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Importance of Proper Sleep in Healthy Life

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Abstract: *Nidra (sleep) is one of the most important components of a healthy and satisfying life, according to Ayurveda. It is one of the three big subsidiary pillars (trayopastambhas) on which a person's health is firmly balanced. Acharya Vagbhata claims that 'Happiness and sadness, nourishment (perfect body) and abnormalities, strength and debility, sexual prowess and impotence, wisdom and ignorance, life and death - all depend on sleep'. Improper or excessive sleep, or sleep at an inappropriate time, vitiates all three doshas. Vitiating vata dosha causes giddiness, stiffness all over the body, restlessness, lack of concentration and decision-making power, excessive yawning, headache, etc. while vitiating pitta dosha mainly causes digestion-related problems. When the Kapha dosha is vitiating, it causes dullness and heaviness throughout the body, as well as tiredness. Getting enough good sleep at the right times can help you maintain your mental and physical health, as well as your quality of life and safety. In order to detach a tired mind from the senses, it is necessary to get the right amount and good quality of sleep. The quality of sleep can be harmed by partial disconnection of mind. Although most people are aware of the benefits of a healthy diet and regular exercise, they usually neglect the importance of sleep, which can have serious health effects.*

Keywords: *Nidra, Trayopastambhas, Healthy life, Insomnia*

I. INTRODUCTION

A normal man spends approximately 1/3rd part of his life span in sleep. A person usually sleeps about 8 hours in a 24hour period, with a range of 4 to 10 hours per day, though newborns and youngsters sleep more and the elderly sleep less.¹ Short and long sleepers are equally at an elevated risk of death from any cause, according to researchers. Sleeping too much or too little, or keeping a constant vigil, is like a night of ruin, robbing you of happiness and longevity.²

It has become a major source of concern in the modern period. Increased technology, night shift duties, excessive social networking indulgence, stress, and other factors have had a direct or indirect impact on the quality of a good sleep, which impacts an individual's health.

Sleep occurs when *tamo guna* (one of the three essential aspects of mind that creates ignorance), which predominates along with *kapha dosha*, covers the seat of *chetana* (consciousness).³ The individual sleeps when the mind and soul are fatigued or become motionless, and the sensory and motor organs are also inert.⁴

Sleep is one of the trayopastambhas (three big subsidiary pillars) that supports a person's health.⁵ It is one of the four basic, natural impulses in Ayurvedic literature, and it is considered the pioneer for health; the other three are the desires to eat, drink, and have sexual intercourse. *Nidra* is also known as '*Vaishnavi maya*' in metaphorical language, implying that it supplies sustenance to maintain good health in the same way as Lord Vishnu (the sustaining god) nourishes and sustains this universe. *Acharya Vagbhata* claims that 'Happiness and sadness, nourishment (perfect body) and abnormalities, strength and debility, sexual prowess and impotence, wisdom and ignorance, life and death - all depend on sleep'.⁶

II. TYPE OF SLEEP

- 1) *Svabhavika* (natural sleep) and *asvabhavika* (abnormal sleep) are the two types of sleep in general. *Acharaya Charaka* described seven types caused by: *tamas*; vitiating *kapha*; mental exertion; physical exhaustion; *agantuka* (indicative of bad prognosis leading to imminent death); a complication of other diseases like *sannipataja jvara* (fever having involvement of *tridosha*); and the very nature of the night (physiological sleep).⁷
- 2) *Acharya Sushruta* describes three types of *nidra* as *Vaishnavi* (naturally formed by the sustaining deity); *tamasi* (due to mental darkness); and *vaikariki* (due to mental darkness).⁴
- 3) *Acharya Vagbhata* says that sleep occurring at night is considered normal while the remaining is abnormal.

III. BENEFITS OF PROPER SLEEP IN HEALTHY LIFE

Like proper diet, adequate sleep is also essential for the maintenance of good health. Sleep is more than just a period of rest for the body and nervous system; it is also a time for the body and nervous system to recover. Getting enough good sleep at the right times may maintain your mental and physical health, as well as your quality of life and safety.⁸

The following benefits of getting proper sleep are as follows:

- 1) *It is Able To Assist You In Maintaining Or Losing Weight:* If we are getting a good sleep that will help to maintain your basal metabolism and thereby our health as well as our body weight will be maintained. Numerous studies have linked improper sleep to a variety of health problems. Sleeping less than 7 hours per night is associated with a higher risk of weight gain and a higher BMI (BMI).⁹ In fact, a study published in 2020 indicated that persons who slept less than 7 hours per night had a 41% higher risk of becoming obese. Meanwhile, sleeping for extended periods of time did not raise the risk.¹⁰
- 2) *Increases Productivity And Concentration:* Proper sleep is necessary for a variety of brain functions. Before and after adjusting for burnout, researchers looked at the links between sleep-related impairment and occupational wellness indicators in physicians working at academic medical centers, as well as the link between sleep-related impairment and self-reported clinically significant medical errors. According to the study, doctors who had moderate, high, or very high sleep-related impairment were 54 percent, 96 percent, or 97 percent more likely to report clinically significant medical errors.¹¹ Similarly, obtaining adequate sleep can help children, adolescents, and young adults perform better in school.
- 3) *Helps In Improving Your Athletic Performance And Day To Day Activities:* Getting enough sleep has been demonstrated in numerous studies to improve fine motor skills, reaction time, muscular power, muscular endurance, and problem-solving abilities.¹²
- 4) *Help To Strengthen Your Heart:* According to a meta-analysis of 19 research, sleeping less than 7 hours a day raised the risk of heart disease death by 13%.¹³ According to one study, persons who slept for less than 5 hours per night had a 61% higher risk of having high blood pressure than those who slept for 7 hours.¹⁴ Excessive sleep-in adults (more than 9 hours) has been associated with a higher risk of heart disease and high blood pressure.¹³
- 5) *By Having A Good Sleep, A Sugar Metabolism Will Be Better But Sometimes Short Sleep May Lead To An Increased Risk Of Type 2 Diabetes:* Short sleep is linked to an increased risk of type 2 diabetes and insulin resistance (when your body can't properly use the hormone insulin). In fact, a study of 36 research involving over 1 million people indicated that getting less than 5 hours of sleep and getting less than 6 hours of sleep raised the risk of type 2 diabetes by 48 percent and 18 percent, respectively.¹⁵
- 6) *Sleep Deprivation Has Been Connected To Depression:* Poor sleep quality and sleeping problems are closely linked to mental health issues such as depression. In one study of 2,672 people, those with anxiety and depression were more likely to have poor sleep scores than those who did not have anxiety or depression.¹⁶
- 7) *Helps To Keep Your Immune System Healthy:* Sleep deprivation has been linked to immune system impairment. Participants who slept less than 5 hours each night were 4.5 times more likely to have a cold than those who slept more than 7 hours, according to one study. 5.24 times more likely were those who slept 5–6 hours.¹⁷ Some data also suggests that proper sleep may improve your body's antibody responses to influenza vaccines.
- 8) *Sleep Deprivation Has Been Linked To An Increase In Inflammation:* Sleep is essential for the proper functioning of our central nervous system. It's implicated in the sympathetic nervous system and the hypothalamic-pituitary-adrenal (HPA) axis, which are both stress-response systems.¹⁸
- 9) *Emotions And Social Interactions Are Influenced By It:* Sleep deprivation impairs your capacity to control emotions and interact socially. We have a harder time controlling our emotional outbursts and behaviors in front of others when we're exhausted. Weakness in our ability to respond to humor and demonstrate empathy may also be a result of exhaustion. Moreover, persons who are sleep deprived on a regular basis are more likely to withdraw from social gatherings and experience loneliness.¹⁹

IV. IDEAL TIME FOR SLEEP

According to *Kaiyadeva Nighantu*, the best time to sleep is after the first two *Yamas* (about 6 hours) of sunset. It is also recommended that one remembers and pays homage to the god, sages, and their teachers shortly before sleeping.²⁰ Sleep occurs at almost the same time every night for a healthy person and lasts for a fixed period of time. Ayurveda regards this sleep as *Ratrisvabhava Prabhava* (naturally occurring at night).⁷ It is further advised to avoid sleep during the first and last parts of the night, and wake up before the sun rises.

V. SUGGESTIONS FOR A BETTER SOUND SLEEP

Ayurvedic texts have provided guidelines to enhance good sleeping:

- 1) Avoid sleeping on a bed that has not been fully covered with sheets and pillows, or is uneven, or is too small to be comfortable.²¹
- 2) Sleeping in the prone position is not recommended.²²By sleeping in prone position may aggravate some medical conditions because neck and spine are not in a neutral position when you sleep on your stomach but sleeping in prone position is medically accepted position to improve breathing comfort and oxygenation specially in Covid patient.
- 3) Clean and pleasant bed sheets should be used in the bedroom. Quality sleep is aided by comfortable bedding, which promotes rest and happiness.²³
- 4) The mattress should be comfortable and nice, and the bed should be at knee joint level.²³
- 5) At the beginning and end of night, i.e. while going to sleep and waking up, one should only think about virtuous acts and avoid all negative thoughts.²³
- 6) Sleeping with a cool atmosphere in a hot climate is relaxing, keeps flies and mosquitoes away, stops perspiration, relieves stress, fainting, and fits, and soothes any burning, burned, or parched sensation.²⁴
- 7) *Samvahana* (gentle massage) is soothing, relaxing, and aphrodisiac. It eliminates the *vata* and *kapha doshas* in the body, relieves exhaustion, and calms the blood, skin, and muscles.²⁴
- 8) It is not advisable to sleep during the day and stay awake at night. Both of them are harmful to one's health.²⁵

VI. DURATION OF SLEEP ACCORDING TO AGES

Most individuals are unaware of how much sleep they require, putting themselves and others at risk for medical problems, as well as an increased chance of injuries or fatal accidents.²⁶ Over the course of a person's life, the amount of sleep they require fluctuates. Although individual sleep requirements vary, Table 1 provides basic guidelines for various age groups.²⁷

Ages	Recommended Amount of Sleep
Newborn	16-18 hours a day
Pre-school-aged children	11-12 hours a day
School-aged children	At least 10 hours a day
Teens	9-10 hours a day
Adults (18-60 years)	7-9 hours a day
Adults (60 and above)	7-8 hours a day

VII. EFFECTS OF AN INAPPROPRIATE SLEEP PATTERN ON A HEALTHY LIFE

A. Day Sleep And Its Effect

- 1) Sleeping during the day, except in the summer, is not recommended since it aggravates the *kapha* and *pitta doshas* and makes the body more unctuous.²⁸ Day sleep, according to the *Sushruta Samhita*, vitiates all three doshas. When the *Kapha dosha* is vitiated, it causes dullness and heaviness throughout the body, as well as tiredness. The vitiated *pitta dosha* creates an elevated sense of heat in the body as well as digestive issues. Dizziness and broad body discomfort are symptoms of a vitiated *vata dosha*.^(29,30,31)
- 2) Sleeping during day time is indicated for those who are suffering from indigestion, wasting, who are too old, too young, weak, thirsty, suffering from diarrheas, colic pain, dyspnea, hiccup, or emaciated; those injured by fall or assault, afflicted with insanity, or exhausted by travelling, vigil, anger, grief, or fear; etc are allowed for day sleep. Summer is the best time to sleep because the nights are short and *Vata Dosha* builds up owing to heat, dryness, and *aadaana kaala* (period of absorption of fluid).³²
- 3) Day sleep is recommended for those who have remained up at night due to *vata dosha* vitiation induced by lack of sleep.⁴ People who eat a high-fat diet on a daily basis should not sleep during the day. Poisoning and throat diseases patients should not sleep at all, even at night.³³

B. Effects Of Being Awake At Night

- 1) Staying up at night causes dryness in the body, as well as complications such as vitiated *vata* and *pitta doshas* and a diminution in *kapha dosha*. Vitiating *vata dosha* causes giddiness, stiffness all over the body, restlessness, lack of concentration and decision-making power, excessive yawning, headache, etc. while vitiated *pitta dosha* mainly causes digestion-related problems. When the *Kapha dosha* is vitiated, it causes dullness and heaviness throughout the body, as well as tiredness.
- 2) Sleeping during the day enhances the unctuousness of the body through raising *kapha dosha*, whereas not sleeping at night produces dryness in the body. However, napping during the day in a slightly reclined position or sitting comfortably does not result in dryness or unctuousness.³⁴

C. Insomnia

- 1) In healthy people, insomnia can be caused by excessive dosha elimination through *virechana* (purgation) or *vamana* (emesis), excessive worry, fear, anxiety, anger, or grief, excessive smoke, physical exercise, or sexual intercourse, bloodletting, fasting, an uncomfortable bed, old age, or diseases, and especially due to *vata* vitiation such as colic pain.⁷
- 2) Massage, unctuous bath, eating soup of domestic, marshy, or aquatic animals, shali rice (red variety of rice) with yoghurt, milk, unctuous substances, alcohol, mental pleasure, pleasing fragrances, listening to enjoyable and relaxing music, samvahana (mild massage), application of soothing ointment on the eyes, head, and face, comfortable bed and home, and proper time can all help with insomnia.⁷

D. Excess Sleep And Its Management

- 1) Increased *kapha dosha* creates heaviness in the body by obstructing the orifices of the tissues due to uneven processing. As a result, laziness develops, leading to excessive sleep.³⁵
- 2) *Vamana* (emesis), *samshodhana* (purification therapies), fasting therapy, bloodletting, nasal drops, and involving the person in strenuous mental activity etc, all of which decrease *Sleshma* and thus lead to the reduction of sleep, should be used to manage excessive sleep. Apart from *samshodhana*, *Maharshi Charaka* has stated that focusing on strengthening *sattva guna* (mental purity) and inhibiting *tamo guna* go hand in hand in overcoming excessive sleep.³⁶

VIII. DISCUSSION

Because of inappropriate use of technology and social media, excessive working hours, night shifts, professional and personal stress, and other factors, healthy sleep is now severely harmed. People regard sleep as a daily routine habit that must be completed regardless of the number of hours. However, this is not a healthy way to sleep. On the process that causes sleep according to Ayurveda, the mind becomes tired (*klant*), the sense organs become exhausted, and the *vishaya* is not perceived, and so no knowledge is gained. For knowledge to occur, the mind and sense organs must work at their best, which can be attained by resting and sleeping well. Sleep is important for the correct functioning of the CNS.

Sleep supports physical restoration, provides a period for growth and repair, has a positive effect on the immune system, and promotes the secretion of anabolic hormones such as growth hormone. A person who sleeps well is also less prone to become ill. A well-rested person is thought to be healthier and more appealing. *Sukha*, *pushti*, *varna*, and *bala* are the results of all of this. After a good night's sleep, a person feels refreshed and ready for the next day's job.

On the other hand, only ingestion of food is not enough, it must be properly digested and metabolized for proper nutrition and healthy body. Inappropriate sleeping pattern occurs due to hectic lifestyle, changed and extended work timings, fast and extensive travelling etc. all these factors' effects digestion and causes digestion related issues. In some digestion related health issues like *ajirna* even sleeping enough and for a long time, is beneficial for digestion (*agnidipti*).

Because it performs so many functions in the body to make a person healthy, all of the considerations described above show that appropriate sleep is crucial for excellent physical and mental health, and consequently for survival and a long healthy life span.

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