

Interpersonal Violence: Bridging Research & Practice

October 21, 2010
Rochester, NY

Sleep & Domestic Violence

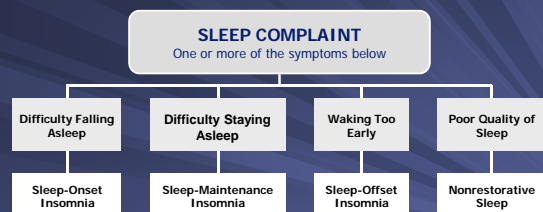
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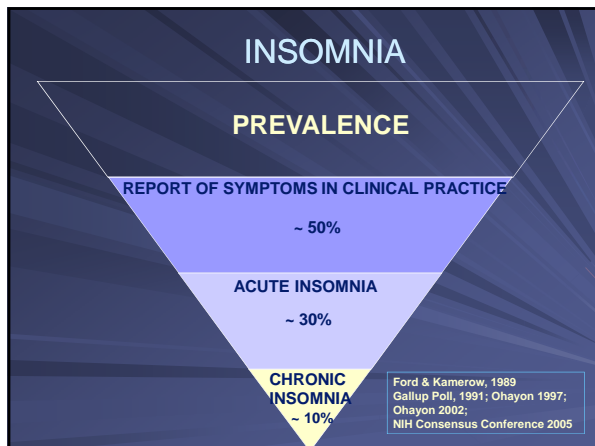
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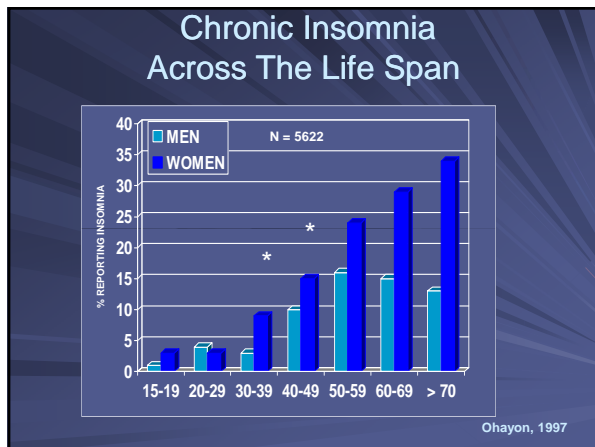
A Quick Outline

- **Background**
 - Intro to sleep disturbances
 - Sleep disturbances in traumatized populations
 - Review of sleep literature in IPV populations
- **Our Preliminary Work & Data**
- **Our Developing Vision**
- **Discussion**

Insomnia Dx







Insomnia is an Independent Risk Factor for:

- Hypertension & Glucose Intolerance
- Substance Abuse & Relapse
- New Onset & Recurrent Depression
- Mania
- Suicide

**“Without enough sleep, we all
become tall two-year-olds.”**

-- JoJo Jensen,
Dirt Farmer Wisdom, 2002

Co-Morbid Insomnia is Pervasive

- **≥ 50% Prevalence in Depression,
Generalized Anxiety & Trauma/PTSD**
- **≥ 50% Prevalence in Chronic Pain,
Diabetes & Traumatic Brain Injury.**

Co-Morbid Insomnia is Treatment Resistant (when not directly targeted)

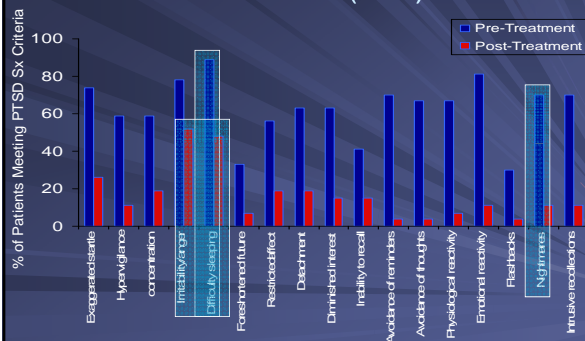
- **~ 50% of Patients with PTSD or Depression
who remit following treatment (Behavioral
or Pharmacologic) have residual insomnia**

Trauma/PTSD & Sleep Disturbance

- Insomnia & Nightmares among the most frequently endorsed PTSD Sxs
- 70-85% of chronic PTSD patients (civilian and combat) report sleep problems and/or nightmares.

Ohayon & Shapiro. *Comprehensive Psychiatry* 2000; 41:469-78.
Breslau & Davis. *AM J Psychiatry* 1992;149:671-675.

Treating the PTSD/Depression CBT for PTSD (n=25)



Zayfert & Deviva. *J Traumatic Stress* 2004;17:69-73.

Sleep and Domestic Violence

- Little research has been done on the connection between sleep and domestic violence.
- The first known research is the "Effect of Music Therapy on the Anxiety Levels and Sleep Patterns of Abused Women in Shelters" by Eugenia Hernandez-Ruiz in 2005 (*Journal of Music Therapy*).

Sleep and Domestic Violence*

■ Walker, Logan, and Shannon presented further findings in December (2007). [*Disturbed Sleep & Victimization*. Brown Bag PowerPoint Presentation at the University of Rochester.]

- Sleep disturbance is a long term and enduring effect of victimization.
- Once the sleep cycle has been disturbed due to victimization it may not self correct even when the imminent threat of domestic violence has been reduced or removed.
- Clinical practice should consider close assessment of sleep disorder as an independent condition among violence victims rather than simply seeing it as a symptom of PTSD or depression.

*Slide adapted from: Walker, R., Logan, T. K., & Shannon, L. (July 2007). Presented at: *International Family Violence and Child Victimization Research Conference*, Portsmouth, NH. Copy of presentation in pdf found at: <http://www.kyk.edu/VAW/Presentations.html>. Supported by Grant No. AA12735-01 National Institute on Alcohol Abuse and Alcoholism and the University of Kentucky General Clinical Research Organization funded by the National Institute of Health Grant #M01RR02602. Presented again (December 10, 2007). *Disturbed Sleep & Victimization*. Brown Bag Presentation at the University of Rochester.

Why is it the case that insomnia in particular tends to persist?

HPA AXIS ABNORMALITIES

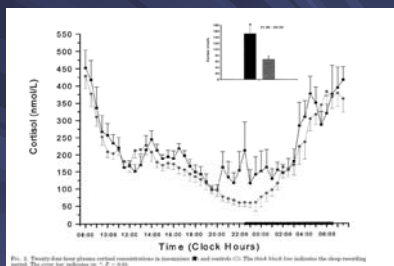


Fig. 2. Twenty-four hour plasma cortisol concentrations in trauma (●) and control (○). The black shaded area indicates the sleep/wake period. The inset bar indicates the cortisol levels during sleep. * $p < 0.05$.

**WORRY
RUMINATION
INTRUSIVE THOUGHTS
SELECTIVE ATTENTION
SLEEP RELATED INTENTION AND
EFFORT
SAFETY BEHAVIORS**

How does the sleep environment
contribute to sleep disturbance ?

An example from sleep in deployed
military service members...

Unique Features of Insomnia in the Context of Trauma & Partner Violence

- The presence of nightmares
- The sleep environment is not safe
- Conditioned alertness/wakefulness
- Sleep avoidance
- Fear of sleep

Sleep Disturbance Among Intimate Partner Violence Victims Seeking Protection Orders

Pigeon, Cerulli, Richards, He, Perlis & Caine



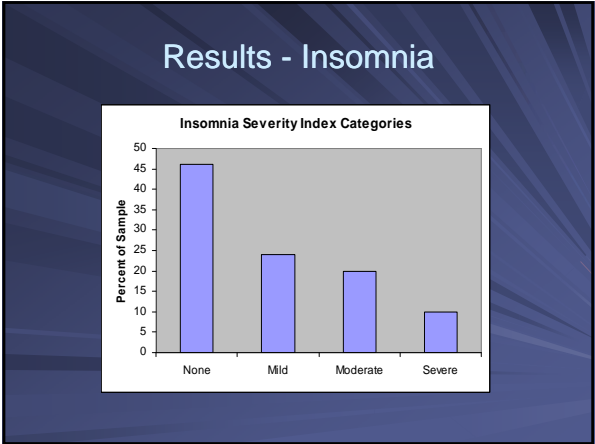
Support Provided by NIH grants: K01MH075965, T32MH18911, and K23NR010408

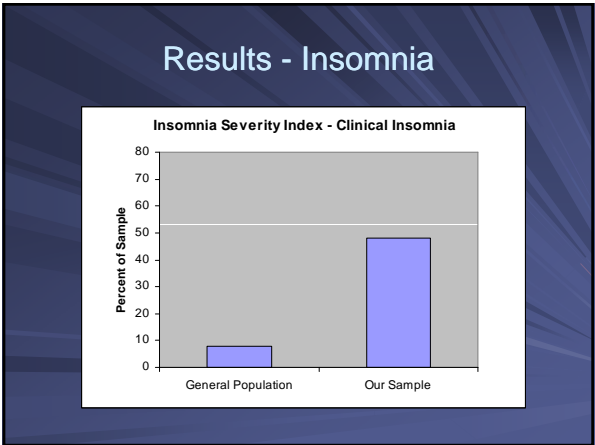
Sample Characteristics (N = 121)

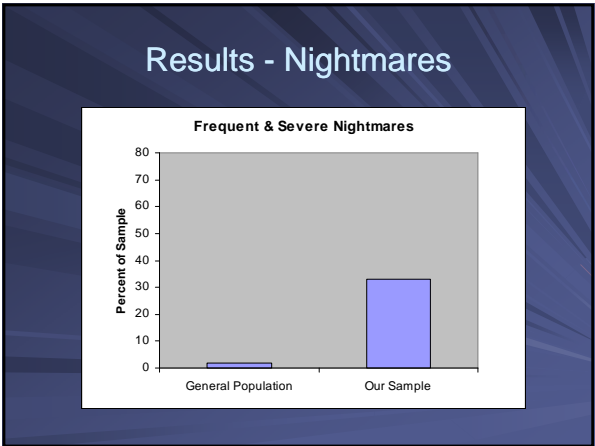
Mean Age (sd)	34.6 (10.9)
Race	
White	41.5%
African- American	37.3%
Hispanic	16.1%
Other	2.4%
Employed ('yes')	60.2%
% Living in poverty	24%
PTSD (cutoff is 46):	55.8 (30.9)
CESD (cutoff is 16)	27.58 (12.89)

Sleep Measures In Our Project:

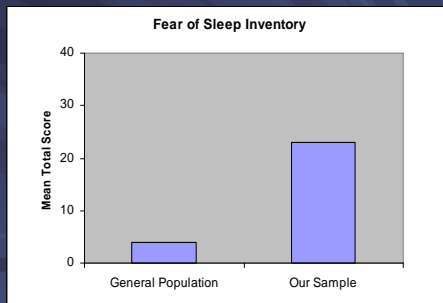
- Insomnia Severity Index (ISI)
 - 7 items scored on a 0-4 scale
- Two Nightmare Questions (frequency and severity)
- Fear of Sleep Inventory (FoSI):
 - 23 items
 - 0-4 scale ('not at all' -to 'nearly every night')
 - on such items as:
 - I was fearful of letting my guard down while sleeping.
 - I woke up in the night and I was terrified of returning to sleep.
 - I felt that it was dangerous to fall asleep.
 - I avoided going to sleep because I thought I would have really bad dreams







Results – Fear of Sleep



Results Sleep-Depression Relationships

Risk of Depression		
Odds Ratios (95% Confidence Intervals)		
	<u>Depression</u>	<u>Depression (Adj for PTSD)</u>
Insomnia	13.9 (5.1-38.1)***	8.7 (2.9-26.1)***
Nightmares	10.2 (3.6-29.0)***	3.3 (0.99-10.9)#
# p = .0502 *** p < .001		

Study Summary & Conclusions

- No surprise that sleep disturbances are:
 - prevalent in an IPV cohort presenting at family court
 - Strongly associated with depression
 - Driven in part by the 'Fear of Sleep' construct, which appears to be active in these women

Study Summary & Conclusions

- The findings suggest that:
 - Addressing sleep disturbance may be one way reduce mental health (and medical) burden and improve function
 - Tailored treatment is probably indicated
 - There are some testable hypotheses to investigate

Where Do We Go From Here ?



Study Summary & Conclusions

- Questions that are raised include:
 - Do women view sleep disturbance as a high priority?
 - Do they want it addressed? How? Where ?
 - Do they want to participate in clinical trials?
 - What about Male IPV victims?

Some Thank You's Before Discussion

**"The best bridge between despair
and hope is a good night's sleep."**

-- E. Joseph Cossman

Laboratory for Interpersonal Violence (LIVV)

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- Post-Doctorates: Sharon Flicker, PhD, Natalie Cort, PhD
- Research Assistant: Heidi Richards
- Administrator: Christina Smith
- Community Partners: Ronald Pawelzak and Cathy Mazzotta
- Statistics: Xin Tu, PhD, Hua He, PhD, and Kimberly Kaukinen

Discussion