Sleep Disorders in Long Term Care
How Interventions Drive Quality and Optimize Resident Wellness

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Indiana Health Care Association
Keystone at the Crossing
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Objectives

- Explain the identification and treatment of sleep disorders as they pertain to the LTC setting

- Describe the pathophysiology of sleep deprivation on acute and chronic disease states, cognitive function and quality of life measures

- Describe treatment strategies and their positive effects on Patient Centered Care and caregiver and resident satisfaction

- Evaluate how treatment interventions for disrupted sleep can drive quality outcomes for facilities; and physical, cognitive, and wellness outcomes for residents
Objective

Explain the identification and treatment of sleep disorders as they pertain to the LTC setting
National Guidelines

- AMDA The Society for Post-Acute and Long-Term Care Medicine, affiliated with the American Medical Association and the American Society of Internal Medicine.
- Last updated 2007; reviewed 2012
- Available from www.adma.com
Sleep Disorders Definition

Difficulty in maintaining wakefulness during the day OR abnormal behavior associated with sleep all of which are subjectively or objectively distressing or harmful to the patient or the patient’s roommate or sleep partner.

Most sleep disorders in LTC are secondary to chronic disease states or environmental factors and will be the focus of this presentation.
Risk Factors

Inadequate: sunlight, family support, physical activity

Elderly, Dementia
Mental Illness such as depression, bipolar disorder

Multiple comorbidities especially COPD, CHF, arthritis
Medications

Neurological disease
Incontinence

NEW ADMIT TO A LONG TERM CARE FACILITY
Wandering and incontinence are the leading cause of institutionalization.
Signs and Symptoms

- Complaints by roommate
- Morning confusion, headache or impaired cognition
- Falls, accidents, functional decline
- Decreased participation; food and fluid intake
- Uncontrolled hypertension
Symptoms....... 

Abnormal behavior in dementia patients such as agitation, hostility, combativeness, or an acute change in behavior
Sleep issues in LTC settings

- VERY Common
- Poor sleep efficiency
- Comorbidities and/or medications can increase sensitivity to environmental distractions
- Increased risk for falling (self toileting?)
- Increased risk for hospital readmissions. Elevated mortality risk
Treatment of Sleep Disorders

- **IMPLEMENT** non-pharmacologic interventions first
- Reconsider the need for medications that may be interfering with sleep...........**INITIATE individual interventions then........** facility wide sleep program!!
- Treat the medical conditions that may be an underlying cause
- **MONITOR** interventions and re-evaluate as necessary
- **DOCUMENT** per quality and survey standards
“It’s a taser. It’s for your snoring.”
Objective

To describe the pathophysiology related to sleep deprivation on acute and chronic disease states, cognitive function and quality of life measures.
Why do we sleep?

- Survival
- Restoration
- Non-progression of Disease
- Cellular Regeneration
- Learning Memory
<table>
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<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
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<td>45-55%</td>
<td>4-6%</td>
<td>12-15%</td>
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Aging and Sleep

- Dementia
- Arthritis
- High Blood Pressure
- Cancer
- Lung Disease
- Menopause
- Medications
- Gastric Problems
- Osteoporosis
- Incontinence
- Depression
- Psychosocial Issues
Sleep Changes in the Elderly

Age

Physiologic changes in the areas of the brain that affect sleep and natural circadian rhythm (sleep/wake cycle)

Unmet needs/difficulty communicating

Pain, hunger, thirst, toileting, anxiety

Meds

Many medications affect sleep (including pain relievers, drugs to treat Dementia, Parkinson’s disease and antidepressants)
Sleep Across the Human Life Span

Fig. 3.19

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Sleep and Dementia

40% of dementia patients have sleep disturbances

- Dementia Causes:
  - Less deep and REM sleep with reduced sleep efficiency: shorter sleep cycle
  - Nighttime awakening, wandering, and increased daytime napping
  - More difficulty falling asleep

- “Increased severity of dementia is associated with greater sleep fragmentation AND greater sleep disturbances may predict more rapid cognitive decline.”

(Feinburg et al., 1967: Moe et al., 1995; Prinz et al., 1982a, 1982b; Vitiello et al., 1990: Mortimore et al., 1992)
Relationship of Sleep and Dementia is Bi-Directional

Chronic sleep disorders (such as sleep apnea) can affect cognitive behavior and increase the risk of Dementia/Alzheimer's disease.

Diseases such as Dementia/Alzheimer's can significantly impact the sleep cycle and trigger further declines in mental ability.
Chronic sleep deprivation increases the risk for dementia.
“One of the unique challenges in researching sleep disturbance as a factor in cognitive decline is: once patients have developed AD, we do not know if sleep disruption contributes to AD progression or if AD progression contributes to sleep disruption.”

(Mander BA. Disturbed sleep in preclinical cognitive impairment: cause and effect? SLEEP 2013;36(9))
Objective

To "get back to the basics" and Patient Centered Care interventions and treatment strategies that caregivers can apply in their facilities to improve QAPI and resident wellness outcomes.
Fayetteville, Arkansas SVH
Uninterrupted Sleep Program

Developed to promote person-centered care and restorative sleep to all Veterans within the Home. “Change will help restore dignity, autonomy, privacy, choice, honor, trust and quality of life to those we serve.” (Fayetteville Veterans Home Policy)
Uninterrupted Sleep Program

- Developed from observation of the following problems
  - Anger and acting out issues
  - Non-compliance with overall care and ADL’s
  - Increase in negative psychiatric behaviors...leading to

- These behaviors caused an increase in:
  - Anti-psychotic drug administration
  - Transfers to acute care and psychiatric treatment facilities
  - Negative side effects from the medications
Process

Sleep Interview

- Incorporate preferences into plan of care
- Done at admission/MDS intake
- Re-evaluate as necessary

Evaluate Incontinence

- Incontinent residents were switched to super-absorbent, longer wearing products
- Allows for longer uninterrupted SLEEP

Evaluate Medical Management

- Timing of blood sugars, vitals
- Therapy and other interventions
- Medication schedule
Fayetteville: Standard of Care

- Keep lights to a minimum during checks.
- Use soft voices
- Decrease loud noises from any source i.e. promptly answer call lights and alarms
- Don’t interrupt unless condition warrants.

Eliminate a “wake up list” altogether in an effort to support the Veteran’s natural sleep pattern.

AM Blood Sugar: time based on individual needs
Continental Breakfast: for early risers
Eliminate universal, rigid morning routines
Turn **Down** Alarms!!!!
Keep residents involved, engaged and busy......

- Diverse activities....crafting, art, dancing, live music, exercise classes.

- Discourage staff from “cohorting” residents at the nurses station, which promotes frequent daytime napping.

- If you don’t keep residents busy and active, they will find something else to do which may not always be productive.
Engaging Activities decrease daytime boredom/napping.

A study published in *Geriatric Nursing, 2014* “suggests that physical mobilization and social activation may improve residents' subjective sleep quality.”

Joachim Kuck, Michaela Pantke, Uwe Flick, PhD, March 26, 2014
Announcement:

Exposure to noise at night can suppress immune function even if the sleeper doesn’t awaken. Unfamiliar noise during the first and last two hours of sleep has the greatest disruptive effect on the sleep cycle.
Study Results: all related to

- Decrease in anti-psychotic med use
- Reduced admission rate to acute care and psychiatric facilities
- Decrease in anger issues
- Decrease in illness related to lack of sleep
- Increase in compliance with care including meals, ADL’s and PT/OT
- Improvement in overall wellness of residents

(Jerry Poole, RN, Staff Development/Infection Prevention)
SLEEP STUDY OUTCOMES

- Longer periods of uninterrupted Sleep
- More time for safety rounding and meaningful, personal care
- Staff/Veteran and family satisfaction.
Facility Readiness

- Staff Education
  - Develop a “cross-pollinated team to evaluate issues including family, residents and caregivers to help tailor person-centered care approach for EVERY resident
  - Sleep disorders recognition and consequences
  - Interventions to change the current “culture” of sleep practices and routines in LTC facilities involve common sense.
- Environmental enhancements
- Individualized care planning
  - Start with the sleep interview
- Interdisciplinary care management: TEAM effort!
Objective

To evaluate how treatment interventions for disrupted sleep can drive QAPI (Quality Assurance and Performance Improvement) outcomes for facilities, and physical and cognitive wellness outcomes for residents.
Quality Outcomes of Poor Sleep

- Patient dissatisfaction with sleep quality can significantly decrease overall quality of life and perceived quality of residential care.

- Older, fatigued patients are more likely to:
  - Have difficulty with ADL’s
  - Experience confusion
  - Be more challenging for caregivers
  - Experience falls and injury
  - Heal more slowly and have exacerbated acute and chronic illness

- Daytime sleepiness can also be dangerous. In a large study of older women who self-reported the need for frequent napping during the day, poor sleep was associated with a **30-40% increase in falls** (Stone, et al. 2006).
Partnership to improve dementia care

- In 2012, CMS launched *Partnership to Improve Dementia Care in Nursing*

*Partnership:*
- Advancing Excellence in America’s Nursing Homes Campaign
- AHCA Quality Program and Quality Assurance Performance Improvement (QAPI).

*Focus on person-centered care*
- The reduction of unnecessary antipsychotic meds in nursing homes and other care settings.
- Addition of a sleep programs is a perfect fit.................
QAPI 2012

- AHCA 2012 goal of 15% reduction in the off-label use of antipsychotics by end of 2015
  - **Sleep disturbance** often a causative factor of agitation in patients with dementia

- Indiana’s Long Term Care facilities, show a decrease of **13.1%** between 2012 and 2014

- People with dementia are 20% more likely to be re-hospitalized, antipsychotic use increases risk

Increasing restful sleep can reduce agitation and the need for sedatives.
Trouble Falling or staying asleep or sleeping too much

How much of the time have you experienced pain or hurting over the last day

Number of days during last 7 days that resident has received hypnotic medication
Performance for facilities and consumers

- LTC facility commitment to customer service quality and a desire to improve performance:
  - Consumer satisfaction
  - Meeting state survey standards
  - Participating in the Advancing Excellence in America’s Nursing Homes Campaign.
  - Resident review compliance
  - Standard and Compliance Surveys
    (Ohio LTC Quality Initiative ohio.gov)
Guidelines for the treatment of sleep disorders in LTC and numerous available resources can help your facility develop an effective program to improve veteran’s sleep.

The relationship between sleep and aging is a bi-directional one and is a hot topic of current research.

Simple, non-pharmacologic interventions can help reset circadian rhythms and optimize sleep efficiency.

Improving sleep and establishing uninterrupted sleep programs contribute to quality indicators AND resident health and wellness.
Thanks for Listening!

“Your lectures cured my sleep disorder.”
Thank you!

To provide comments or ask further questions, please contact us anytime........

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