The Restless Pillow

Treating Insomnia in Primary Care

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Disclosure statement

- Nothing to disclose

A ruffled mind makes a restless pillow.

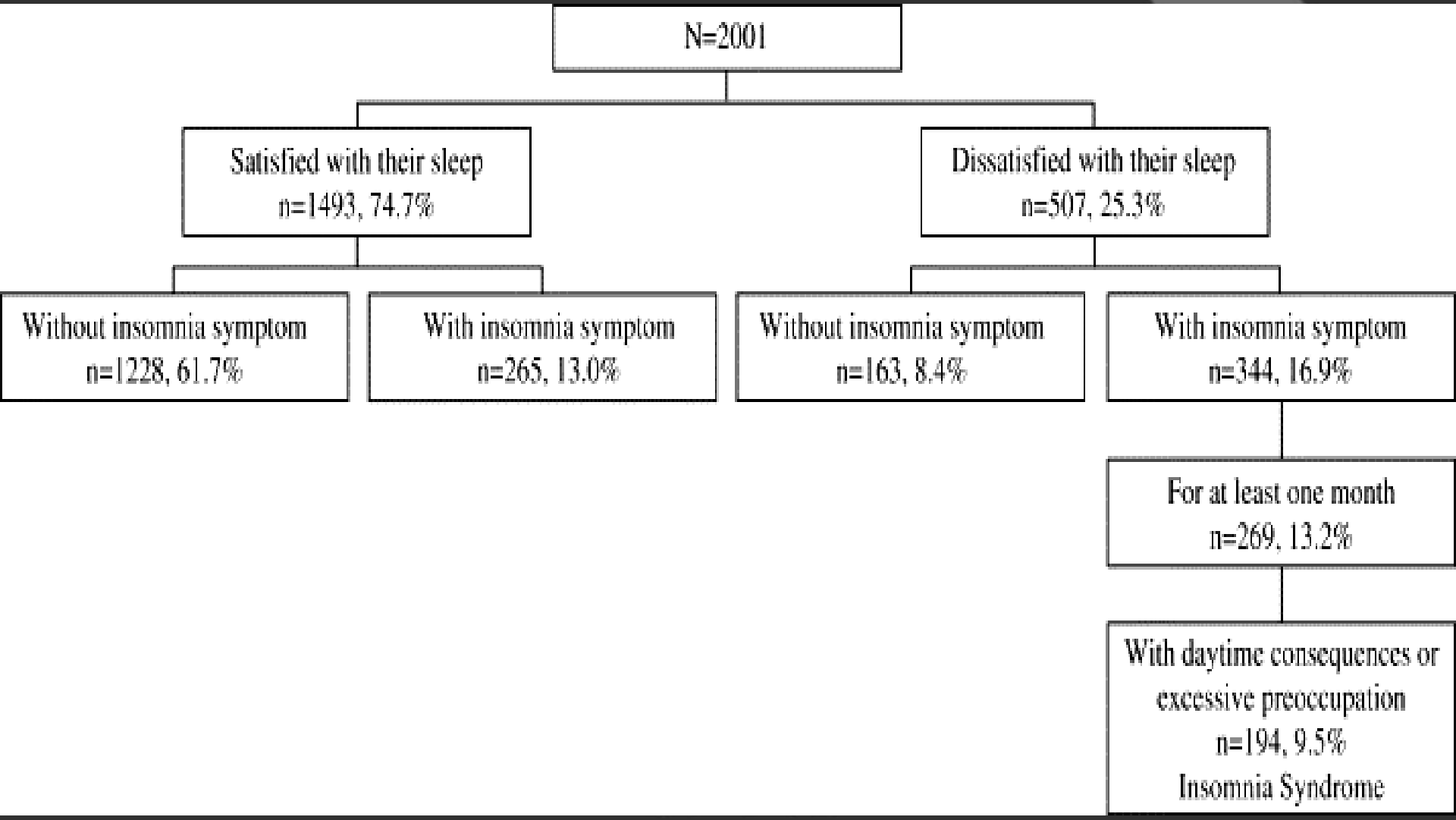
~ Charlotte Brontë

by Will Luck

Prevalence

Prevalence of sleep trouble
in general adult population: 15-25%

Epidemiology of Insomnia
Morin et al., 2006
N=2,001 Quebec



Prevalence

- Higher prevalence in women
- Higher prevalence with older age
- Higher prevalence with medical conditions
  e.g., respiratory illness
  heart disease
  chronic pain
- Higher prevalence with psychological distress
  e.g., anxiety
  depression

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 the health care system

Cancer patients: Davidson et al., 2007

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

Outline
Treating Insomnia in Primary Care

- Hypnotic medication
- “Stepped care”
- 3 levels of intervention
- Sleep disorders other than insomnia

Hypnotic Medication

Recent Trends

- Benzodiazepines
- Atypical benzodiazepines
- Sedating anti-depressants, especially trazodone
- OTC antihistamine sleep aids
- melatonin

Optimal Interventions for Improvement in Sleep by Time

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

“Stepped Care”

Model of health-care delivery

a. Simplest first
b. More intensive help as needed

Stepped Care for Sleep Problems in Primary Care

1. Person is interested in getting good sleep, preventing sleep problems.

2. Person is starting to develop a pattern of poor sleep. Some nights are bad. Starting to affect daytime functioning.

3. Person has sleep difficulty almost every night. There is interference with daytime functioning. Has persisted for ≥ 1 month.

Stepped Care for Sleep Problems

1. Person interested in getting good sleep, preventing sleep problems.

Sleep tips = “Sleep hygiene” education

Top Ten Sleep Tips!

1. Make your **bedroom** conducive to sleep. Consider the comfort of your bed, the air temperature, and levels of noise and light. Minimize interference with your sleep by bed partner, children, or pets.
2. **Caffeine** is a stimulant and should be discontinued 6 hours before bedtime. Know the foods, drinks and medications that contain caffeine.
3. **Nicotine** is a stimulant and should be avoided near bedtime.
4. **Alcohol** is a depressant; although it may help you get to sleep, it causes awakenings later in the night. Do not drink alcohol later than 4 hours prior to bedtime.

Top Ten Sleep Tips!

5. **Sleeping pills** after the quality of sleep, and if used for several weeks or months will cause disturbed sleep when discontinued.
6. A light snack may be sleep inducing, but a heavy **meal** close to bedtime interferes with sleep. Avoid consuming chocolate, large amounts of sugar, and excessive fluids close to bedtime.
7. Do not **exercise** vigorously within 3 – 4 hours of bedtime. Regular exercise in the late afternoon may deepen sleep.
8. Take time to unwind in the evening.
9. Have a regular bedtime and rise time, even on week-ends.
10. If you can't sleep, get out of bed, go to another room and do a quiet activity until you are sleepy. Return to bed when sleepy.

Sleep Tips

- Sleep Tips Handout, Bookmark

Newest tip:

- Remove electronic devices from bedroom!

Stepped Care for Sleep Problems

2. Person is starting to develop a pattern of poor sleep. Some nights are bad. Starting to affect daytime functioning.

Emphasize most powerful principles

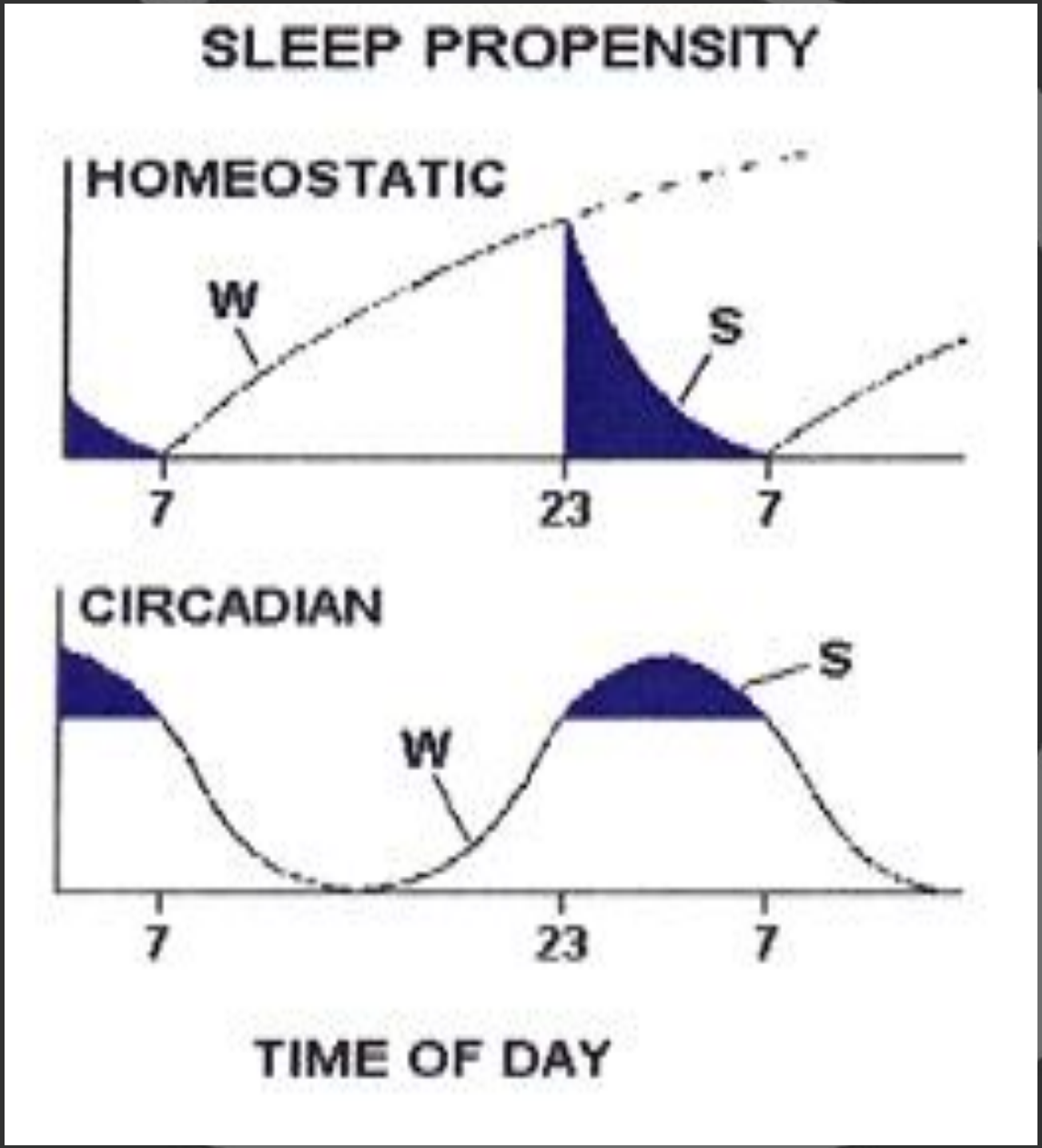
Most Powerful Sleep Principles

Keep sleep diary – 7 nights

- Constant rise time
- Don’t go to bed too early (Stay up Late!)
- Get out of bed when not sleeping
- Do something with racing thoughts

SLEEP DIARY WEEK OF: _____ NAME: _____

DAY *(morning, upon awakening)*							
DATE							
1. I had __ naps yesterday. *Note the time of day and duration of the nap(s).*							
2. I went to bed at _____ *(time)* and turned out the lights at _____ *(time)*.							
3. After turning out the lights, I fell asleep in ___ minutes.							
4. My sleep was interrupted ___ time(s). *Specify duration, in minutes, of each awakening.*							
5. I woke up at ____ *(time of last awakening)*.							
6. I got out of bed at _____ *(time)*.							
7. How rested do you feel this morning? *(1=exhausted; 5=very refreshed)*							
8. Rate the quality of last night's sleep. *(1=very restless; 5=very sound)*							
9. Alcohol *Time and amount*							
10. Sleeping medication *Time and amount*							


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

Stepped Care for Sleep Problems

3. Person has sleep difficulty almost every night. There is interference with daytime functioning. Has persisted for **≥ 1 month**

Formal treatment with CBT-I

Insomnia

- *a complaint of difficulty initiating or maintaining sleep, or of non-restorative sleep*
- *causes clinically significant distress or impairment in functioning*
- *often associated with fatigue*

American Psychiatric Association (DSM-IV, 1994)
American Sleep Disorders Association (ICSD-R, 1997)

Chronic Insomnia

> 1 month

- Important to treat

Mental Health Risk

- Insomnia can be an early marker for psychiatric disorders.
- Longitudinal studies: insomnia is associated with higher risk of developing depression and an anxiety disorder.

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

Primary care patients with insomnia

Greater use of health care resources:

- Visits to family physician
- Phone calls
- More lab tests

- More sick days

Terzano et al., 2004

Cognitive Behavioural Therapy for Insomnia (CBT-I)

- Insomnia specific techniques
- Based on reducing interference with biological processes that regulate sleep and wakefulness
- and learned associations

CBT-I treatments produce significant improvements in sleep that are reliable and sustainable for adults with insomnia

Morin et al., 1994

Murtagh & Greenwood, 1995

Morin et al., 1999

Chesson et al., 1999

Morin et al., 2006

Morgenthaler et al., 2006

Cognitive Behavioural Treatment for Insomnia

- **Stimulus control therapy**
  Bootzin *et al*.: learned associations: bed and sleep tendency; sleep-wake scheduling

- **Sleep restriction therapy**
  Spielman *et al*.: restrictive sleep scheduling

- **Relaxation-based approaches**
  progressive relaxation, imagery, meditation, autogenic training

continued

- **Cognitive restructuring**
  Examining and altering dysfunctional beliefs about sleep

- **Paradoxical intention**
  Try to stay awake!

Kingston Family Health Team
Sleep Therapy Program

- Information / education
- Sleep scheduling
  - Stimulus control therapy with sleep restriction
- What to do with your mind
  - Cognitive restructuring - addressing concerns about insomnia
  - Clear-your-head time
  - Some relaxation, visualization training

CBT-I

Sleep Therapy Program

Wednesdays 1:00-3:00 p.m.

June 8	Introduction to Sleep and Sleep Therapy
June 15	Reconnecting your Bed with Sleep
June 22	Relaxing your Mind and Body
June 29	Putting it All Together
July 6	Keeping it All Together
July 13	Maintaining your Progress

Sleep Therapy Program

- 6-10 patients
- 6 sessions
- psychologist, nurse-practitioner, assistant

Special ancillary program

For insomnia patients who are chronic users of benzodiazepines or atypical benzodiazepines:

Hypnotic medication withdrawal program involves psychologist, pharmacist, family physician

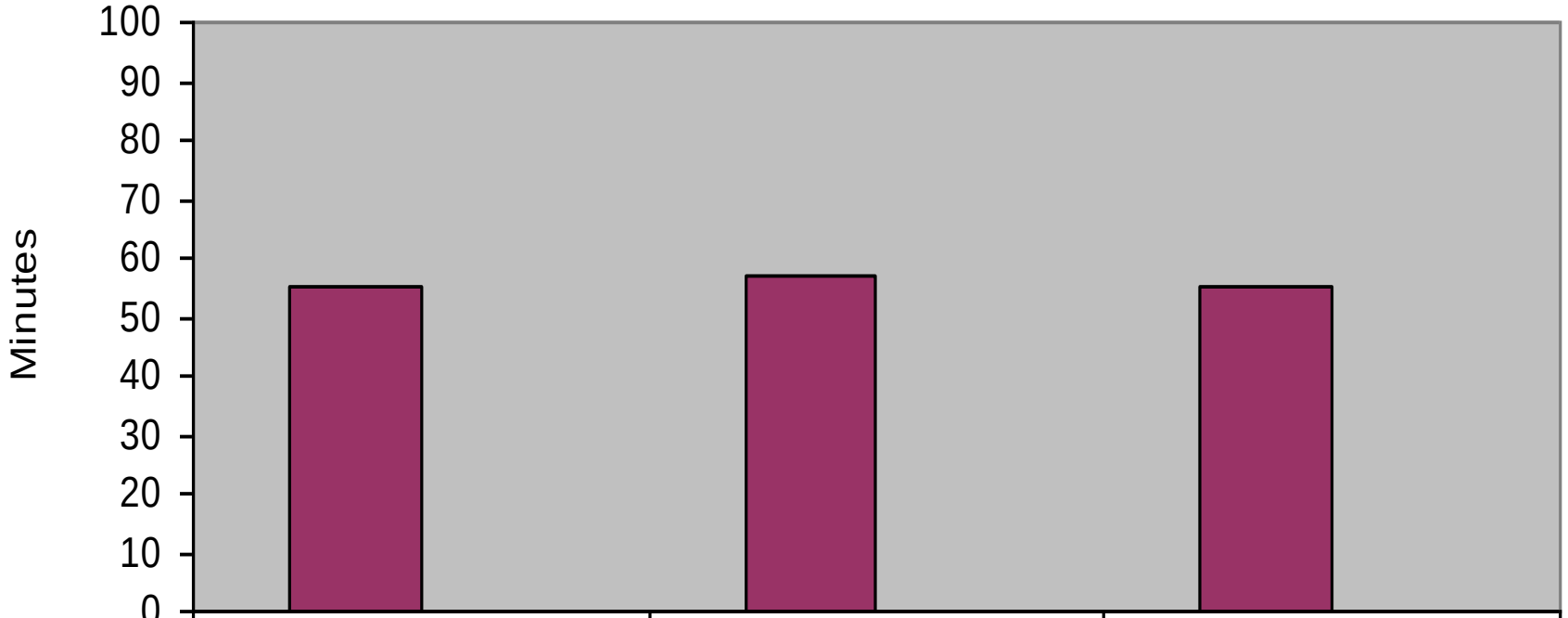
Offered in advance or concurrently with CBT-I

KFHT Experience with CBT-I

- 30 patients with chronic insomnia
- 25 women, 5 men
- Age: Mean = 54.4 yrs, s.d. =11.2 yrs

  Range = 30-78 yrs
- Most had concurrent medical conditions

Kingston Family Health Team
Insomnia Group All Sessions
Mean Sleep Outcomes Before the Program
N = 30



	Sleep onset latency	Time awake during nightime awakenings	Early morning awakening duration
Pre	55	57	55

Kingston Family Health Team
Insomnia Group All Sessions
Mean Sleep Outcomes Before and After the Program
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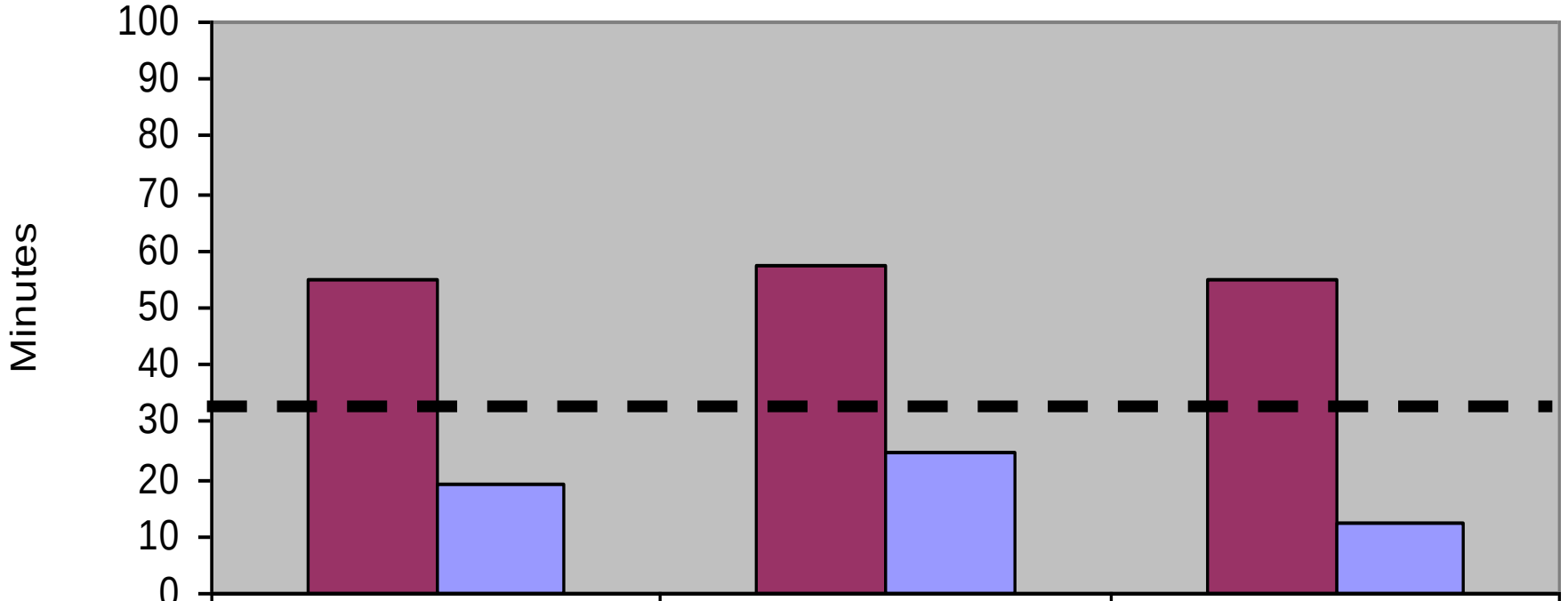

	Sleep onset latency	Time awake during nightime awakenings	Early morning awakening duration
Pre	55	57	55
Post	19	25	12

Measure	Pre Mean (S.D.)	Post Mean (S.D.)	*p*
Sleep Measures			
Total Sleep Time (min)	350 94	369 69	.089
Sleep Efficiency (percent)	65% 13%	87% 8%	<.001
# Awakenings	2.32 1.54	1.46 0.78	<.01
Rating of Restedness (1 - 5, 5 =best)	2.59 0.72	3.09 0.72	<.001
Rating of Sleep Quality (1 - 5, 5 =best)	2.71 0.74	3.18 0.67	.014
Insomnia Severity Index *N=23	17.9 4.0	9.8 4.3	<.001
Medication (number of times taken per week)	1.40 2.42	0.47 1.48	.012
Mood Measures			
HADS Anxiety	8.21 3.54	6.57 2.97	<.01
HADS Depression	6.47 4.12	4.47 3.10	<.01

“ *I wanted to thank you for the opportunity to attend your sleep clinic. I was a little sceptical at first but the outcome has been very successful. The quality of my sleep has improved and I feel so much better*.”

Other Sleep Disorders

- 52-year-old woman
- depressed mood
- not sleeping at night
- falling asleep during the afternoon at work

To the Sleep Lab?

- Sleep apnea, restless legs syndrome, periodic limb movement disorder, night terrors, sleep walking, REM sleep behaviour disorder, narcolepsy

- 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

To the Sleep Lab?

Epworth Sleepiness Scale > 10

Excessive daytime sleepiness:

- Sleep disorder other than insomnia
- Medical condition
- Substance/ medication