





NELL HODGSON WOODRUFF SCHOOL OF NURSING

Testing a Dyadic Sleep Intervention for Persons Living With Cognitive Impairment and Their Care Partners

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Objectives

- Discuss why dyadic research to address sleep disturbance among persons living with cognitive impairment and their caregivers is needed
- Describe quantitatively how the sleep of persons living with cognitive impairment and caregivers change after completing a 4-session cognitive behavioral therapy for insomnia (CBTi) intervention
- Discuss some research implications based on the conclusions of the study

Prevalence and Repercussions of Sleep Disturbance

Sleep disturbance

- Fragmented sleepwake patterns
- Longer wake after sleep onset
- Greater numbers of nightly and early awakenings
- Caregivers
- Up to 90% Persons living with Cognitive Impairment
 - Up to 71%

Both

- Depressive symptoms
- Quality of life Caregiver
 - Increased burden

Persons living with Cognitive Impairment

• Earlier placement into residential care

Interventions to address Sleep Disturbance

- Pharmacological
 - Benzodiazepines
 - Non-Benzodiazepines
- Potential Side
 Effects
- Caregivers' hesitance to use

Non-Pharmacological

- Meditation
- Exercise
- Bright Light
- Cognitive Behavioral Therapy for Insomnia

Cognitive Behavioral Therapy for Insomnia

- Behavioral Factors
 - Spending excessive time in bed
 - Daytime napping
 - Irregular sleepwake schedules

Cognitive Factors

- Excessive concern over sleep loss
- Rumination about the daytime effects of poor sleep

Cognitive impairment specific issues for the dyad

Cognitive Behavioral Therapy for Insomnia

Components

- Relaxation
- Sleep Consolidation
- Stimulus Control
- Sleep Hygiene
- Cognitive Therapy
- Pleasant Activities
- Having a set waketime

Number of sessions

- 4-16 Order of delivery
- How the techniques are taught
 Mode of delivery
 - In-person vs teleconference
 - Individual vs partner

Aim

For persons living with cognitive impairment and their caregivers, evaluate the feasibility, acceptability, and preliminary efficacy of a 4-session CBTi intervention delivered via videoconferencing

Measures/Procedures/Analyses

- Demographics
- Sleep
 - Epworth Sleepiness Scale
 - Insomnia Severity Index
 - Pittsburgh Sleep Quality Index

- Data collection
 - Three time points: baseline, 1 week and 3 months post-intervention
- Intervention visits
- Descriptives
- Baseline and postintervention differences using Chi-square or ttests

Results: Demographics

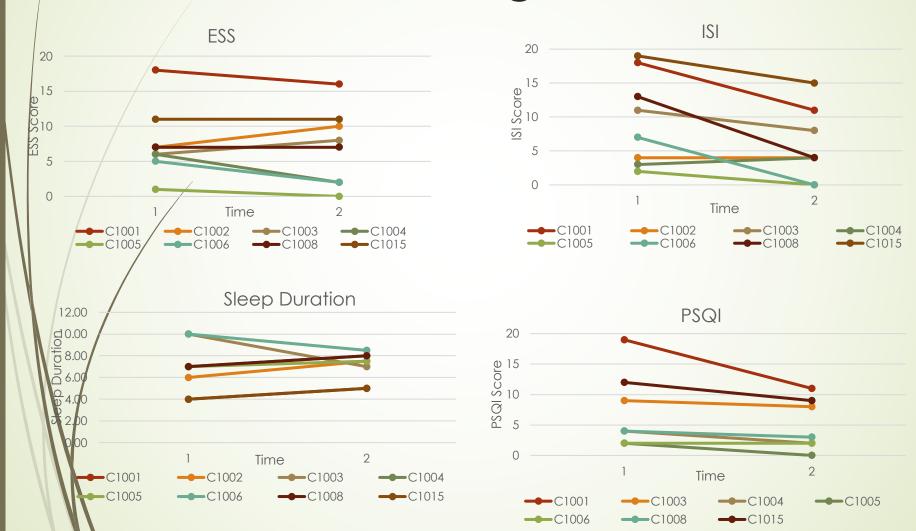
Caregivers

- Age: 71.25 years
- Gender: 100% female
- Education: Average 19 years
- Employed: 1
- Race
 - White/Black: 4 each
- Relationship: 100% spouses
- Years of caregiving
 - Range from 1 year to 12 years

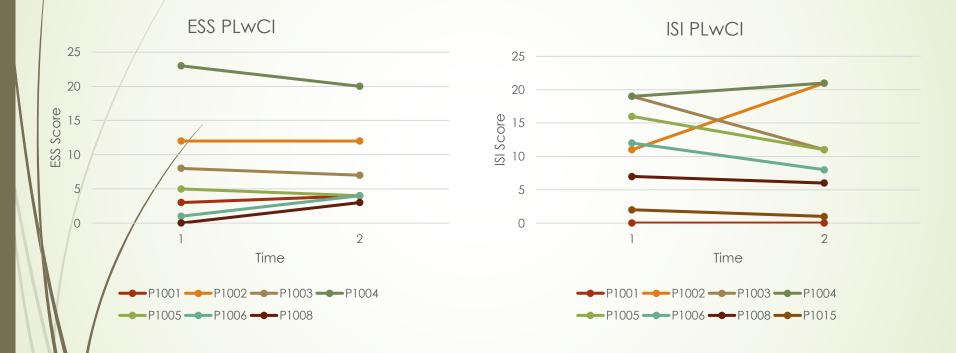
<u>PlwCl</u>

- Age: 75.75 years
- Gender: 100% male
- Education: 18.75 years
- Race:
 - Black/White: 4 each

Results: Sleep Outcomes across Caregivers



Results: Sleep Outcomes by PLwCI



Conclusion

Most individuals reported an improvement in insomnia and daytime sleepiness symptoms

Points to consider

- Who is completing the diaries and questionnaires
- The cognitive ability of the person living with dementia and level of participation in the sessions
- Wearing the watches and lost devices
- Inclusion and Exclusion Criteria

RESEARCH IMPLICATIONS

- Persons living with cognitive impairment and their care partners can work together to complete behavioral recommendations to improve their sleep pattern
- Upon realizing that there is sleep disturbance within a family living with cognitive impairment, geriatricians, gerontological and family nurse practitioners and other providers who interact with families living with dementia should refer to or suggest clinical and behavioral sleep medicine providers for further evaluations
- Behavioral sleep medicine providers should integrate partners and assess outcomes for both in sessions with caregivers or persons living with cognitive impairment

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Persons living with cognitive impairment and their care partners/ caregivers





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