

Integrated Care in Parkinson's Disease Series  
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# Relax, Rewind, & Get a Good Night's Sleep

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## Presentation Overview

- Part 1: Impact of PD and Aging on Sleep
- Part 2: Sleep Regulation
- Part 3: Barriers to Quality Sleep
- Part 4: Quieting an Active Mind

## What does a good night of sleep look like for you?



- "I didn't wake up too often!"
- "I woke up but got back to sleep pretty easily."
- "I was able to fall asleep in just a few minutes."
- "I only needed 1 nap today."
- "I was able to exercise or walk today."
- "I felt productive around the house."
- "I crossed off a few to-do list items today."

## Sleep Changes Related to Parkinson's Disease & Aging

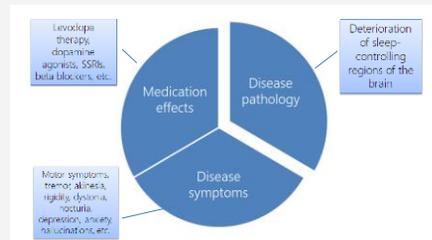


At least 66% of people living with Parkinson's disease report sleep disturbances

## Epidemiology of sleep disturbances in Parkinson's disease

Drews, Healy, Pal, & Chaudhuri, 2006

## Impact of Parkinson's Disease on Sleep



## Impact of Aging on Sleep

AGE-RELATED CHANGES FROM 20 TO 60 YEARS OF AGE

TOTAL SLEEP TIME	TIME TO FALL ASLEEP	NIGHT TIME AWAKENINGS	BED & RISE TIMES
Reduction of 10-12 minutes per decade	Increases very slightly with age	+10 minutes per decade	60 minutes earlier

Li, Vitello, & Gooneratne, 2016

## Weighing the Importance of Sleep Quality



## Barriers to Quality Sleep



## What gets in the way of quality sleep for you (night time factors)?



### Physical symptoms & discomfort

Pain/soreness  
Tremors  
Stiffness  
Hormones

### Other medical conditions

Urinary conditions  
Diabetes  
Depression  
Active mind

### Sleep disorders & related symptoms

Vivid dreams  
Dream re-enactment  
Hallucinations  
Restless legs  
Sleep apnea

### Lifestyle factors

Watching TV in bed  
Big meal, alcohol, or stimulants before bed

### Sleeping environment

Too hot/too cold (62-68 is best)  
Too much light  
Bed partner interference

## What gets in the way of quality sleep for you (daytime factors)?



### Irregular routine

Variable bed and wake times  
Wake time > bed time

### Reduced light exposure

Minimal time near sunlight  
Late wake up = limited sunlight hours

### Minimal physical activity (or exercise)

Moderate aerobic exercise is best (adapt as needed)  
Mood benefits  
Optimal timing varies by person

### Emotional health

Presence of mood and anxiety symptoms  
Engagement in enjoyable activities

## Optimizing your Physical Health to Promote Sleep



## Optimal Treatment of Medical Symptoms is Important



### Motor and Non-Motor PD symptoms

- Medication adjustments to dopaminergic therapy may be warranted
  - Consider nocturnal patterns with 'on' and 'off' periods
- Management of psychiatric symptoms



### Non-PD conditions and symptoms

- Specialty medical management may be warranted
  - Urology, sleep medicine, pain specialist, etc.

## Optimizing your Emotional Health to Rewind & Promote Sleep



## An 'Active Mind' at Night

*"My thoughts just won't turn off at night!"*

- May be present in many forms:
  - Overthinking a single subject
  - Juggling thoughts on multiple subjects
  - Racing, worrying thoughts
  - Hard to control
- Tired brains tend to not be very good at problem-solving late at night



## Quieting an 'Active Mind': Exploration of Thoughts

*What types of things do you tend to think or worry about?*

- Identifying and labeling the content of your thoughts:
  - Health, finances, relationships, sleep, politics, etc.?
  - Upcoming activities/events?
  - Unfinished tasks?
- Is it a situational or chronic worry?
- Degree of control or influence over the subject? Amenable to problem-solving?



## Quieting an 'Active Mind': Creating a Buffer Zone

*"How do you signal to your brain it is time to wind down at night?"*

- Building 'quiet time' into your nightly routine:
  - Transitional time from daytime activities to bed time
  - Engagement in enjoyable, relaxing activities (ideally, not in the bed)
  - Turn off the electronics!
  - Begin at least 30-60 minutes before bed



## Quieting an 'Active Mind': Scheduling a Brain Dump

*"How do I slow my mind down with all these thoughts?"*

- Benefits of expressive writing to tackle night time thoughts (or worries)
  - Scheduling brief time (ideally, several hours) before Buffer Zone
  - Complete *outside* of the bedroom
  - Delay problem-solving until mind and body are rested
  - Writing 'To Do' list instead of completed activities associated with faster time to sleep



Sculin et al., 2018

## Quieting an 'Active Mind': Reducing Bodily & Cognitive Arousal

"How might you soothe your body while holding those thoughts?"

- Relaxation exercises

- Directly targets physiological activation within body 
- Aim for at least 15-20 minutes (ideally, out of the bed)
- Key to success: Individual fit, practice, & building into your nightly routine

- Examples:

- Diaphragmatic breathing
- Guided imagery
- Meditation



THERE'S AN APP FOR THAT



## Relaxation Exercises: Phone App



Mindful Moments

Created by Cleveland Clinic Wellness Institute

Highlights: Offers +15 audio clips of relaxation exercises

Apple App Store Preview

## Quieting an 'Active Mind': Reducing Bodily & Cognitive Arousal

- Light stretching exercises

- May help reduce bodily tension and promote relaxing breathing exercises
- Listen to your body
- Consult with medical/rehabilitation provider for adjustments



- Reading

- Audio books are a good alternative

- Music



- Gratitude journaling

## Concerned about your sleep?



## Time to start tracking



## Tracking Your Sleep: Logs



Monitor for 1-2 weeks before your medical visit



Bedtime  
# minutes to fall asleep  
# night time awakenings  
Length of time you are awake  
Rise time



Bed partner  
observations  
& input



Use a journal, online forms, or wear-able devices

THERE'S AN APP FOR THAT



## Tracking Your Sleep: Phone App



GO! To Sleep

Created by Cleveland Clinic Sleep Center

Highlights: Sleep tracker, health and sleep survey to generate a "sleep score"

Apple App Store Preview

## During your Medical Visit: Sleep Conversations

- Describe your sleep problems and complaints
  - *What is the most bothersome aspect to you?*
- Relationship to nocturnal PD symptoms (if applicable)
- Be sure to discuss other important health behaviors that contribute to daytime functioning
  - *Are mood, activity level, and daytime stimulation satisfactory?*



## Summary



### **Quality sleep is vital to promotion of health and wellness when living with PD**

Sleep changes are common in PD and part of the normal aging process.

However, poor sleep quality should not be the norm.



### **Comprehensive management is key to understanding and treating sleep disruptions**

Medical and behavioral strategies are effective in improving sleep quality.

An individualized sleep intervention plan is key.



### **Practical, research-driven behavioral strategies can improve sleep quality**

Interventions designed to lower pre-bed cognitive and physiological arousal may help sleep promotion