

FAQs on Insomnia, Tiredness, and Snoring

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How does insomnia affect other areas of a person's life?

Insomnia is an inability or difficulty to initiate or maintain sleep. But it is more than just a problem with sleep. Insomnia is only a symptom that points to a more fundamental underlying problem. Many factors influence the amount and depth of sleep. Sleep is an activity that is necessary and critical for the development of a healthy mind and body.

The lack of sleep will have widespread repercussions on a person's physical and mental state of health. The most obvious manifestation arising from sleep deprivation is daytime sleepiness and tiredness.

When a person has not had enough sleep, there will be a decline in various psychomotor, mental and emotional parameters. An executive may experience a reduction in effectiveness, thinking skills and job performance at work. In an era when creativity and innovation are key success factors, the effect of feeling tired during the day can be disabling and demoralizing.

Students who feel chronically tired during the day as a result of sleep deprivation will suffer academic under-performance and a loss in motivation to press on with their schoolwork.

People who look sleep and perform poorly are often misunderstood and mislabeled as being lazy or incapable. As a result, they will miss out on important opportunities for work advancement, promotion and academic excellence.

In reality, these people are not lazy or slothful. They appear to be so simply because they have a medical problem which resulted in insomnia, daytime sleepiness, tiredness and under-performance.

Besides cognitive and intellectual functioning, moods are also affected. Over time, people who suffer from chronic sleep deprivation will become irritable, depressed and lose interest in life. They will experience an inability to cope with the stresses of life.

Insomnia and daytime somnolence can also be a cause of social embarrassment. Imagine dozing off and snoring loudly during a social function, or while in the company of friends and associates!

Daytime sleepiness can also be life-threatening too! This is because motor functions are also affected. A driver who is tired and sleepy will be less alert on the road. His motor reflexes will be tardy and slow. He is a threat not only to himself but to other road-users and pedestrians.

Scientific studies have shown that road traffic accidents are **FOUR TIMES** more common in drivers who suffer from insomnia and obstructive sleep apnea.

Children who have difficulty sleeping or who suffer from sleep apnea will suffer from failure to thrive. More than 80% of growth hormone secretion takes place during the deep stages of sleep. A child who lacks sleep on a chronic basis will have a reduction in growth hormone production, and will not grow physically to his full potential.

Is insomnia a symptom of a potentially more serious problem?

Insomnia is only a sign that an underlying problem exists. We have to search hard for the various underlying factors and reasons that contribute towards a particular person's problem of insomnia. We also have to assess the relative importance of the factors that we have identified. Treatment strategies will have to be prioritized to target the more important factors first.

It is a complex problem. We have to probe like detectives to search out the implicating factors, then determine which piece of the jigsaw puzzle is important and which is not.

The causes of insomnia include a large spectrum of diseases. They range from the easy-to-solve variety to the rare and exotic types that require great amounts of time, energy and resources to work out.

In simple terms, we can subdivide the causes of insomnia into:

1. Those that affect the mind and nervous system (psychiatric and neurological),
2. Those that affect the body (heart, lungs, nose and throat), and
3. Those due to environmental factors.

Depending on cause and complexity, a person with insomnia can be managed by either his family practitioner, or by specialists from different medical disciplines. Specialists who manage insomnia and snoring include Ear Nose Throat surgeons, psychiatrists, neurologists, respiratory physicians, and pediatricians.

Each specialty looks at the problem from different perspectives to provide the jigsaw pieces that go on to form a complete holistic picture of the patient's sleep problem.

For example, most hospital-based sleep studies are performed by the respiratory physician, while the psychiatrist advises on sleep hygiene, and provides relaxation and cognitive-behavioral therapy.

As an Ear Nose Throat Surgeon, my role in the whole scheme of things is to evaluate and manage the airways and breathing passages. I use an endoscope to critically evaluate the inside of the nose and throat to identify hot spots of potential airflow obstruction and airway narrowing during sleep. I manage the block nose, infected sinuses, enlarged adenoids, swollen tonsils, elongated palates, small chins, and retro-displaced tongues, which are frequently responsible for blocking the airways. A large array of technologies and modern inventions help me in my quest to alleviate the snoring problem. They include nose sprays, oral medications, appliances, special air pressure equipment, and modern surgical techniques.

Environmental causes of insomnia include noisy environments, such as the sound of traffic, or a noisy snoring bed partner. Students preparing for examinations, and executives who have very tight schedules may suffer from insomnia as a result of stress, anxiety and depression. Workers on shift work also frequently suffer from insomnia.

Many neurological and psychiatric problems also cause poor sleep quality. Patients with dementia or stroke have insomnia. Elderly patients with depression often experience early morning awakening. This is a phenomenon where the elderly person wakes up at 3 to 4 am in the morning, and would have difficulty going back to sleep.

Any physical problems that cause discomfort and bodily pain will interfere with sleep. Joint pains from arthritis, abdominal pain from chronic diarrhea, and breathlessness from heart or lung problems will deprive the sufferer of a good night's sleep.

I commonly see patients who have difficulty breathing through their nose at night, or who have a post-nasal drip when lying down at night. Patients with block nose tend to be restless, and to toss and turn a lot when they sleep at night in an attempt to alleviate the block nose. This disturbs their bed partners through their constant restlessness in bed. Some patients even have to wake up in the middle of the night just to sneeze, blow their nose, or clear their throat.

Secretions from the nose in someone with sinusitis will track back into the throat during sleep. This will cause throat irritation and inflammation. If the patient is a heavy sleeper, he may not cough during the night, but will do so the first thing in the morning when he wakes up.

Most people will not be able to wait till the next morning to clear their throat. They will cough, gasp and clear their throat incessantly throughout the night as a result of the irritation in the throat. Coughing can only occur when a person is aroused from sleep. The body and mind wakes up in the middle of

the night so that coughing and clearing of the accumulated secretions in the throat can take place. Sleep is therefore disturbed and fragmented.

No wonder many patients with chronic sinusitis look like they have been deprived of sleep for years!

Should a person take medications to cure insomnia?

It is interesting that most patients instinctively think of medications whenever they have difficulty sleeping. It is almost like a reflex.

So should a person take medications to cure or control insomnia?

That depends. If the insomnia is going to be transient and not expected to last for more than 3 weeks, then medications that facilitate sleep may be prescribed. Patients who have jet lag, or are anxious because of impending examinations or deadlines may be given a short course of sleeping pills for up to one month. Patients who have just lost a loved one and are in a state of bereavement may be given sleeping pills if they have insomnia.

But we must get away from the idea that sleeping medications are the best or only way of treating insomnia. There are many other methods and approaches that are superior to medications in alleviating insomnia. The use of sleeping pills will not be effective if the main cause of insomnia is due to breathlessness from cardiac failure or lung problems. Sleeping pills can even be dangerous and life threatening if the patient has snoring or obstructive sleep apnea syndrome. In such patients, who have airway narrowing during sleep, they need all the respiratory drive they can muster to maintain oxygen levels in the blood. Sleeping pills cause the airways to narrow even further and reduce the respiratory drive. Oxygen levels may drop precipitously to such low levels as to induce abnormal heart rhythms and threaten life.

How is snoring potentially dangerous

Snoring is produced when turbulent inspired air causes the palate and tissues of the throat to vibrate. The turbulent airflow occurs when there is a narrowing in the nose, palate or throat. Snoring that is intermittent and mild, and which is not associated with sleep fragmentation or daytime somnolence is a benign condition. But when snoring is persistent and loud, or when the patient's sleep is disturbed, then treatment will be necessary.

Loud and persistent snoring is an annoyance to family members who will lose sleep because of the noisy disturbance. It may produce marital discord or a less than happy family when the bed partner decides to move into another room to get some sleep.

Loud snoring and a narrowed airway may produce arousals and awakenings during sleep. With the onset of daytime sleepiness, the patient starts to feel an adverse impact in his work and social activities. Snoring of this nature may

result in long term health problems such as hypertension, heart attack and stroke.

How is snoring related to sleep apnea?

Sleep apnea can be one of two types: obstructive and non-obstructive. Obstructive sleep apnea is the common garden variety that is caused by a narrowing of the airways from enlarged tonsils or an obese neck.

Snoring is caused by a partial obstruction of airways such that turbulent flow of air is generated. Obstructive sleep apnea is caused by the intermittent complete obstruction of the airways such that there is complete cessation of airflow at intermittent intervals. Each episode of complete cessation of airflow that lasts for more than 10 seconds is an apnea. During these episodes, oxygen levels in the blood will fall. The patient is automatically aroused by this drop in oxygen level so that he is able to launch an effort to breathe again. In fact, he is literally fighting for his breath.

Usually snoring and sleep apnea are well correlated. This means that as snoring becomes louder, the apnea is more severe. Occasionally there can be a paradoxical situation where apnea worsens but snoring becomes softer instead of louder. This happens when the apneas are so severe that the reduced airflow is unable to produce loud snoring.

Although snoring creates problems, obstructive sleep apnea is a more serious medical condition that demands urgent medical attention.

What can you do to fix a snoring problem?

A snoring problem needs to be fixed. But obstructive sleep apnea needs more urgent medical attention.

Treatment of obstructive sleep apnea is directed at solving the current problems that the patient is experiencing, as well as to avert the future complications that will arise if sleep apnea is left untreated.

Current problems include daytime sleepiness, poor job performance, impaired cognitive and intellectual functioning, reduced motor skills, and increased risk while on the road.

Future complications that may arise from untreated sleep apnea include hypertension, heart disease and stroke.

We should always try to troubleshoot first before attempting to fix the problem. Proper diagnosis should always precede any therapeutic measures we take to alleviate the problem.

Obesity and weight gain play a dominant contributory role in many cases of obstructive sleep apnea. A rational dietary program that aims to help the patient lose weight is an important part of management. Other simple

measures include abstinence from alcohol and sleeping pills as these tend to exacerbate the severity of apnea.

The patient's cardiovascular status should be evaluated. Many of these patients may already have hypertension without knowing it. Identification of hypertension is essential as it necessitates active management to prevent the future development of heart disease and stroke. Good control of hypertension is also a prerequisite for safe surgery if this option is contemplated. Hormonal problems like low thyroid levels should also be looked for and treated when present.

Patients with block nose have to be treated. Nasal obstruction worsens snoring and apnea. This is because the lungs would need to generate a greater amount of suction in order to draw air past the obstructed nose into the lungs. A simple course of nasal sprays may be all that is required to alleviate the block nose.

When all the prior preliminary treatments have been undertaken, it is now time to grab the bull by its horns. The first choice of treatment for moderate to severe obstructive sleep apnea is continuous positive airways pressure (CPAP). This is a treatment method using a device that administers compressed air into the patient's collapsible airways in order to keep them open, and to allow air to flow unimpeded. The patient uses a mask that fits over his nose. Administered compressed air converts the relative vacuum in the airways into positive pressure. The hardware that is required to do this is only about the size and weight of a laptop computer. It can be easily carried around in case the patient travels.

Some patients find CPAP cumbersome, and are unable to tolerate using a mask for long periods of time. Others find it unappealing to face the prospect of having to use a piece of equipment for the rest of their lives. These people resort to surgery.

Surgery for snoring and obstructive sleep apnea consists of removing the tonsils, trimming away excessive tissue at the back of the throat, and refashioning the soft palate. The operation is called uvulo-palato-pharyngoplasty or UP3 for short. When apnea is mild, and snoring is not associated with sleep fragmentation, then a lesser operation may be performed. This consists of simply refashioning the soft palate without any attempt to remove the tonsils using either a laser or radiofrequency equipment. The operation is called a laser-assisted or radiofrequency-assisted uvulo-palatoplasty.

Implants may also be inserted into the palate to prevent it from vibrating excessively. This operation is called the Pillar Procedure.

Occasionally when the tongue or small chin is the cause of airway collapse during sleep, operation can be performed to advance the chin and to draw the tongue forward.

When the nose is obstructed or when sinusitis is persistent and refractory to drug treatment, surgery may be performed to widen the nasal passages, remove the adenoids, and to facilitate drainage of the sinuses.

In the past before we had all these modern approaches to surgery, the cure for snoring and sleep apnea was achieved by simply opening a hole in the trachea in the neck. This is called a tracheostomy. The operation achieved a cure by allowing air to flow directly into the trachea and lungs instead of having to flow through an obstructed and collapsed airway in the neck. In effect, the tracheostomy operation allowed air to bypass and circumvent the obstruction in the neck. A tracheostomy is extremely effective in alleviating snoring and sleep apnea. The reason why it is not so often done nowadays is because of the social stigma of having a hole in the neck.

Presently, a tracheostomy is performed for snoring and sleep apnea only when the problem is severe, life-threatening, and when other options have failed in salvaging the situation.