SUMMERVILLE

Family Health Team

Welcome

Ontario

Privacy Statement

- This session is reserved for the sharing of less sensitive information, it is mainly, educational materials relating to insomnia.
- Virtual sessions do have some inherent privacy and security risks:
  - There is a chance your personal log-in information may be intercepted or unintentionally disclosed.
  - It is possible that there could be a problem with the technology and your session could be cut short and/or interrupted.
- We will not be recording the session, and ask that you not record the session, either

Workshop Protocol

- Your participation is encouraged! You can participate by:
  - Unmuting your microphone when invited or when you have a question.
  - Use the chat box to type your question. You can choose to send the question so that everyone can see, or you can direct it to one of the facilitators.
- Please keep your microphone muted unless you would like to share.

Sleep & Aging

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Changes in Sleep Patterns

Sleep and aging are closely connected, and the quality and quantity of sleep tend to change as we get older.

As people age, their sleep patterns generally change. Older adults may have trouble falling asleep, staying asleep, or having a restful night's sleep. They may also tend to wake up earlier in the morning and feel sleepy earlier in the evening. These changes are attributed to various factors, including alterations in circadian rhythms and age-related changes in the brain.

Sleep and Aging

Disturbed sleep, waking up tired every day, and other insomnia symptoms, on the other hand, are not a typical part of growing older. Sleep is just as vital now as it was when you were younger for your physical and mental well-being.

Sleep Duration

While individual sleep needs can vary, older adults generally require around the same amount of sleep as younger adults, which is typically 7-9 hours per night.

How Does Sleep Change as We Age?

- As you age your body produces lower levels of growth hormone, so you'll likely experience a decrease in deep sleep (an especially refreshing part of the sleep cycle). When this happens you produce less melatonin, meaning you'll often experience more fragmented sleep and wake up more often during the night. That's why many of us consider ourselves "light sleepers" as we age. You may also:
  - Want to go to sleep earlier in the evening and wake up earlier in the morning.
  - To get the hours of sleep you need, you'll either stay in bed longer at night or take a nap during the day.

In most cases, such sleep changes are normal and don't indicate a sleep problem.

The Stages of Sleep

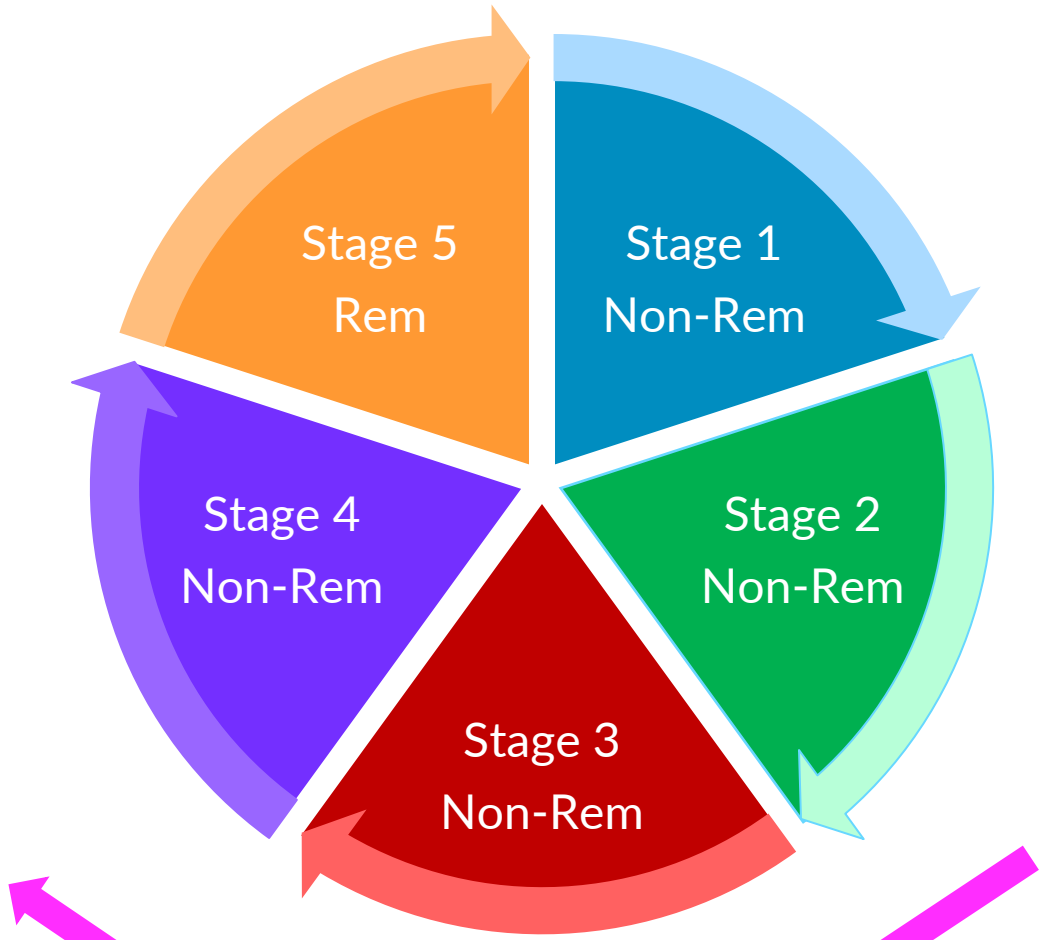
Stage 5

- Brain is active
- Eyes move rapidly

Move to Stage 5 REM sleep approximately 90 minutes after feeling sleepy.

Stage 4

- Deep restful sleep
- Body temperature decreases
- Blood pressure decreases



Stage 1

Interim between consciousness and sleep

Move to Stage 2 after 5 to 15 minutes.

Stage 2

- Heart rate slows
- Brain does less complicated tasks

Move to Stage 3 after another 15 minutes.

Stage 3

Body makes repairs

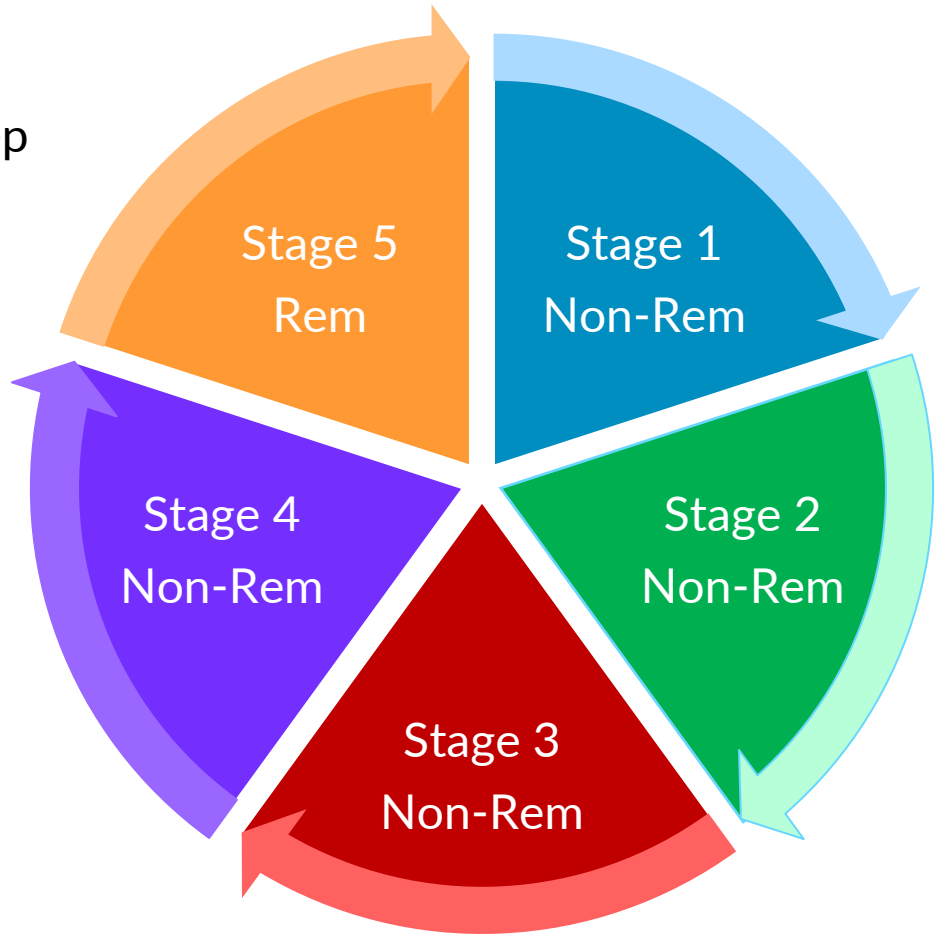
Changes in the Stages of Sleep with Age

Stage 5

- Decreased amount of REM Sleep

Stages 3 & 4

- Deep sleep stages decreases



Stages 1 & 2

- Takes longer to initiate sleep
- Increased time spent in lighter sleep

Sleep Fragmentation

Older adults tend to experience more frequent awakenings during the night, which can lead to sleep fragmentation. These awakenings may disrupt both REM and non-REM sleep, causing a less consolidated and less restorative sleep pattern.

Fragmented Sleep can cause:

- morning headaches
- daytime sleepiness
- memory lapses
- difficulty concentrating

Circadian Rhythm Changes

- The circadian rhythm is the body's "biological clock," or 24-hour cycle. Circadian rhythms are natural, internal processes that regulate our sleep-wake cycle, as well as various physiological and behavioral functions throughout a 24-hour period. It signals when we should be awake and alert and when we should sleep.
- The timing of sleep can also be affected by changes in the circadian rhythm with age. Older adults often find themselves waking up earlier in the morning and feeling sleepier earlier in the evening.
- This shift in the timing of sleep-wake patterns is known as **Advanced Sleep Phase Syndrome** and can impact the distribution and duration of both REM and non-REM sleep.

Advanced Sleep Wake Phase Disorder

Standard Sleep Phase

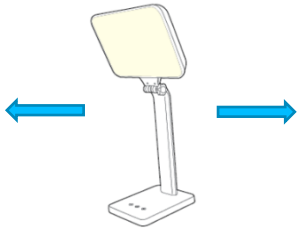
Sleepy

Go to bed

Wake up

6 pm 7 pm 8 pm 9 pm 10 pm 11 pm midnight 1 am 2 am 3 am 4 am 5 am 6 am 7 am 8 am

Sleepy



Go to bed

Wake up

Advanced Sleep Phase

Sleep Disorders

Older adults are more prone to developing sleep disorders compared to younger individuals. The following conditions are more prevalent among older adults:

- Sleep Apnea
- Restless Leg Syndrome
- Periodic Limb Movement Disorder
- Insomnia

These disorders can significantly impact sleep quality and overall well-being.

Sleep Apnea

Sleep apnea is a sleep disorder characterized by pauses in breathing or shallow breathing during sleep. It can affect individuals of all ages, including older adults. However, the prevalence of sleep apnea tends to increase with age. The two primary types of sleep apnea are obstructive sleep apnea (OSA) and central sleep apnea (CSA).

- OSA, the more common type, occurs when the airway becomes partially or completely blocked during sleep.
- CSA is caused by a lack of proper communication between the brain and the muscles responsible for breathing.

Sleep Apnea

Risk Factors:

- Older adults may be at a higher risk of developing sleep apnea due to various factors.
- These include changes in muscle tone and elasticity of the airway, increased prevalence of obesity, structural changes in the throat, hormonal changes, and the presence of other medical conditions such as hypertension and heart disease.

Symptoms:

- The symptoms of sleep apnea may include loud snoring, gasping or choking during sleep, excessive daytime sleepiness, morning headaches, difficulty concentrating, irritability, and restless sleep.

Sleep Apnea

Treatment Options:

- The treatment of sleep apnea in older adults may involve a combination of lifestyle modifications, such as weight loss, positional therapy, and avoiding sedatives and alcohol before bed.
- The primary treatment for moderate to severe sleep apnea is continuous positive airway pressure (CPAP) therapy, which involves wearing a mask that delivers a steady stream of air to keep the airway open during sleep.

Restless Leg Syndrome

- Restless Leg Syndrome (RLS), is a neurological disorder characterized by uncomfortable sensations in the legs, often accompanied by an irresistible urge to move them. RLS can affect individuals of any age, but it tends to be more prevalent in older adults. The symptoms typically worsen during periods of rest or inactivity, such as when sitting, lying down or sleeping , and are relieved by movement. Common sensations described by individuals with RLS include creeping, crawling, tingling, itching, or aching in the legs.
- Studies suggest that the prevalence of RLS increases with advancing age, particularly after the age of 50. The exact reasons for this are not fully understood, but it is thought to be related to age-related changes in the nervous system.

Restless Leg Syndrome

Treatment Options:

- The treatment of RLS in older adults typically involves a combination of lifestyle modifications and medication management.
- Lifestyle modifications may include:
  - Regular exercise
  - Maintaining a regular sleep schedule
  - Avoiding triggers like caffeine and nicotine
  - Applying heat or cold to the legs.

Periodic Limb Movement Disorder (PLMD)

- Periodic Limb Movement Disorder (PLMD) is a sleep disorder characterized by repetitive, involuntary movements of the limbs during sleep. These movements typically involve the legs but can also affect the arms. Most individuals with PLMD are unaware of their movements, but they can cause frequent arousals from sleep, leading to disrupted sleep and daytime fatigue.
- Studies have shown that the frequency of PLMD increases with advancing age, particularly in individuals over the age of 60. The exact reasons for this are not fully understood but may be related to age-related changes in the nervous system.

Periodic Limb Movement Disorder (PLMD)

Treatment Options:

- The treatment of PLMD in older adults often involves a combination of lifestyle modifications and medication management.
- Lifestyle modifications may include:
  - Maintaining a regular sleep schedule
  - Having healthy sleep habits
  - Avoiding substances that may worsen symptoms, such as caffeine and alcohol.

Insomnia

- Insomnia is a sleep disorder characterized by difficulty falling asleep, staying asleep, or experiencing non-restorative sleep.
- Insomnia becomes more common as people age. Older adults are more likely to experience insomnia compared to younger individuals.
- Insomnia can be classified as acute (short-term) or chronic (long-term). Acute insomnia is often related to a specific event or circumstance and typically resolves without treatment. Chronic insomnia, on the other hand, persists for at least three nights a week for three months or longer and requires intervention.

Insomnia

Insomnia in older adults can be caused by a combination of factors. Common causes and risk factors include:

- Medical conditions (e.g., chronic pain, heart disease, respiratory disorders)
- Mental health conditions (e.g., depression, anxiety)
- Medications
- Sleep disorders (e.g., sleep apnea, restless legs syndrome)
- Lifestyle changes, and age-related changes in sleep patterns.

Insomnia

Insomnia can have significant consequences on the physical and mental health of older adults. It may lead to:

- Daytime sleepiness
- Fatigue
- Mood disturbances
- Cognitive impairment
- Decreased quality of life
- Increased risk of falls and accidents
- Impaired daytime functioning.

Insomnia

Treatment Options:

The management of insomnia in older adults typically involves a combination of non-pharmacological and pharmacological approaches. Non-pharmacological strategies include:

- Improving sleep hygiene
- Cognitive Behavioural Therapy for Insomnia (CBT-I)
- Relaxation techniques
- Sleep restriction therapy
- Stimulus control therapy
- Medication may be considered in certain situations, but their use should be carefully monitored due to potential side effects and interactions.

Healthy Sleep Habits

Healthy Sleep Habits

Healthy sleep habits are essential for promoting quality sleep in older adults. Some habits that may improve your quality of sleep include:

1. **Stick to a Consistent Sleep Schedule:**
    - Establishing a regular sleep routine can help regulate your body's internal clock.
    - Try to go to bed and wake up at the same time every day, even on weekends.
    - Bypass the snooze button in the morning.

Healthy Sleep Habits

2. **Create a Relaxing Bedtime Routine:**
    - Establish a wind-down routine before bed to signal to your body that it's time to sleep. Maintaining a consistent routine also aids your body in recognizing that it is bedtime when the routine begins. This may assist you in falling asleep faster. Here are some suggestions:
        - Take a warm bath or shower. In addition to being calming in the moment, the water may also make you feel sleepy due to the drop in body temperature.
        - Read a book but not on an electronic reading device.
        - Practice relaxation techniques such as deep breathing or meditation.
        - Listen to some calming music.

Healthy Sleep Habits

3. **Create a Sleep-Friendly Environment:**
   - Ensure the room is cool, dark, and quiet.
   - Make your bedroom a comfortable and relaxing space for sleep.
   - Invest in a supportive mattress, pillows, and bedding that suit your comfort preferences.
   - Consider using blackout curtains, earplugs, or a white noise machine if needed.

Healthy Sleep Habits

4. **See the Light:**
    - Spend some time outside in natural light. Even if the sun isn't shining brightly, natural light still has positive effects on circadian rhythm. As much as possible, open windows and blinds to let light into your home during the day.

Healthy Sleep Habits

5. **Engage in Regular Physical Activity:**
    - Regular exercise can improve sleep quality. Engaging in physical activity during the day, such as walking, cycling, swimming, or yoga, can promote better sleep at night.
    - Avoid working out within a couple of hours of going to bed. Your body temperature and energy levels may increase as a result, making it harder for you to fall asleep.

Healthy Sleep Habits

6. **Avoid Stimulants:**
    - Limit your intake of caffeine as it can interfere with sleep. Caffeine's effects can last anywhere from 3 to 7 hours after consumption. This means that a cup of coffee in the afternoon may keep you awake and alert for far longer than you'd like. Everyone's caffeine tolerance is different.
    - Try to avoid smoking at least four hours before bedtime as it can interfere with a good night's sleep.
    - Avoid drinking alcohol. Although you may think that alcohol will help you fall asleep, it interferes with sleep later in the evening. So, try to avoid consuming alcohol at least four hours before bed.

Healthy Sleep Habits

7. **Limit Exposure to Screens Before Bed:**
    - The blue light emitted by electronic devices like smartphones, tablets, and computers can lower your melatonin levels and disrupt sleep. Melatonin regulates your sleep-wake cycle. It could be more difficult to fall asleep when your melatonin levels drop.
    - Avoid using these devices at least one hour before bedtime.

Healthy Sleep Habits

8. **Manage Stress continued:**

   Stress and worry can interfere with sleep. Find healthy ways to manage stress, such as:

   - Engaging in relaxation techniques.
   - Practicing mindfulness
   - Seeking support from friends, family, or a therapist.

Healthy Sleep Habits

8. **Manage Stress:**

   It can be difficult to sleep at night if you're worrying about anything. To keep your problems from keeping you awake at night, try the following suggestions:

   - Set a worry period during the day. Your worry period should be no longer than 30 minutes.
   - Write down your worries before you go to sleep, and then tell yourself that you will worry about them during your worry period.

Healthy Sleep Habits

9. **Limit Daytime Napping:**
    - Excessive daytime napping can disrupt nighttime sleep.
    - If you feel the need to nap during the day, keep it brief (20-30 minutes).
    - Avoid taking a nap later in the day.

Healthy Sleep Habits

10. **Be Mindful of Medications:**
    - Some medications can affect sleep patterns.
    - If you're experiencing sleep difficulties, consult with your health care provider to review your medications and discuss any potential adjustments.

Healthy Sleep Habits

11. Use your bed only for sleep

- Do not use your bed for reading, working, talking on the phone, watching TV, or other activities.
- It's important to use your bed for sleep and sex only. This helps strengthen your brain's association between your bed and sleep, making it easier to fall asleep.
- Reading may be one way you relax before going to sleep, but even books can be disruptive to your sleep if they keep your brain alert. Try reading on the couch before moving to your bed instead.

Healthy Sleep Habits

12. Go to bed only when you’re tired

- If you're not tired, don't lie in bed tossing and turning. Instead, engage in a relaxing activity until you become tired, then go to your bed.
- Get out of bed if you haven't fallen asleep after 20 minutes of going to bed. You may grow frustrated if you can't fall asleep, which will keep you awake even longer.
- Once you've gotten out of bed, do something relaxing, such as reading on the couch, until you're sleepy enough to return to bed.

Apps for Sleep

Insight Timer

The Calm Sleep: Sleep & Meditation App

Sleep Sounds - Relax & Sleep, Relaxing Sounds

Tide - Sleep Sounds, Focus Timer, Relax Meditate

Any Questions?