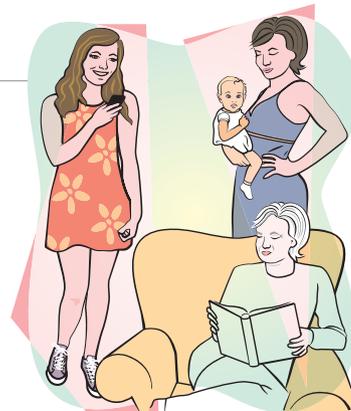


Women and Sleep

A woman's sleep changes over time with aging and in certain circumstances. Changing hormone levels associated with the menstrual cycle, pregnancy, menopause and post-menopause can affect the quality of a woman's sleep. Young adult women typically have the highest quality sleep. Older women get less deep sleep and are more likely to have nighttime awakenings. Women are particularly at risk for sleep disorders and are more likely to develop sleep apnea during pregnancy and after menopause.



How does the menstrual cycle affect a woman's sleep?

Women report disrupted sleep a week prior to their menses (period) and during menses. This is due to changes in the levels of the hormones progesterone and estrogen that can lead to menstrual symptoms such as cramping, moodiness, cravings, and irritability. During the menstrual period, it is common to have an increase in nighttime awakenings and an increase in vivid dreams. Normally, these sleep problems resolve after the start of the period, though some women may have continuing sleep problems such as insomnia. Hormone therapy may alter a woman's sleep and various symptoms associated with sleep disorders. This should be discussed with your provider prior to initiating therapy so that you know what changes to expect.

How does pregnancy affect a woman's sleep?

About 66% to 94% of pregnant women report some form of sleep change during the course of pregnancy. A woman's sleep may vary by the time period in pregnancy as follows:

- First and second trimester of pregnancy: During the first and second trimester, hormone changes during pregnancy, including an increase in the level of progesterone, can greatly reduce the quality of sleep. Women are often more tired during the day and feel the increased need for sleep.
- Third trimester of pregnancy: Women tend to have poor quality of sleep in the late stages of pregnancy. Pregnancy leads to an increase in light sleep, a decrease in the amount of deep sleep, and a decrease in dream sleep (REM sleep). There can be an increase in nighttime awakenings and a decrease in the total sleep time. General pregnancy symptoms can lead to poor sleep in the late stages of pregnancy. These can include body aches/cramps, Restless Legs Syndrome, being uncomfortable in certain positions, heartburn, the baby's movements, the need to urinate during the night, and worrying.

There can also be challenges with sleep for a new mother after having her baby. After giving birth, the baby's feeding and sleeping schedule places more stress upon the mother. This can create more challenges with sleep times. Studies suggest that women with significant sleep issues, such as insomnia or poor

sleep quality, are more likely to report depression symptoms or even develop postpartum depression. When a new mother's sleep is severely interrupted, it can also lead to problems, including trouble bonding with the baby or caring for the baby, and even behavioral or emotional issues for the baby.

Tips to improve sleep during pregnancy:

- During pregnancy, a healthy diet is recommended to help minimize symptoms of heartburn.
- Heavy meals, caffeine, and spicy foods should be avoided within two to three hours prior to bedtime.
- Limit your fluid intake during the evening so that you do not have to get up as often to urinate.
- Have a comfortable bed, pillow and sheets.
- Try sleeping on your left side with one pillow at your back, one between your legs, and one to rest your arms on.

After the baby is born, it is very important to try to get as much sleep as possible. Sleep deprivation is quite common especially as you try to meet the needs of your newborn. The lack of sleep can affect your mood and may lead to postpartum blues or postpartum depression.

The following tips may help you get adequate sleep after delivery:

- Take a nap when your baby naps.
- Ask for help around the house and try to delegate household chores.
- Ask your partner for help with nighttime feedings.
- Have a daily routine for you and your baby.

How does menopause affect a woman's sleep?

Menopause is the period when the menstrual cycles ends. It can occur naturally, with hormonal changes or surgery. It can happen in your 40's or 50's when no menstrual period occurs for 12 months. During menopause, women have decreased deep sleep and increased nighttime awakenings. Changes in estrogen levels can result in hot flashes, night sweats, headaches, and palpitations, which can directly affect sleep.

Hot flashes usually last only a few minutes but it may take time for you to settle down into sleep again. This can interrupt sleep

and cause women to be tired during the day. It can also cause mood changes. About 20% of women will experience depression during this time.

The following tips may help ease problems with sleep that are caused by hot flashes:

- Control the temperature in your bedroom. Use fans and light bed linens.
- Do not take a hot bath or shower within one or two hours of bedtime.
- A variety of prescribed medications and over-the-counter supplements are available to treat hot flashes. Ask your healthcare provider which medications are safe and effective in managing your symptoms.

In postmenopausal women, the lack of progesterone increases the risk of development of obstructive sleep apnea (OSA). Sleep apnea can occur in about 47-67% of postmenopausal women. Symptoms include snoring, gasping or choking during sleep, frequent nighttime awakenings and daytime sleepiness. During menopause, the risk for sleep apnea in women increases. A sleep study may be needed to determine if you have sleep apnea and you should speak to your provider to discuss this.

What sleep disorders are women generally more likely to have?

1. Restless Legs Syndrome (RLS).

The key symptoms include: 1) having the urge to move the legs; 2) the urge to move the legs is worse during rest or inactive periods; 3) the urge to move the legs is improved with movement; 4) the urge to move the legs is worse in the evening; and 5) the symptoms are not due to other medical or behavioral problems.

RLS is 2 to 3 times more common in pregnant women than in the normal population. The symptoms can be bothersome but are usually relieved after delivery. The main contributors that may influence RLS during pregnancy are hormonal changes, iron levels and folate levels. While iron supplementation during pregnancy is considered to be safe, most drugs typically used to treat RLS, such as ropinirole and pramipexole, have not been studied extensively in pregnant women. You should talk to your provider about the risks of these medications during pregnancy.

2. Insomnia.

Insomnia is the most common sleep problem. One of the biggest causes for insomnia symptoms is hormonal change. In women, hormonal shifts occur through every phase of life. Controlling sleep problems brought on by hormonal changes starts with good sleep habits.

What can I do to get better sleep?

- Follow a regular sleep schedule. Go to bed and wake up the same time every day.
- Women need to make sure that they get enough sleep on a daily basis.
- Women should avoid stress as much as possible. Engage in a relaxing routine prior to bedtime.
- Have a comfortable sleep environment.
- For many women, insomnia is linked with depression. You may need to see your doctor if you have symptoms of

depression.

What if I have a problem sleeping?

You may be referred for a sleep study or to see a sleep specialist. Keep a sleep diary for a couple of weeks, noting when you get into and out of bed each day, when you sleep (including naps), and if you have any caffeine, alcohol, or nicotine throughout the day. You can share this diary with your healthcare provider. Your healthcare provider will want to know what medications you take, including any over-the-counter medications, herbs, and supplements.

If you are diagnosed with a sleep disorder, it is important to get treatment, because sleep disorders are generally long lasting and may cause or worsen other health problems, such as high blood pressure and heart disease.

Authors: Anita Rajagopal, MD, Ninotchka Liban Sigua, MD

Reviewers: Helena M. Schotland, MD, Iris A. Perez, MD, Marianna Sockrider MD, DrPH

Rx Action Steps

- ✓ Get 7-9 hours of sleep each day or enough sleep that you wake up feeling refreshed.
- ✓ Follow good sleep habits and a regular sleep schedule.
- ✓ Talk to your healthcare provider if you think you have a sleep problem.
- ✓ Never drive or operate heavy machinery if you are sleepy.

Healthcare Provider's Contact Number:

Resources

Centers for Disease Control and Prevention

- <http://www.cdc.gov/sleep/>

National Heart, Lung, and Blood Institute

Sleep Deprivation and Deficiency

- <http://www.nhlbi.nih.gov/health/health-topics/topics/sdd>

National Sleep Foundation

- <http://sleepfoundation.org>
- <http://drowsydriving.org>

Sleep Education—American Academy of Sleep Medicine

- www.sleepeducation.com/

American Thoracic Society

- <http://www.thoracic.org/patients/>
 - Healthy Sleep
 - Insomnia
 - Obstructive Sleep Apnea
 - Restless Leg Syndrome

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