WHY CAN’T I SLEEP?

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Sleep and Aging

• How does sleep change as we age?
• Do we need less sleep as we get older?
• Can a person expect to experience more sleep problems or have a sleep disorder as they advance in age?
• As we age, how does sleep affect our overall health, medical conditions and general well being?
• What can we do to get good sleep?
Sleep is Essential to Our Overall Health and Well Being

• Key to our health, performance, safety and quality of life

• As essential a component as good nutrition and exercise to optimal health

• Essential to our ability to perform both cognitive and physical tasks, engage fully in life and function in an effective, safe and productive way
Normal Sleep and Aging: Our internal Clock

- The biological clock resides in the brain
- It helps regulate when we feel sleepy and when we are alert
- It works in tandem with light and dark, and our body temperature and hormones
Normal Sleep and Aging: Less Deep Sleep
Health and Environment Affect Our Sleep

With age, we become more sensitive to:

- Hormonal Changes
- Physiological Conditions
- Environmental Conditions
  - Light
  - Noise
  - Temperature
Normal Sleep and Normal Aging: Sleep Efficiency

Changes with age

Sleep Efficiency (% Time in Bed Sleeping)

Men
Women

Age
• The ability to get continuous and consolidated sleep may become more difficult as we age
### Sleep Problems/Disorders Prevalent Among Older Persons

#### SYMPTOMS OF SLEEP PROBLEMS BY AGE

<table>
<thead>
<tr>
<th>Symptoms: a few nights a week or more</th>
<th>55-64</th>
<th>65-74</th>
<th>75-84</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insomnia</td>
<td>49%</td>
<td>46%</td>
<td>50%</td>
</tr>
<tr>
<td>Snoring</td>
<td>41%</td>
<td>28%</td>
<td>22%</td>
</tr>
<tr>
<td>Sleep Apnea</td>
<td>9%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Restless Legs Syndrome (RLS)</td>
<td>15%</td>
<td>17%</td>
<td>21%</td>
</tr>
</tbody>
</table>
Insomnia

• A perception or complaint of inadequate or poor sleep
  • Difficulty falling asleep
  • Frequent awakenings
  • Waking too early and having difficulty falling back to sleep
  • Waking unrefreshed

• A highly prevalent condition affecting as many as 48% of older persons

• Next day consequences
Insomnia Treatment.

- Effective Treatment
  - Healthy sleep habits
  - Behavioral therapy
  - Prescription hypnotic medications
  - Other therapies
What Is Cognitive Behavioral Therapy?

• Cognitive behavioral therapy for insomnia is a **structured** program that helps you identify and replace thoughts and behaviors that cause or worsen sleep problems with habits that promote sound sleep.
Cognitive Behavioral Therapy

- Multicomponent regimen
  - 1. Sleep restriction
  - 2. Stimulus control
  - 3. Cognitive therapy
  - 4. Sleep hygiene
  - 5. Relaxation training
    - Goal: to alter factors presumed to sustain chronic insomnia (perpetuating factors)
- Front line treatment for chronic insomnia
Snoring

- Partial blockage of airway causing abnormal breathing and sleep disruptions
- Males
  - Those who are overweight and with large neck size most at risk
- Loud snoring can be a symptom of sleep apnea
Sleep Apnea

• Increases as we age
• Characterized by pauses or gaps in breathing due to an obstruction of the airway
Sleep Apnea

- Signs and Symptoms
  - Loud, regular snoring
  - Large neck size
  - Obesity

- Associated with major medical conditions

- Most efficacious, least invasive treatment option - Positive Pressure Therapy.

- Other treatment options include oral appliance and surgical options.
Restless Leg Syndrome/Periodic Limb Movement Disorder

Neurological movement disorders

- Involuntary urge to move due to unpleasant feelings in the legs during sleep or rest
- Jerking of legs and arms during sleep
- Increases with age
- Worsened with iron deficiency, renal disorders, pregnancy.

Treatment
- Medications
- Healthy lifestyle
- Sleep hygiene
Medical Conditions Increase With Age

Medical Conditions increase with age and are often associated with sleep problems

• Hypertension and Heart Disease
• Heart Failure
• Stroke
• Menopause
• Cancer
• Gastrointestinal Disorders
Medical Conditions Increase With Age

Medical Conditions increase with age and are often associated with sleep problems

• Alzheimer’s, Parkinson’s and cognitive problems
• Depression
• Arthritis
• Other conditions
• Medications Can Cause Sleep Problems!
The Use of Alcohol, Nicotine, Caffeine Affects Sleep
Sleep Tips

- Establish a regular schedule with consistent bed and wake times
- Maintain a relaxing bedtime routine
- Create a sleep-promoting environment that is comfortable, quiet, dark and preferably cool
Set a Regular Sleep Schedule

- go to bed and get up at same time every day
- body clock works best if you have a regular routine
- adults need on average 7 to 9 hours sleep
- use naps wisely – no longer than 30 minutes
Help Your Sleep-Wake Cycle.

• spend time during the day outside in daylight

• ensure your home and work environment lets lots of daylight in during the day

• to promote melatonin secretion at night, turn off bright lights, TV, electronic devices and have a dark bedroom

• if you do get up in the night use dim lights
Bedroom Environment

- your bed is for sleeping and intimacy
- TV, computers, mobile phones, tablets and work should all be left outside the bedroom
- ensure you have comfortable bedding and room temperature
- try to eliminate noise and make sure room is dark
- your lounge should not be be your bedroom
Things to Avoid

• Avoid big meals just before bed
• Avoid alcohol and caffeine (tea, coffee & cola) at least 4 hours before bed
• Avoid napping on the couch in the evening
• Avoid strenuous exercise late in the evening
• Quit smoking
• Don’t clock watch
What If I Can’t Sleep?

• You Can’t Force Sleep!

• an hour before bed try to unwind from your day
  • Read, take a warm bath, listen to relaxing music, stretch and do relaxation exercises

• try to sort out the days worries before you go to bed, write down solutions to problems

• if you are not asleep within 20 minutes, get out of bed and go to another room sit quietly in dim light and do something relaxing, e.g. reading or listen to soothing music
What If I Can’t Sleep? (cont)

• then go back to bed when you feel tired
• it's normal to wake briefly a few times during the night
• if you can’t go back to sleep try to remain relaxed, worrying about sleep will only cause stress and anxiety
• have a notebook by your bed and write down thoughts and solutions to problems, sort these out during the day
Keep a Sleep Diary to Identify Your Sleep Habits and Patterns
Seek Help From a Sleep Specialist and a Sleep Study
Types of Sleep Study

- Diagnostic PSG
- PAP titration study
- Split night study
Sleep Study
Pediatric Sleep Study
Torrance Memorial Sleep Center
Torrance Memorial Sleep Center.
Torrance Memorial Sleep Center.
Lastly

• Good quality sleep is vital for our overall health and well being so make sure you are eating a well balanced diet, doing at least 30 minutes of physical activity a day and are implementing good sleep habits!
Questions?
I FEEL **TIRED** ALL DAY!!
CAUSES OF FATIGUE:

- medications
- Anemia
- Other medical conditions
- Shortness of breath / work of breathing
- Emotional distress / depression
- Poor nutrition
- Pain – treatment of pain (medications)
- Sleep disturbances
My day starts backwards...
I wake up tired and go to bed wide awake.

"I can't sleep. I think I'll get up and solve all my problems."

[Images of people sleeping and in bed]
**FEEL VERY TIRED / SLEEPY**

<table>
<thead>
<tr>
<th>Tired / Fatigued</th>
<th>Sleepy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication effect?</td>
<td>Not enough sleep?</td>
</tr>
<tr>
<td>Manifestation of the underlying disease?</td>
<td>Medication effect?</td>
</tr>
<tr>
<td>Metabolic causes?</td>
<td>Underlying disease?</td>
</tr>
<tr>
<td>Anemia?</td>
<td>sleep conditions?</td>
</tr>
<tr>
<td>Pain?</td>
<td>• <strong>Decreased quantity</strong> - <em>not enough hours in bed</em></td>
</tr>
<tr>
<td>Emotional distress?</td>
<td>- Intentionally</td>
</tr>
<tr>
<td>Poor nutrition?</td>
<td>- Unintentionally e.g. Insomnia</td>
</tr>
<tr>
<td>Not enough sleep?</td>
<td>• <strong>Decreased quality</strong> - <em>fragmented sleep</em></td>
</tr>
<tr>
<td></td>
<td>- Due to sleep disorders e.g. sleep apnea</td>
</tr>
<tr>
<td></td>
<td>- Due to other medical disorders e.g. chronic pain / chronic medical cond.</td>
</tr>
<tr>
<td></td>
<td>- Due to other mental disorders e.g. depression / anxiety</td>
</tr>
</tbody>
</table>
OBSTRUCTIVE SLEEP APNEA

• Sleep apnea is characterized by
  • periods of airflow slowing (shallow breathing) or breathing pauses for 10 to 30 seconds or longer
  • often accompanied by a decrease in oxygen concentration
  • followed by an arousal/awakening
Normally, air flows freely past the structures in the throat.
OBSTRUCTIVE SLEEP APNEA

- Sleep Apnea
  - Sleep Fragmentation
    - Low oxygen, high Co2
  - Excessive Daytime Sleepiness
  - Morbidity
  - Mortality
  - Cardiovascular Complications
WHEN TO SUSPECT SLEEP APNEA

• Snoring (loud, chronic)
• Nocturnal gasping and choking
  – Usually noted by bed partner
• Automobile or work related accidents
• Personality changes or cognitive problems
• Excessive daytime sleepiness
TREATMENT

- Positive Airway Pressure (CPAP/BIPAP/APAP)
- Dental Mandibular Devices
- Surgical options
DENTAL APPLIANCES
OSA: TREATMENT

• **Positive pressure devices (CPAP)**

• **Dental Devices**

• **Surgery**
SURGICAL OPTIONS

In maxillomandibular advancement surgery the lower jaw and mid-face is moved forward to increase posterior airway space.
INSPIRE
WAKE UP STILL TIRED

• Can’t go back to sleep:
  • Tired but not sleepy
  • Disrupted sleep (e.g. apnea, pain, meds, …etc)
  • Medications / Caffiene / Nicotine
  • Underlying medical conditions / depression etc.

• Can easily go back to sleep
  • Disrupted sleep (e.g. apnea)
  • Medications / sleep aids
  • Underlying medical condition / depression etc.
I can’t sleep. I think I’ll get up and solve all my problems.
CAN’T FALL ASLEEP!

• Circadian rhythm disorders:
CAN’T FALL ASLEEP!

- Restless leg Syndrome
CAN’T FALL ASLEEP!

Other causes

• Pain, discomfort, shortness of breath
• Medications / Caffeine / Nicotine
• Anxiety / depression / emotional distress
• Poor sleep hygiene / Insomnia
Me every night: I can have exactly 7 hours 23 minutes and 48 seconds of sleep if I fall asleep right now.
CAN’T STAY ASLEEP!!
WAKE UP TOO EARLY!!

• Pain / Discomfort / Shortness of breath
• Medications / Caffeine / Nicotine
• Anxiety / Depression / Emotional distress
• Poor Sleep Hygiene / Insomnia
SHORT-TERM INSOMNIA

- Three months or less and is usually caused by stressors:
  Changes in the sleeping environment,
- The loss of a loved one, divorce, or job loss
- Recent illness, surgery, or sources of pain
- Use or withdrawal from stimulants (caffeine), certain medications

- Often resolves when the stressor resolves
LONG-TERM INSOMNIA

• Lasts longer than one month

• Mental health problems, such as depression, anxiety disorders (including panic attacks), and posttraumatic stress disorder

• Medical illnesses, especially those that cause pain, stress, or difficulty breathing

• Neurological disorders, such as Parkinson disease and Alzheimer disease

• Primary insomnia: no identifiable problem causing poor sleep
INSOMNIA TREATMENT

• Sleep hygiene education

• Behavioral therapy -
  • Usually includes manipulation and adjustment of sleep timing and conditions

• Medication -
  • OTC, e.g. antihistaminics, melatonin etc..
  • Benzo’s & Non-Benzo’s,
  • Antidepressants

• Combined approach
I asked my heart, "Why can't I sleep at night?"

Heart replied, "Because you slept in the afternoon, don't act like you're in love."
ABNORMAL MOVEMENT AT NIGHT

- REM sleep disorder
ABNORMAL MOVEMENT AT NIGHT

- Nocturnal seizures
- Sleep walking / talking / eating etc
- Nightmares / night terrors
SIGNS OF A SLEEP PROBLEM,
CONSULT YOUR DOCTOR IF...

• Feeling sleepy even after a good night sleep
• Falling asleep if not active e.g. watching TV
• Waking up gasping
• Loud snoring - keeping bed partner awake
• Long time to fall asleep or waking up too early and can’t go back to sleep
• Multiple awakenings in the night
• Uncomfortable or restless sensation in legs - or moving/jerking legs at night
• Sleep talking, yelling, thrashing, walking, eating. etc
RULES FOR A GOOD NIGHTS SLEEP

1. Select a standard wake up time. Use it everyday regardless of the sleep you got on any particular night – and that includes weekend.

2. Use the bed only for sleeping. Do not read, eat, watch TV etc. in bed – sexual activity is the only exception.

3. Get up when you can’t sleep. When you are unable to sleep get up and go to another room until you feel sleepy enough to fall asleep quickly before returning to bed. Get up again if sleep does not return quickly.
RULES CONTINUED

4. Do not worry, plan, etc in bed. If such mental activities come to mind automatically in bed, get up and stay up until you can return to bed without these mental activities interfering with your sleep.

5. Avoid daytime napping. Napping, particularly in the afternoon or early evening may interfere with your night’s sleep.

6. Go to bed only when sleepy. Long periods of time in bed will lead to shallow fragmented sleep. You should spend only the amount of time in bed that you actually need for sleep.
OTHER HELPFUL PRACTICES:

1. Limit caffeine, alcohol and nicotine especially in afternoon and evenings
2. Avoid steady use of sleeping pills
3. Exercise steadily but not close to bed time
4. Schedule down time before bed
5. Keep bedroom quite, dark and cool
6. Try a light bedtime snack such as milk or cheese
THANK YOU