# World Journal of Pharmaceutical and Life Sciences WJPLS

www.wjpls.org

SJIF Impact Factor: 5.088



<sup>1</sup>\*Dr. Twinkle Gupta, <sup>2</sup>Dr. Sandeep Bhagat, <sup>3</sup>Dr. Shivani Gupta,

<sup>1</sup>Associate Professor, Department of Kayachikitsa. Jammu Institute of Ayurveda and Research.
<sup>2</sup>Assistant Professor, Department of Kriyasharir. Jammu Institute of Ayurveda and Research.
<sup>3</sup>P.G. Scholar, Department of Kayachikitsa. Jammu Institute of Ayurveda and Research.

\*Corresponding Author: Dr. Shivani Gupta

PG. Scholar, Department of Kayachikitsa, Jammu Institute of Ayurveda and Research.

Article Received on 02/04/2018

Article Revised on 23/04/2018

Article Accepted on 13/05/2018

#### ABSTRACT

Sleep is a natural phenomenon of giving adequate rest to the body and mind. Insomnia is the inability to fall asleep at night for many hours or inability to have a sound sleep, which deprives one of natural rest and interferes with activities during the day. Each of us has suffered a restless night at some point in our lives. We've all occasionally sacrificed sleep for a cram session before an exam, or an important deadline. Many of us also know the feeling of losing sleep due to an intense emotional upset or the accumulation of stress or anxiety. For some of us, loss of sleep is short-lived; for others, it is chronic and we've come to anticipate losing sleep on a regular basis. Insomnia can be caused by elevated or chronic stress, illness, physical discomfort, environmental factors, changes in our schedules, side effects from prescribed medications, depression, anxiety, and many other factors<sup>[1]</sup> Our bodies crave sleep for good reason and there are actually serious health risks associated with sleep loss, which can have complicated effects on both the physiology and the mind. Ayurveda offers time-tested tools that truly support our bodies in reclaiming their natural rhythms. This article gives a break from the fretful anticipation of sleeplessness that so often accompanies insomnia and instead focuses on real and meaningful tools for balancing our sleep cycles.

KEYWORDS: Insomnia, anidra, sleep, anxiety, depression, stress.

### INTRODUCTION

According to guidelines from National sleep foundation, insomnia is difficulty falling asleep or staying asleep, even when a person has the chance to do so. Insomnia is a sleep disorder that regularly affects millions of people worldwide. In short, individuals with insomnia find it difficult to fall asleep or stay asleep. The effects can be devastating. Insomnia is a common sleep problem for adults. The National Institutes of Health estimates that roughly 30 percent of the general population complains of sleep disruption, and approximately 10 percent have associated symptoms of daytime functional impairment consistent with the diagnosis of insomnia.

In a 2005 National Sleep Foundation (NSF) Poll, more than half of people reported at least one symptom of insomnia (difficulty falling asleep, waking up a lot during the night, waking up too early and not being able to get back to sleep, or waking up feeling un-refreshed) at least a few nights per week within the past year. Thirty-three percent said they had at least one of these symptoms every night or almost every night in the past year. The two most common symptoms, experienced at least a few nights a week in the past year, included waking up feeling not refreshed and waking up a lot during the night. A 2002 NSF Poll found that 63 percent of women (versus 54 percent of men) experienced symptoms of insomnia at least a few nights per week.

Other polls have found interesting trends associated with insomnia. For example, 68 percent of adults ages 18 to 29 report experiencing symptoms of insomnia, compared with 59 percent of adults ages 30 to 64, and only 44 percent of people over the age of 65. Not surprisingly, parents report more insomnia symptoms than adults without children in the household (66 vs. 54 percent).

The international classification of sleep disorders-2 (2005) (ICSD-2) classifies the sleep disorders in six major categories:<sup>[2]</sup>

- 1. Insomnia
- 2. Sleep related breathing disorders
- 3. Hypersomnia's
- 4. Circadian rhythm sleep disorder
- 5. Parasomnia
- 6. Sleep related movement disorders

## Epidemiological Studies from India

There are but few studies from India which looked at the prevalence of India among different segments of the population. Panda et al studied the prevalence of sleep related disorders among healthy population from South Indian states. Among 1050 apparently healthy attendants/ relatives of patients attending a tertiary care hospital in a population of 35.1 + 8.7 years age insomnia was reported in 18.6% of the patients with 18% for initiation of sleep, 18% for maintenance and 7.9% with early morning awakening. Hypertension was noted in 42.6% of the subjects.<sup>[3]</sup> Suri et al have undertaken several questionnaire based studies in Delhi among different age groups. In a study among 2475 adult subjects of 30-60 vears, it was found that 28.1% of the subjects reported to have complaints suggestive of disorders of initiation and maintenance of sleep.<sup>[4]</sup> Insomnia also understandably is extremely common among shift workers and patients with circadian rhythm sleep disorders because of disturbances in the normal sleep wake cycle due to work or social demands.

### Types of Insomnia

Insomnia is commonly separated into three types

- **Transient insomnia** occurs when symptoms last up to three nights.
- Acute insomnia is brief and often happens because of life circumstances (for example, when you can't fall asleep the night before an examination or after receiving stressful or bad news). Many people may have experienced this type of passing sleep disruption, and it tends to resolve without any treatment.
- Chronic insomnia is disrupted sleep that occurs at least three nights per week and lasts at least three months. Chronic insomnia disorders can have many causes. Changes in the environment, unhealthy sleep habits, shift work, other clinical disorders, and certain medications could lead to a long-term pattern of insufficient sleep. People with chronic insomnia may benefit from some form of treatment to help them get back to healthy sleep patterns. Chronic insomnia can be comorbid, meaning it is linked to another medical or psychiatric issue, although sometimes it's difficult to understand this cause and effect relationship.

# Causes<sup>[5]</sup>

Insomnia can be caused by physical and psychological factors. There is sometimes an underlying medical condition that causes chronic insomnia, while transient insomnia may be due to a recent event or occurrence. Insomnia is commonly caused by

- 1. Disruptions in circadian rhythm- jet lag, job shift changes, high altitudes, environmental noise, extreme heat or cold.
- 2. Psychological issues bipolar disorder, depression, anxiety disorders, or psychotic disorders.
- **3.** Medical conditions chronic pain, chronic fatigue syndrome, congestive heart failure, angina, acid-

reflux disease (GERD), chronic obstructive pulmonary disease, asthma, sleep apnea, Parkinson's and Alzheimer's diseases, hyperthyroidism, arthritis, brain lesions, tumors, stroke.

- 4. Hormones estrogen, hormone shifts during menstruation.
- 5. Other factors sleeping next to a snoring partner, parasites, genetic conditions, overactive mind, pregnancy.
- 6. Media technology in the bedroom- Several small studies in adults and children have suggested that an exposure to light from televisions and smartphones prior to going to sleep can affect natural melatonin levels and lead to increased time to sleep. In addition, a study conducted by Rensselaer Polytechnic Institute found that backlit tablet computers can affect sleep patterns. These studies suggest that technology in the bedroom can worsen insomnia, leading to more complications.
- **7. Medications** According to the American Association of Retired Persons (AARP), the following medications can cause insomnia in some patients:

Corticosteroids, statins, alpha blockers, beta blockers, anti-depressants, ACE inhibitors, ARBs (angiotensin II-receptor blockers), cholinesterase inhibitors, second generation (non-sedating) H1 agonists, glucosamine/ chondroitin

#### Signs and Symptoms

Insomnia itself may be a symptom of an underlying medical condition. However, there are many signs and symptoms that are associated with insomnia:

- Difficulty falling asleep at night.
- Waking during the night.
- Waking earlier than desired.
- Still feeling tired after a night's sleep.
- Daytime fatigue or sleepiness.
- Irritability, depression, or anxiety.
- Poor concentration and focus.
- Being uncoordinated, an increase in errors or accidents.
- Tension headaches (feels like a tight band around head).
- Difficulty socializing.
- Gastrointestinal symptoms.
- Worrying about sleeping.

Sleep deprivation can cause other symptoms. The afflicted person may wake up not feeling fully awake and refreshed, and may have a sensation of tiredness and sleepiness throughout the day.

Having problems concentrating and focusing on tasks is common for people with insomnia. According to the National Heart, Lung, and Blood Institute, 20% of nonalcohol related car crash injuries are caused by driver sleepiness.

#### Ayurvedic Concept of Insomnia

In Ayurveda, Insomnia is known as Anidra. Nidra is considered as a "trayo upastamba" meaning it is one of the three supporting pillars of life. Proper diet, sleep (nidra) and a regulated sex pattern are the three pillars known to maintain health. Proper sleep is said to nourish the body, increase life span, improve memory power, enhance fertility and bestow strength and happiness. Improper sleep is said to bring emaciation, debility, impotence, poor mental functioning and unhappiness. The complete absence of sleep can lead to death. According to the Ayurvedic perspective, the doshas (Ayurveda humors) responsible for this disease are Tarpak Kapha, Sadhak Pitta or Prana Vata.

Tarpak Kapha is a sub-dosha of Kapha (Water). It nourishes the brain cells and facilitates a good night's sleep. Imbalance of this dosha causes poor nourishment of brain cells, leading to Insomnia. Sadhak Pitta is a subdosha of Pitta (Fire) and is located in the heart. It controls emotions, desires, decisiveness, and spirituality. Its imbalance makes a person demanding and workaholic, thereby leading to situations that may cause lack of sleep. Prana Vata is a sub-dosha of Vata (Air). It is linked to insomnia, worry, anxiety, and problems like depression. Prana Vata makes the nervous system sensitive; this sensitive nervous system coupled with an aggravated Prana Vata lead to insomnia.

#### Management

In each patient, different combinations of doshas can lead to the disease. The Ayurvedic treatment of Insomnia focuses on balancing the aggravated body energies through herbal medicines as well as customized diet and lifestyle plans. Besides that, relaxation of mind is also important part of the treatment. Ayurveda recommends the use of oil massage, shirodhara and other purificatory procedures to relieve insomnia. Shirodhara has the ability to relieve chronic insomnia. It is known to increase blood circulation and promote the secretion of serotonin, the happy hormone, which gives good sleep and a calm mind.

Herbs such as Ashwagandha are found highly effective in relieving insomnia. Brahmi or Mandukaparni and Tagara are popular Ayurveda herbs which are recommended for insomnia, depression, anxiety and other related disorders.

#### Ayurvedic Home Remedies For Insomnia<sup>[6]</sup>

- Soak 10 to 15 raisins in warm water for 4 to 5 hours. Consume the raisins along with the water.
- One teaspoon of Ashwagandha choornam or two capsules/tablets with a glass of warm milk can relieve chronic sleeplessness.
- Massage warm sesame oil on the soles of the feet before bed. Wipe clean after 15 minutes or sleep with your feet covered with a pair of old socks.

• Intake of milk, buffalo milk, wine, meat soup and yogurt is advised. Foods which pacify vata and pitta should be used.

# Diet & Lifestyle Advice<sup>[7]</sup>

- Have fresh fruits, avocado, pasta, rice, dairy products, and sweet foods.
- Include nuts like almonds, walnuts, sesame seeds, pumpkin seeds, and peanuts in your daily diet.
- Have salads with a dressing of cream, yogurt, or vegetable oils.
- Use whole-wheat flour and brown rice instead of refined varieties.
- Increase use of butter or purified butter in foods.
- Avoid caffeinated drinks, alcohol, and aerated drinks after dusk.
- Avoid watching television or working on the computer late at night.
- Have a body massage with sesame oil, followed by a bath.

# 10 Tips to Improve Sleep

- 1. Early to bed early to rise should be part of your daily routine.
- 2. Day time sleeping should be avoided.
- 3. Hot shower before going to bed can improve the quality of sleep.
- 4. A light dinner taken 2 to 3 hours before bed time, followed by some walking can result in better sleep.
- 5. Indulge in lovemaking and other things which are comforting to the mind.
- 6. Avoid watching television, playing video games and using laptops or mobile devices before going to bed.
- 7. Do physical exercises regularly in the morning. Avoid these exercises in the evening though.
- 8. Drink a glass of warm milk. This is an age old remedy for insomnia.
- 9. Include fruits and vegetables in your daily diet. They promote over all wellbeing and a balance in the doshas.
- 10. Yoga asanas, pranayama and meditation can be very helpful.

# **Other Therapies**

Shirodhara is an Ayurvedic treatment in which medicated liquid, such as medicinal oil, milk, buttermilk, Kanji etc. is poured on the forehead in lying position for 30-45min. Shirobhyanga is a specialised and therapeutic head massage to treat psychological or mental problems. Basti is a technique of enema with medicated oils to calm the Vata. In addition, Netratarpan is a therapy to relieve stress symptoms in ocular disorders. Anjana is the process of applying medicated kajal in order to induce sleep. Abhyanga is a massage of the whole body with medicated oil and in Udwartanam, the whole body is scrubbed with healing powders. And finally there is the Padabhyanga, a foot massage, to promote sleep. All these treatments may be used alone or in combination with the appropriate living- and dietary recommendations made, so to calm Vata and reduce Raja.

## CONCLUSION

Sleeping pills are not the solution in the treatment of insomnia. This is because all the sleep inducing drugs cause addiction and dependence. Sleep Medication is prescribed in cases of acute insomnia in order to relieve the symptoms temporarily. Ayurveda also describes many herbs that can help in maintaining sleep. The use of herbs instead of regular medication is no excuse. The self-administration of medicines is not recommended and may even have immediate or delayed adverse effects on your health. Medicinal therapies and treatments must be under the supervision of a qualified physician. Alcohol is not a solution for insomnia. Consult your Ayurveda specialist and apply his/her advice in your life for a pleasant and healthy sleep.

## REFERENCES

- "An Overview of Insomnia," Web MD, last modified 29 Jul, 2012. http://www.webmd.com/sleepdisorders/guide/insomnia-symptoms-and-causes.
- Diagnostic and coding manual. 2nd ed. Westchester: American Academy of Sleep Medicine; 2005. ICSD-International Classification of Sleep Disorders.
- Panda S, Taly AB, Sinha S, Gururaj G, Girish N, Nagaraja D. Sleep-related disorders among a healthy population in South India. Neurol India, 2012; 60: 68-74 22.
- Suri JC, Sen MK, Adhikari T. Epidemiology of Sleep Disorders in the Adult Population of Delhi: A Questionnaire Based study. IJSM, 2008; 3(4): 128-137.
- 5. https://www.medicalnewstoday.com/articles/9155.p hp.
- 6. https://www.theayurvedaexperience.com/blog/sleep-ayurvedic-home-remedies-tips/.
- 7. https://www.jiva.com/diseases/insomnia/.