Insomnia

- *a complaint of difficulty initiating or maintaining sleep*

- *causes clinically significant distress or impairment in functioning*

- *often associated with fatigue*

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Useful tools:

- Sleep Diary
- Insomnia Severity Index

Sleep Diary for the week of: _____

Baseline

DAY of the WEEK *Which night is being reported on?*							
Sleep timing **1. I went to bed at** *(clock time):*							
2. I turned out the lights after *(minutes):*							
3. I fell asleep in *(minutes):*							
4. I woke up ___ time(s) during the night. *(number of awakenings):*							
5. The total duration of these awakenings was *(minutes):*							
6. After awakening for the last time, I was in bed for *(minutes):*							
7. I got up at *(clock time):*							
Sleep quality **The quality of my sleep was:** *1=very poor; 10=excellent*							
Naps *Number, time and duration*							
Alcohol *TIme, amount, type*							
Sleep Medication *TIme, amount, type*							
Notes:							

Insomnia Severity Index

For each question below, please circle the number corresponding most accurately to your sleep patterns in the LAST MONTH. For the first three questions, please rate the SEVERITY of your sleep difficulties.

1. **Difficulty falling asleep:**

None	Mild	Moderate	Severe	Very Severe
0	1	2	3	4

2. **Difficulty staying asleep:**

None	Mild	Moderate	Severe	Very Severe
0	1	2	3	4

3. **Problem waking up too early in the morning:**

None	Mild	Moderate	Severe	Very Severe
0	1	2	3	4

4. **How SATISFIED/dissatisfied are you with your current sleep pattern?**

Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
0	1	2	3	4

Insomnia Severity Index (*cont.*)

For each question below, please circle the number corresponding most accurately to your sleep patterns in the LAST MONTH.

5. **To what extent do you consider your sleep problem to INTERFERE with your daily functioning (eg, daytime fatigue, ability to function at work/daily chores, concentration, memory, mood)?**

Not at all	A little	Somewhat	Much	Very much
0	1	2	3	4

6. **How NOTICEABLE to others do you think your sleeping problem is in terms of impairing the quality of your life?**

Not at all	A little	Somewhat	Much	Very much
0	1	2	3	4

7. **How WORRIED/distressed are you about your current sleep problem?**

Not at all	A little	Somewhat	Much	Very much
0	1	2	3	4

Guidelines for Scoring/Interpretation:
Add scores for all seven items *(Total score ranges from 0-28)*
0-7 = No clinically significant insomnia
8-14 = Subthreshold insomnia
15-21= Clinical insomnia (moderate severity)
22-28 = Clinical insomnia (severe)

Insomnia: To the Sleep Lab?

- Polysomnography is not helpful for the assessment of insomnia (unless another sleep disorder is suspected).

Treating it

Optimal Interventions for Improvement in Sleep by Time

Immediate	Short-term 2-4 weeks	Long-term
Pharmacologic	Pharmacologic Non-pharmacologic or Combination	Non-pharmacologic

Treating It

Cognitive behavioural therapy for insomnia (CBT-I)

- Recommended first-line treatment[1-2]
- Effective for adults[3], including elderly and patients with comorbidities (chronic pain, depression, cancer, heart disease and others)[4]
- Benefit at least to 2 years[5]

1. Schutte-Rodin S et al. *J Clin Sleep Med.* 2008;4(5):487-504.
2. Wilson SJ et al. *J Psychopharmacol*. 2010;24(11):1577-1600.
3. Morin CM et al. *Sleep*. 2006;29(11):1398-1414.
4. Smith et al. Clin Psychol Rev. 2005;25:559-592
5. Morin CM et al. *JAMA*. 1999;281(11):991-999.

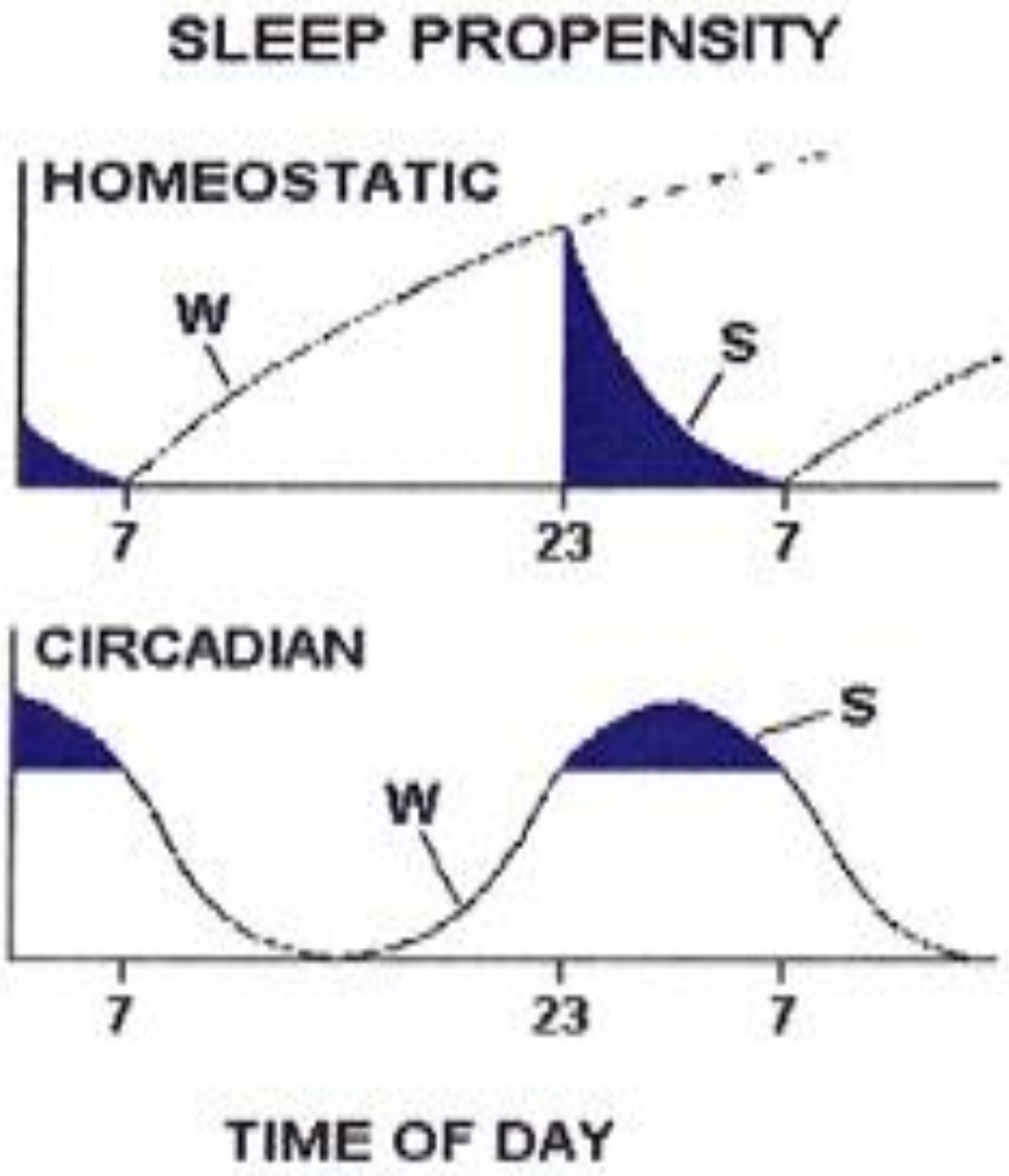
Treating It

- No need to differentiate “primary” from “secondary” insomnia.
- We now refer to “comorbid” insomnia.
- Treat comorbid insomnia.
- Don’t delay treatment.

What is CBT-I?

Strategies allow biological sleep processes to operate

without interference.

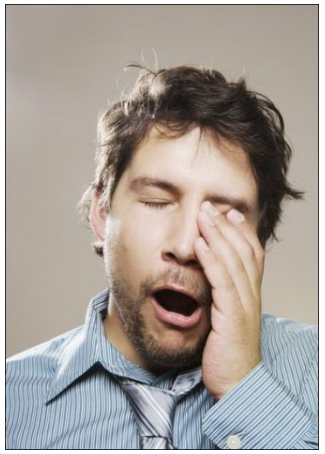

SLEEP PROPENSITY
HOMEOSTATIC
W
S
7
23
7
CIRCADIAN
S
W
7
23
7
TIME OF DAY

A. Borbély

CBT-I Overview

- Sleep restriction therapy
- Stimulus control therapy
- Cognitive restructuring
- Relaxation techniques

Sleep restriction therapy



- **Restrict time in bed**

- **Builds up the sleep “drive”**
- **Stabilizes the circadian sleep-wake rhythm**

Sleep restriction therapy

Strategies

- Stay up late
- Get up at same time 7 days per week

Stimulus control therapy

Strategies

- Use the bed only for sleep
- Go to bed only when sleepy
- Leave the bed if you are not sleeping; return when sleepy

Stimulus control therapy

Sleep in bed

Get out of bed when not sleeping

Cognitive restructuring

- **Allows "de-arousal" necessary for sleep**

Strategies:

Notice and re-balance dysfunctional beliefs about sleep

- ***I need 8 hours of sleep every night***
- ***I will not be able to function tomorrow***
- ***I will get a terrible illness***

Relaxation Techniques

- Progressive Muscle Relaxation
- Imagery
- Meditation (*e.g.*, mindfulness)
- Clear-your-Head Time

All done OUT of bed

What about sleep hygiene?

Most people with chronic insomnia know sleep hygiene.

Providing CBT-I

	Number of sessions	Duration of sessions (minutes)
Group CBT-I	4-8	60-120
Individual CBT-I	4-8	60
Brief encounters	3-5	15-30

Providing CBT-I

Whether group, individual or brief:

Always start with assessment including a baseline sleep diary.

Baseline

Sleep Diary for the week of: March 11, 2013 Jack

DAY of the WEEK *Which night is being reported on?*	MON	TUES	WED	THURS	FRI	SAT	SUN
Sleep timing							
1. I went to bed at *(clock time):*	9 45 PM	11 00 PM	10 30 PM	9 00 PM	11 00 PM	1 00 AM	10 30 PM
2. I turned out the lights after *(minutes):*	40	5	25	20	40	10	10
3. I fell asleep in *(minutes):*	1hr = 60 min	30	2hrs = 120	Didn't	30	20	2hrs = 120 min
4. I woke up ___ time(s) during the night. *(number of awakenings):*	5	2	4	sleep	0	2	1
5. The total duration of these awakenings was *(minutes):*	60	20	80	at all!	—	40	30
6. After awakening for the last time, I was in bed for *(minutes):*	2	10	5	}	2	30	10
7. I got up at *(clock time):*	6 00 AM	7 10 AM	6 00 AM	5 30 AM	6 00 AM	9 00 AM	6 10 AM
Sleep quality							
The quality of my sleep was: *1=very poor; 10=excellent*	3	4	2	1	4	3	3
Naps *Number, time and duration*	—	—	—	2 PM 30 min	—	10 AM 40 min	—
Alcohol *Time, amount, type*	—	—	—	—	—	—	—
Sleep Medication *Time, amount, type*	—	11 00 PM zopiclone 7.5 mg	—	—	11 00 PM zopiclone 7.5mg	—	—
Notes:				Mind won't turn off!			

Individual CBT-I

1. Constant rise time
2. Stimulus control therapy with sleep restriction
3. Continue and “titrate” time in bed
4. Relaxation and cognitive techniques as necessary

Resources for you

- Morin CM, and Espie C. Insomnia: A Clinical Guide to Assessment and Treatment 2003. Springer.

- Perlis, Jungquist, Smith and Posner. *Cognitive Behavioral Treatment of Insomnia*. 2008 Springer.

- Edinger J and Carney C. 2008. Overcoming Insomnia: A Cognitive Behavioural Approach. Therapist Guide. 2008. Oxford University Press.

- Lacks P. *Behavioral Treatment for Persistent Insomnia*. 1987. Pergamon.

- Canadian Sleep Society. *Insomnia Rounds*. www.insomniarounds.ca 12 articles by Canadian sleep experts.

- National Sleep Foundation. *sleepfoundation.org/*

Resources for the person with insomnia

Books

Silberman S. *The Insomnia Workbook.* 2009. New Harbinger

Davidson JR. *Sink into Sleep*. *A Step-by-Step Workbook for Reversing Insomnia.* 2013 Demos. Sinkintosleep.com – has sleep diary, computes sleep efficiency

Carney C and Manber R. *Goodnight mind. Turn off your noisy thoughts & get a good night's sleep.* 2013 New Harbinger.

also: Carney et al., *Quiet Your Mind and Get to Sleep: Solutions to Insomnia for Those with Depression, Anxiety or Chronic Pain*.

Internet CBT-I

- Sleepio $149 for 12 week access, or $24 per week
- SHUT-I $129 for 16 week access

Apps

- CBT-I coach
- Sleepio

Example of CBT-I Group Program

Kingston Family Health Team

Fridays 2:00-4:00 p.m.

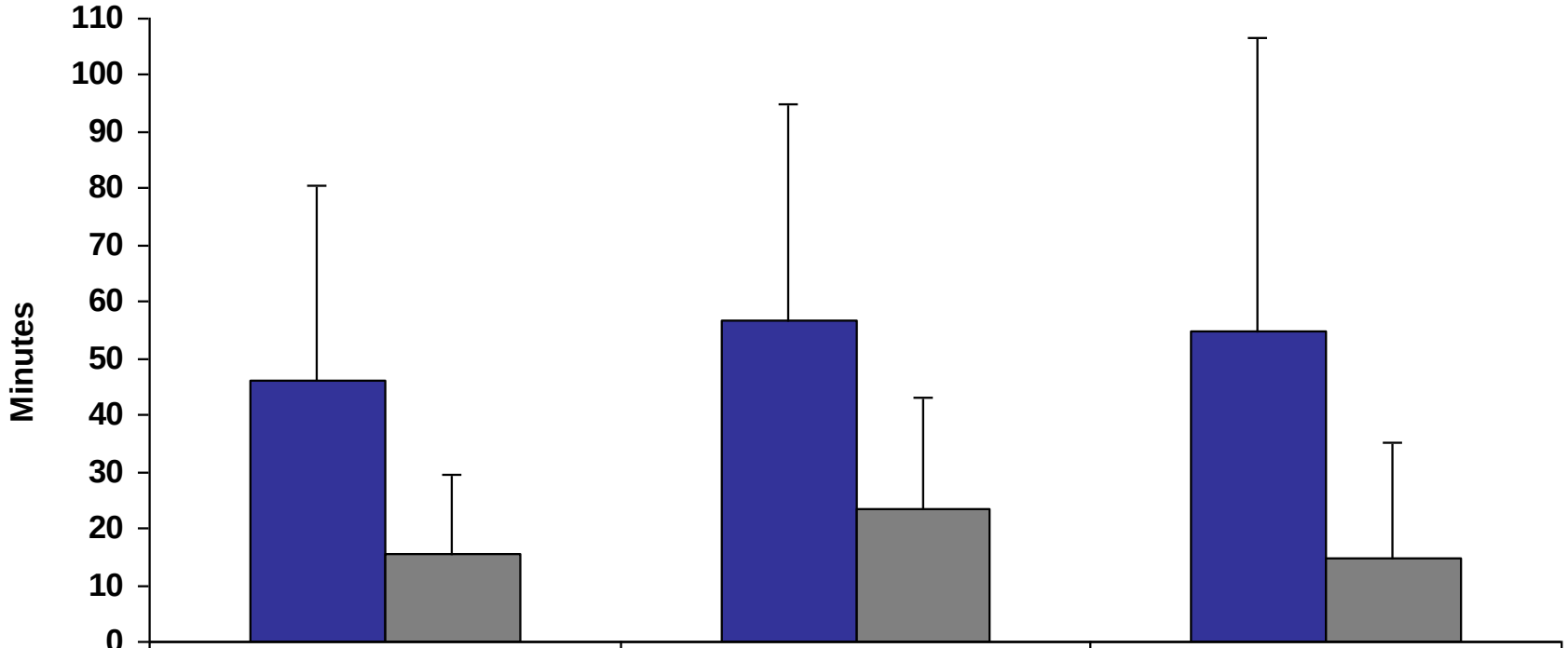
Sep 19	Introduction to Sleep and Sleep Therapy
Sept 26	Reconnecting your Bed with Sleep
Oct 3	Relaxing your Mind and Body
Oct 10	Putting it All Together
Oct 17	Keeping it All Together
Oct 24	Maintaining your Progress

Stimulus control with sleep restriction

Kingston Family Health Team
Group CBT-I Program

- 6-10 patients
- Run by psychologist, nurse-practitioner, assistant

Kingston Family Health Team
Mean (+sd) Sleep Outcomes
Initial and Post Program, N=58



	Sleep onset latency	Time awake during awakenings	Early morning awakening duration
Initial	46.2	56.7	54.8
Post	15.6	23.3	14.8

Brief Encounters

You can’t offer full CBT-I

You can use the most powerful principles.

CBT-I main principles:

- Constant rise time
- Stay up late
- Get out of bed when not sleeping
- Do something with racing thoughts

Insomnia and *your* FHT

- What thoughts do you have about helping patients with insomnia at your FHT?
- Are you already using CBT-I?
- What questions do you have?

Take-home points

- Insomnia is the most common sleep disorder
- Reduces quality of life, mood and functioning
- Untreated insomnia → psychiatric risk
  *** depression

  health care visits

Take-home points

- Sleep hygiene alone is not effective
- CBT-I is the treatment of choice
- CBT-I works when comorbidities are present
- No need to designate “primary” or “secondary”.

Take-home points

If full CBT-I is not available:

- Learn how to do it. Get further training.
- Team up with a behavioural sleep medicine professional.
- Apply the principles of CBT-I.

Take-home points

CBT-I main principles

- Constant rise time
- Stay up late
- Get out of bed when not sleeping
- Do something with racing thoughts

My thanks to:

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