

What is sleep apnea?

Sleep apnea is a common medical illness affecting millions of Americans. Sleep apnea can be central (e.g., due to a neurological condition such as a stroke) and due to a lack of respiratory effort, obstructive (due to a closed airway in spite of normal respiratory effort), or the combination of both.

Obstructive Sleep Apnea/Hypopnea Syndrome (OSAHS) is the most common cause of sleep apnea and is caused by the repetitive closing of a person's airway (e.g., trachea or "windpipe") while they are asleep. When a person goes to sleep, all of the body's muscles which are under voluntary control begin to relax, making it impossible to breath.

Apneas are the moments when breathing is stopped due to the obstructed movement of air (lasting more than 10 seconds) and *hypopneas* are moments of abnormal and decreased breathing due to obstruction. Snoring is common for many people with OSAHS. OSAHS causes poor sleep, excessive daytime sleepiness, and a number of other medical and psychiatric issues that comprise the syndrome.

How is it diagnosed?

OSAHS is diagnosed by a doctor who recognizes the combination of symptoms that are seen in people who have this syndrome. Specifically, many people with OSAHS may:

- 1) Experience poor sleep (e.g., waking up multiple times overnight)
- 2) Report excessive daytime sleepiness
- 3) Be aware of nighttime snoring
- 4) Have other symptoms such as unexplained high blood pressure, daytime headaches, or incontinence while sleeping (*nocturia*)

A definitive diagnosis of OSAHS is made using a test called a "sleep study," or a *polysomnogram*, that measures for apnea and hypopnea events that are present when a person sleeps overnight in a hospital or another medical setting.

Who is at risk?

Men are at greater risk of developing OSAHS than women and younger people are less likely to develop OSAHS than older individuals. People who are overweight are also significantly more likely to be diagnosed with OSAHS.

What are some of the complications of OSAHS?

People with OSAHS are more likely to develop high blood pressure and diabetes which increases the risk of heart disease and heart attacks. People with OSAHS are also at increased risk when undergoing surgeries or other procedures that require general anesthesia.

OSAHS and Mental Illness

Getting a good night's sleep is very important for all people, but even more so for people with depression, anxiety, bipolar disorder and other mental illnesses. Many mental illnesses can disrupt sleep when untreated, but sometimes it is the other way around: poor sleep worsens mental illness and makes it harder to treat the symptoms of mental illness.

The poor sleep that is caused by OSAHS has been shown to significantly worsen the symptoms of depression in scientific studies. Furthermore, severe OSAHS can decrease the efficacy of certain treatments in depression. All of the scientific data shows the connection between medical and mental illnesses: good treatment for OSAHS is necessary for recovery—or prevention—in both types of conditions.

What is the treatment for OSAHS?

After a diagnosis is made, sitting down and talking with a physician is the first step in the treatment of OSAHS. A person's doctor will likely counsel them on smoking and alcohol use; both of these substances may worsen OSAHS. People can also expect to be counseled to lose weight as this will decrease the severity of symptoms associated with this condition. Some people, who are taking medications that increase sleepiness, including some benzodiazepines, may also be advised to stop these medications.

Some people may seek treatment with stimulant medications or non-stimulant medications but these are not effective in treating the underlying cause of OSAHS. These medications are only useful in decrease daytime sleepiness.

Continuous Positive Airway Pressure (CPAP) is a treatment of choice in OSAHS. This consists of a mask that people wear on their face while sleeping in bed. This mask is attached to a machine that blows air into a person's nose and mouth and helps to keep the airway open. Most people find that this treatment is very effective.

Some people might also seek surgery to cure their OSAHS. It is not generally recommended for most people with OSAHS because non-surgical methods have proven more effective.

Another treatment used is a Mandibular Repositioning Splint (MRS), a "mouth guard" or an "oral device," which can help to open the airway and decrease apnea and hypopnea events.

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