

**Cognitive Behavioral Therapy for
Insomnia in Patients with Chronic Pain**

Carla Jungquist, MSN, FNP-C
Doctoral Candidate
University of Rochester
Pain Service at Strong
Sleep & Neurophysiology Research Laboratory
School of Nursing

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Objectives

At end of this session I would like participants to have a clear understanding of:

1. Differentiating types of sleep disorders in patients with chronic pain.
2. Cognitive Behavioral Therapy for Insomnia in Chronic Pain Patients

Significance

- 20% of Americans complain of pain or physical discomfort that disturbs their sleep.

(National Sleep Foundation, 2007)

- 59-63% of patients referred to pain clinics report trouble initiating or maintaining sleep.

(Bair et al., 2003; Tang, Wright, & Salkovskis, 2007)

Types of sleep disturbance

- Sleep Disordered Breathing
 - Obstructive Sleep Apnea
 - Central Sleep Apnea
- Phase Disorders (circadian rhythm disorders)
 - Delayed Sleep Phase
 - Advanced Sleep Phase
- Restless Leg Syndrome
- Narcolepsy
- Insomnia

Sleep Disordered Breathing

- **Obstructive Sleep Apnea**
 - obesity
 - male gender
 - age >65
 - snoring
 - witnessed apneas during sleep
 - complaints of repetitive awakenings or gasping awake during the night
 - excessive daytime sleepiness
 - small or retrognathic mandible
 - large neck circumference (17 inches)
 - a large tongue (Mallampati Class 3 or 4)

Sleep Disordered Breathing

■ Central Sleep Apnea

- age >65
- history of cerebral vascular disease
- presence of cardiac disease
- presence of respiratory disease
- nocturnal oxygen desaturations
- frequent awakenings during the night

Insomnia

■ ≥ 30 minutes to initiate sleep and/or minutes awake after sleep onset

■ ≥ 3 nights/wk

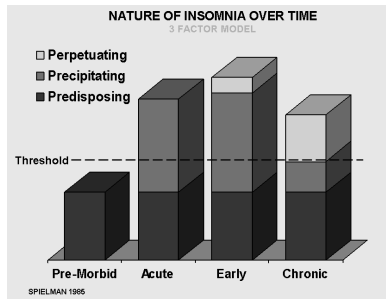
■ ≥ 6 months

The Meaning of Sleep for patients in pain

- Peacefulness
- No pain
- Restore muscles
- Escape

- Be aware of pain patient's that want to use sleep as an escape!
- Average sleep requirement is 7.5-8 hours a night, not 10-12 hours.

Spielman's Theoretical Model of the Development of Insomnia



Cognitive Behavioral Therapy for Insomnia

- Sleep Restriction
- Stimulus Control
- Sleep Hygiene
- Cognitive therapy for catastrophic thoughts about their insomnia

Research Study

- Masters prepared nurse therapist
- CBT-I versus contact/measurement control condition
- Subjects were stratified according to gender, age and ethnicity
- 28 subjects with chronic neck and back pain

Outcomes Variables

- Sleep
 - Minutes for sleep initiation
 - Minutes awake after sleep onset
 - Number of times awakened during the night
 - Sleep efficiency (total sleep time/total time in bed)
 - Total sleep time

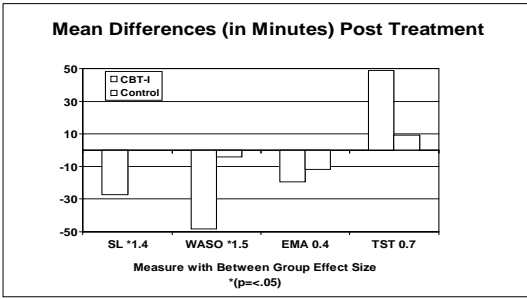
Outcome Variables

- Pain
 - Multidimensional Pain Inventory
 - Pain Severity Scale
 - Pain Interference Scale
 - Pain Disability Index
 - Daily pain intensity on visual analog scale

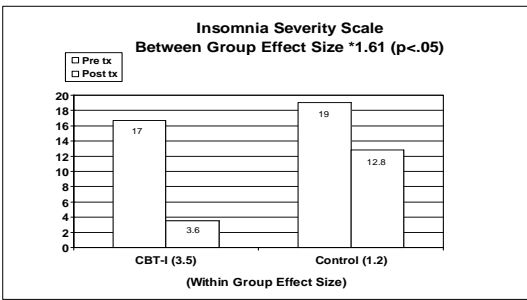
Outcome Variables

- Mood
 - Beck Depression Inventory
 - Hamilton Rating Scale for Depression
 - Profile of Mood States
 - Multidimensional Fatigue Inventory
 - Epworth Sleepiness Scale

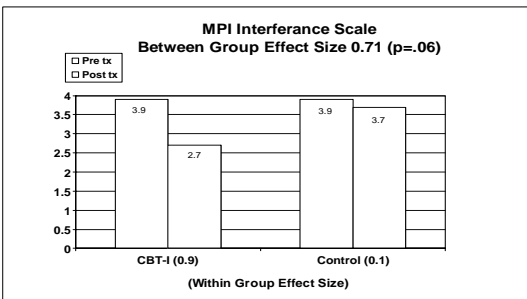
Results – Sleep Variables



Results – Sleep Quality



Results – Pain Variables



Conclusion

- CBT-I was successfully applied to patients experiencing chronic pain. A trend toward clinical gains was also noted for the extent to which pain interfered with daily functioning.
