

Insomnia: Thief of Sleep

BY FRANCES A. TAYLOR, MA, CHom

ABSTRACT

Sleep is necessary for life, health, and happiness. Insomnia is both a symptom and a sleep disorder that is described as difficulty initiating or maintaining sleep, or both; waking up too early in the morning; or unrefreshing sleep. Insomnia is a thief of sleep that can directly affect the health and happiness of a person who has the misfortune to suffer from it. Sleep is restorative and is the critical period when the body rests and rejuvenates. Poor sleep can have devastating effects on health, quality of life, and productivity. There are several types of insomnia, all of which result in sleep deprivation, and which have many postulated causes. There are also many treatments, some of which are more helpful than others. Allergy can play a large role in insomnia and NAET® offers help on several fronts that can help resolve and eliminate this problem.

INTRODUCTION

Sleep is as important to health and life as are food and water. In fact, as shown by animal studies, regular sleep is essential for survival. Sleep affects our daily functioning, physical health, and mental health. At one time sleep was considered to be a passive, dormant activity. Studies that began in the 1950s and are continuing have shown that our brains are very active during sleep. Many aspects about sleep are just now becoming understood. There are at least 84 sleep disorders that can lower quality of life and affect personal health. Insomnia is just one of them.

Sleep is a restorative activity. If sleep time is cut short, the body does not have time to complete muscle repair, consolidate memory, or restore energy. Hormones essential for growth and development as well as ghrelin

and leptin that play a role in hunger are not released in the proper amounts. The person with poor sleep (less sleep time) wakes up less able to concentrate, make decisions, or participate fully in activities. Sleep also affects the immune system. Studies have shown that when sleep patterns are interrupted the natural killer cells (NKC) of the immune system are significantly reduced. These cells are important to the natural defense system of the body. Sleep is also necessary for proper functioning of the nervous system and poor sleep may contribute to obesity, diabetes, and hypertension.

One-third of adults have trouble sleeping at some time, and nearly everyone experiences an occasional sleepless night. However, insomnia can be a constant

problem and is like a thief that robs its sufferers of hours of sleep. It is described as inadequate or poor quality sleep that is caused by difficulty falling asleep; difficulty staying asleep; waking up frequently during the night with difficulty returning to sleep; waking up too early in the morning; or unrefreshing sleep. Unrefreshing or poor quality of sleep occurs despite adequate time and opportunity for sleep and results in some form of daytime impairment as a result. This daytime impairment may include irritability; depression or anxiety; problems with memory; flawed judgment; difficulty paying attention or focusing on tasks; increased errors; increased likelihood of accidents at home, in the work place, and while driving; tension headaches; gastrointestinal symptoms; and ongoing worries about sleep. Mental health disorders, heavy stress loads, night work or changing shifts, eating too much late in the evening, being over age 60, or frequent long distance travel may increase the risk of insomnia.

Reports of insomnia occur all over the world. According to the National Sleep Foundation, in the United States as many as 76% of Americans have trouble falling asleep. Others can get to sleep, but wake up in the early morning hours and cannot go back to sleep. In Canada, 20% of French Canadians report having insomnia. A study of young adults in Switzerland revealed 9% chronic insomnia. In Australia insomnia affects up to a quarter of the population. The World Health Organization conducted a study at 15 different centers and found reports of “difficulty sleeping” to be 27%. No data support an association for or against race as a risk factor for insomnia. Insomnia occurs more frequently in women than men, but women with menstrual problems are more likely to report insomnia than women without these problems. Pregnancy can also cause sleep problems (Facco, *et al*, 2010; Hinter, 2009; Krohn and Taylor, 2002; Kyle, *et al*, 2009; Mayo Clinic, 2009; NIH, 1995; NSF, 2006, 2009).

Insomnia affects the employed population in more ways than productivity. It is associated with greater absenteeism, increased costs, and an increased number of comorbid conditions. A study estimated that the annual cost of insomnia in the US civilian labor force to be between approximately \$15 to \$17 million annually. Costs of insomnia include costs of drugs, visits to physicians, sick leave, short-term disability, long-term disability, and workers’ compensation. Employees with insomnia missed an average of slightly over 3

more workdays annually than those without insomnia (Kleinman, *et al*, 2009).

Types of Insomnia

Insomnia may be classified in many different ways, usually based on the time factors involved. There is much disagreement about the various classifications of insomnia as well the time involved for the different types of insomnia and the timing of the occurrence of the symptoms. One basic classification of insomnia is that of primary or secondary insomnia.

In primary insomnia, sometimes called psychophysiological insomnia, a person has sleep difficulties that are not associated with any other health condition or problem. There will be evidence of conditioned sleep difficulty such as excessive focus and heightened anxiety about sleep; difficulty falling asleep at scheduled times, but none when not intending to sleep. The ability to sleep is better away from home, and there is mental arousal in bed either by intrusive thoughts or inability to cease sleep-preventing mental activity. There may also be heightened tension in bed as shown by perceived inability to relax the body sufficiently to allow sleep. Attention tasks and working memory tasks show performance deficits more often in these insomnia patients (Shekleton, *et al.*, 2009; Ustinov, *et al*, 2009)).

With secondary insomnia the person has sleep problems because of a health condition. They have a coexisting medical condition that interrupts sleep. The onset of insomnia clearly coincides with onset or progression of the illness and wanes with the severity of the illness. Health conditions connected to this type of insomnia might include asthma, arthritis, cancer, depression, heartburn, or other health problems. Secondary insomnia may also be caused by a medication the person is taking, such as pain medication, or a substance they are using or consuming like alcohol, caffeine, or nicotine (Passaro, 2009; Smith, 2008).

Insomnia may also be considered from the standpoint of the length of time the symptoms have persisted and how often they occur. The time involved varies in the definitions given by sleep disorder authorities. With transient insomnia the symptoms last from a few days to weeks and result in sleepiness and impaired psychomotor performance. Transient or short term insomnia can be caused by changes in the sleep environment, temperature extremes, environmental noise, the timing of sleep, major

life change such as a new job or loss of a relationship, severe depression, or by stress. The symptoms usually last less than one week. Insomnia is considered to be intermittent (on and off) if the symptoms of transient insomnia recur from time to time. If the symptoms last between one week to three weeks, the insomnia is considered short-term insomnia.

Acute insomnia is considered to be the inability to consistently sleep well for three weeks to six months. If the symptoms occur on most nights and last longer than this, the insomnia is considered to be chronic or constant. This type of insomnia can last for years and either be caused by another disorder or can be a primary disorder. Symptoms resulting from this type of insomnia can include sleepiness, muscular fatigue, hallucinations, and/or mental fatigue. However, some people with chronic insomnia may exhibit increased alertness. People with chronic insomnia should always be evaluated to be certain the sleep problem is not caused by a medical or psychiatric condition that requires treatment (Nabili, 2009; NIH, 1995; NSF, 2006).

Chronic insomnia is more likely in the elderly and may be as high as 50% whereas the rate in the younger adult population is around 25%. Medical illnesses, losses of family members or friends, and psychosocial stressors may be the reason for this increase. Chronic pain or rheumatological syndromes frequently play a role. Many elderly people are given numerous prescription medications for various conditions. One or more of these medications or their interactions may contribute to insomnia. Pain control measures frequently improve insomnia in the elderly (Buysse, *et al*, 2009; Fetveit and Bjorvatn, 2009; Passaro, 2009).

Middle-of-the-night insomnia is characterized by difficulty in returning to sleep after waking during the night. It is also called nocturnal awakenings, middle of the night awakenings, and middle insomnia. This interrupted sleep can cause excessive daytime sleepiness that can be nearly two times higher than that experienced by people who sleep through the night. Many people who experience this type of insomnia complain of fatigue the following day, and it is the most frequently reported insomnia. Approximately 35% of Americans over 18 report waking up in the middle of the night three or more times a week. Common causes include pain, anxiety, difficulty breathing, need to use the bathroom, hunger or thirst, dreams, noise, or children who must be seen about (Ohayon, 2008).

Confirmation of behavioral insomnia of childhood is based on observation of caregivers. The child will have difficulty falling asleep, and it will be an exhaustive process that requires special efforts. Sleep onset conditions will be highly problematic or demanding for both the child and parents. The child will have difficulty maintaining sleep, and nighttime awakenings require intervention by caregivers or parents for the child to return to sleep. The child may stall or refuse to go to bed at an appropriate time or refuses to go back to bed after a nighttime awakening. Sufficient and appropriate limit setting by the caregiver or parents help establish appropriate sleeping behavior in the child.

Idiopathic insomnia is considered to be a primary sleep disorder with unknown cause. It begins in infancy or childhood with no identifiable cause or participating event. It continues with no interruption or remission into adulthood and results in lifelong sleep problems. Reports place the occurrence at 0.7% in adolescents and 1% in very young adults. This type of insomnia may run in families (Nabili, 2009; Passaro, 2009; Sørensen, 2009).

Fatal familial insomnia is a very rare inherited prion disease of the brain. It is autosomal dominant and the gene mutation has been found worldwide in 50 families. The age of onset is variable and ranges from 30 to 60 with average age of 50. It can also appear after childbirth. The disease has four stages, taking 7 to 18 months to run its course. Presentation of the disease varies considerably from person to person, even in the same family. For about four months, the person suffers from increasing insomnia, resulting in panic attacks, paranoia and phobias. In the next stage, which lasts about five months, hallucinations and panic attacks become more noticeable. Complete inability to sleep followed by rapid loss of weight lasts for about three months. The person then develops dementia, is unresponsive or mute for about 6 months, and will subsequently die. There have been a few cases reported in which there was no significant family history of cognitive difficulties, paranoia, and insomnia. These cases are called sporadic fatal insomnia and are a prion disease (Barash, 2009; Friedrich, *et al*, 2008; Loh and Hinds, 2010; Priano, *et al*, 2009).

Causes of Insomnia

Except for fatal familial insomnia or sporadic fatal insomnia in which there is specific pathology for the

insomnia, there is not one specific cause of other types of insomnia. Instead, multiple factors are known to contribute to all of the various types of insomnia. Some of the factors may play a role in any type of insomnia.

Acute insomnia causes can include significant life stress such as job loss or change, death of a loved one, divorce, or moving. Illness may play a role as can emotional or physical discomfort. Environmental factors that may interfere with sleep include noise, light, or extreme temperatures of heat or cold. Interferences in a normal sleep schedule such as those encountered in jet lag or switching shifts can be a problem because the circadian rhythm is disturbed. Some medications such as formulations used to treat colds, allergies, depression, hypertension, and asthma can interfere with sleep. Abuse of over-the-counter or even prescription sleep aids can produce rebound insomnia.

Chronic insomnia is more complex and may result from a combination of factors. It can be linked to an underlying medical or psychiatric condition. Some causes of chronic insomnia include depression and/or anxiety, chronic stress, and pain or discomfort at night. Any injury or condition that causes pain can prevent an individual from finding a comfortable position in which to sleep. Pain can also cause awakening if the person rolls over and puts pressure on the injured or painful area of the body. Hormone shifts such as those that precede menstruation or those associated with menopause can affect sleep. Estrogen plays an important role in insomnia and in the health of women. Rheumatoid arthritis and hyperthyroidism are medical conditions that can contribute to insomnia.

Mental states or disorders that affect sleep and can produce insomnia are bipolar disorder, generalized anxiety disorder, post traumatic stress disorder, schizophrenia, or obsessive compulsive disorder. The insomnia may be temporarily or permanently associated with the mental state or disorder, but in some cases it may appear a few days or weeks before the underlying mental aspects are evident. Other medical conditions that trigger insomnia include chronic fatigue syndrome, congestive heart failure, night time angina from heart disease, acid reflux disease, chronic obstructive pulmonary disease, nocturnal asthma, obstructive sleep apnea, degenerative diseases, and brain pathology such as tumors, strokes, or trauma to the brain.

Dysfunction of body core temperature is a factor in insomnia. The rise and fall of body temperature is

a mechanism the body uses to produce the feeling of being awake or being tired. In a normal cycle, the body temperature reaches its lowest point at around 4 am. When it starts to rise, the person wakes up and wakefulness increases until afternoon. There is a temporary slump and then the temperature continues to rise until around 10 pm. When it begins to drop again, the person begins to feel sleepy. Sleep onset insomnia is associated with delayed temperature rhythm. Early morning awakening insomnia is associated with an advanced temperature. Sleep maintenance insomnia has been associated with an elevated core body temperature.

Drugs, including stimulants or psychoactive drugs, used to treat coexisting medical conditions can cause insomnia. Insomnia may be associated with exposure to the drug, medication side effects, use or abuse of the drug, or acute withdrawal from the drug. Alcohol, caffeine, nicotine, and some types of herbs can also contribute to insomnia. Drinking alcoholic beverages or coffee, either in excessive amounts or just before bedtime, can perpetuate insomnia as can smoking cigarettes before bedtime.

Life problems, depending on their severity, can contribute to insomnia. Fear, stress, anxiety, dysfunctional beliefs, emotional or mental tension, work problems, financial stress, or unsatisfactory sex life cause some people to have insomnia. Insomnia may be perpetuated in some people expecting to have difficulty sleeping and who worry about it. Frequent daytime napping including excessive napping in the afternoon or evening may have a negative effect on the ability to go to sleep (Lack, *et al*, 2008; Morris, *et al*, 1990; Nabili, 2009; NIH, 1995; NSF, 2006, 2009; Parish, 2009; Passaro, 2009).

Diagnosis and Treatment of Insomnia

A sleep history and comprehensive medical history are basic to diagnosing insomnia. If there is a medical or psychological illness that may be contributing to the patient's insomnia, it must be identified. A thorough physical examination as well as screening for psychiatric disorders is indicated. The sleep history regarding quantity and quality of sleep may be obtained from the sleep diary of the patient or from the bed partner of the patient. Drug use, both recreational and prescription

must be considered. Alcohol use and even smoking habits can be contributing factors to insomnia. Snoring by the person who has insomnia or by the bed partner can prevent sleep. Snoring as well as recent weight gain may be of importance as these suggest the possibility of sleep apnea.

Although not a part of the routine initial workup for insomnia, specialized sleep studies may be of value, especially for complex problems and if the history is suggestive of sleep apnea or restless legs syndrome. Specialists in sleep medicine, usually affiliated or associated with sleep laboratories where the polysomnograms are performed, are qualified to diagnose many different sleep disorders (NIH, 1995; NSF, 2006, 2009; Passaro, 2009).

Treatment for insomnia will depend on causative factors. However, for any sleep problem, sleep hygiene should be corrected before pharmacological or any other measures are considered. Sleep hygiene involves controlling all behavioral and environmental factors that precede sleep and may interfere with sleep. Sleep hygiene can be of some help for virtually every type of insomnia. For some people with mild or moderate insomnia, improving sleep hygiene can provide a cure. For severe insomnia it certainly will help, but other measures may be needed in addition (Passarella and Duong, 2008; Ramakrishnan and Scheid, 2007).

The bedroom is all important in sleep hygiene and combating insomnia. It must be conducive to sleep, including being quiet and clean. Many people can go to sleep and sleep through all types of noise. Most insomniacs cannot, and noise within the house as well as noise from the neighbors must be controlled. Attaining acceptable noise levels is sometimes difficult, particularly if it involves noise from neighbors. Breathing well is essential to sleeping well. Cleanliness is essential to good breathing, which makes the absence of dust of utmost importance in the bedroom. Temperature is also a factor in making sleep easier. There will be a temperature that each insomniac prefers. If there is a rheumatic condition, either in the insomniac or their bed partner, a warmer room is very helpful. A totally dark room is the best sleep environment, but some people must have a nightlight.

The bed is very important for sleep, and having a comfortable mattress is essential. Mattresses do not last forever and need to be replaced whenever they are no longer comfortable. Television, clock watching, and reading in bed can occupy attention and prohibit sleep.

Eating in bed or working and operating a business out of the bedroom and on the bed can also prohibit sleep. The bed should never be used for anything but sleeping or sex. It is important that any mental associations with the bed involve only these two activities. If the person cannot sleep, rather than tossing and turning, they should get up and do some "mindless" activity (goal oriented activities should be avoided) until they feel sleepy. They probably will then be able to sleep when they return to bed. A regular sleeping and awakening schedule is important, even on weekends, as is not oversleeping or "sleeping in."

Activities close to bedtime should be monitored. Eating too much and eating too close to bedtime can interfere with sleep. However, the person should not go to bed hungry. Consumption of alcohol, coffee, and smoking close to bedtime can also interfere with and prevent sleep. Exercise can help sleep, but for some people exercise in the evening can energize them and affect their ability to go to sleep. Frequent naps, long naps, and sleeping late in the afternoon can adversely affect nighttime sleep. Obsessing about problems after going to bed can also prevent sleep. Sometimes "worry" sessions earlier in the day can prevent thinking about the problems after getting into bed and can eliminate this problem (Krakow, 2002; Krohn and Taylor, 2002).

If sleep hygiene improves but does not eliminate insomnia, more help is required. Relaxation therapies, stimulus control, hypnosis, acupuncture, reflexology, and cognitive behavioral therapies may help. Sleep studies can provide helpful information, and for some types of sleep problems a CPAP or BiPAP will help. Other times pharmacological help is indicated. Medications should not be used as the only therapy. If sedatives are combined with behavioral therapy, patients are more able to wean off of the sedatives (Hughes, *et al*, 2009; Nabili, 2009; Ng and Lee, 2008, Vitiello, *et al*, 2009).

Several types of medication are used to treat insomnia. Benzodiazepine sedatives are frequently used. Subjective reports indicate help and improvement with these medications that include Restoril, Dalmane, Halcion, ProSom, Eurodin, Ativan, and Klonopin. Lunesta, Sonata and Ambien are nonbenzodiazepine medications that may be used. Rozerem is a prescription drug that stimulates melatonin receptors. Sometimes melatonin supplementation is also helpful. If there is coexisting depression, Elavil, Endep, and Desyrel, which are antidepressants, are sometimes prescribed. However,

they may not help insomnia if there is no accompanying depression. Antihistamines can induce drowsiness, but they do not improve sleep and should not be used for chronic insomnia. Valerian is an herbal preparation used in the United States for treating insomnia, but again is of little value for chronic insomnia (Krohn and Taylor, 2002; Nabili, 2009; Vitiello, *et al*, 2009).

Insomnia and NAET®

NAET® offers unification for insomnia, both for eliciting the causes of the insomnia as well as treatment to resolve it. Allergy and its effects on the body are prime causers of insomnia. Allergies cause blockages in the energy pathways and normal energy circulation through the energy channels is impaired. The body does not function properly and the brain does not coordinate vital organs. Poor function of the organs can create toxic buildup. If the toxic buildup is in the nervous system, insomnia can result. Insomnia can also be the result of acute allergic symptoms and blockage in the lung meridian. People can be allergic to many different things that can cause insomnia. Foods, chemicals, pollens, molds, emotions, and even other people can trigger allergic reactions that result in many different symptoms, including insomnia.

Food allergy can be a culprit, and most people will not connect it to their insomnia. Many people of all ages have a bedtime snack before they go to bed. Allergy to the snack food or allergy to vitamins or phenolics in the snack food can cause people to have insomnia. Symptoms triggered by food allergy, such as eczema, hives, rashes, or itching can keep people awake. Headache pain caused by food allergy can make going to sleep very difficult or wake people from sleep. Allergy to sugar can stimulate a person, particularly a child, to the point that they cannot sleep. Allergies to foods frequently eaten can cause a nervous system allergy that results in insomnia.

Allergy to chemicals can contribute to insomnia in many different ways. A person can be allergic to the materials either in their bed clothes or their pillows, mattresses, or bedding on their beds. They may also be allergic to the laundry products used on these items. Any of these allergies can cause insomnia. If the allergy causes a blockage in the spleen meridian, the person may have difficulty falling asleep, but will be able to sleep through the night once they go to sleep. If there is blockage in the heart meridian the person may not sleep

through the night. They may wake up several times during the night, and may have difficulty falling asleep again. Chemical allergies to jewelry, implants in the body, cleaning products, tobacco, medications, or even cosmetics and toiletries can cause energy blockages that trigger insomnia.

Insomnia is a typical symptom for people who have IgG pollen allergies. During pollen season their insomnia worsens. Diarrhea is also a common symptom of this type of allergy. Treatment for their pollen allergies offers them relief for both the insomnia and diarrhea. Mold contamination in a house can cause people to have insomnia in addition to many other symptoms because of their mold allergy. Allergy to *Candida albicans*, a common yeast infection in men, woman, and children can be a factor in insomnia.

People can have allergies to other people. If one or both people who are bed partners are allergic to each other, the presence of the “allergen person” in the bed can make sleep difficult and insomnia a certainty for the other person. Children sharing a bedroom may have insomnia because of this type of an allergy.

Nervous system allergy is paramount in causing insomnia. Balancing a person with BBF will help considerably as well as using NAET® to balance the sympathetic and parasympathetic nervous system. People, both adults and children, who report insomnia or sleep difficulty, will nearly always have an imbalance in the sympathetic and parasympathetic nervous systems. The sympathetic nervous system will usually be too active.

All of these types of allergies can be treated with NAET®. Insomnia will be relieved and all other symptoms related to the allergy will be resolved as well. Health, happiness, quality of life, and productivity will be restored when the person is able to get quality sleep (Nambudripad, 2002).

Conclusion

Insomnia is a thief that robs people of hours of sleep that are essential to their health, well being, quality of life, and performance. There are many different types of insomnia and even more postulated causes of insomnia. The success of treatments for insomnia is partially dependent on using a treatment that is effective for the type of insomnia involved. NAET® offers both an explanation for the causes of insomnia, and well as

treatment possibilities that treat and eliminate the allergic causes of this symptom and sleep disorder.

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For Reprints:

Frances A. Taylor, MA, CHom
Los Alamos Medical Center, Suite 136
3917 West Road
Los Alamos, NM 87544
E-mail FTallergy@aol.com