

CONSEQUENCES OF NIDRA(SLEEP): AN AYURVEDIC REVIEW

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ABSTRACT

All human beings spend almost one third of their lifetime in sleeping. Good sleep is essential and advantageous to the quality of life. It is one of the *Trayopastambhas* (three great subsidiary pillars) on which a person's health is firmly balanced. Sleep is important because it affects our mental, physical, and emotional well-being. Sleep is one of the four basic, natural instincts. Food, sleep, fear and having sexual contact, found equally in humans and animals. Sleep is as necessary as food for the survival of a living body. According to the *Mandukya Upanishad*, the state in which the soul does not desire any object and in which it does not even dream is called *sushupti* or *nidra* (sleep). In the state of *nidra*, the instincts of the senses and the mind stop while involuntary activities like breathing, circulation etc. go on. The essential business of the body continues. Regular and good quality *nidra*, is an indicator of good health as it is stress-relieving and normalizes bodily tissues. *Nidra*, is important for proper brain functioning, emotional wellbeing, physical health, daytime performances and activities. In newborn, children and teenagers, sleep also helps in growth and development of body and mind. If a person gets enough good quality and quantity of sleep in day to day life, it provides many benefits including good health, good life span, protecting mental and physical health. During sleep, our body is working to support healthy brain functions and maintain physical health. Due to sleep deprivation many sleep disorders such as anxiety, depression, stress, poor memory, headache and drowsiness may occur.

KEYWORDS: Nidra, Sleep, Tamoguna, Manovahi Strotas, Prakriti.

INTRODUCTION

Nidra is an integral part of our life, the word *Nidra* is obtained by adding prefix to the dhatu '*dra*' means to sleep. Hence the term *Nidra* means back to sleep, down to sleep.^[1] Sleep is also a kind of physiological state which is necessary for the body. There are three sub-pillars which give support to the body like the doshas; these are Ahara (diet), *Nidra*/ Swapna (sleep) and Brahmacharya (celibacy).^[2] Next to *Ahara*, the *Nidra* is the second most important for life.^[3] As *nidra* being chief nourisher of the body, it plays an important role in promotion of health and prevention of diseases.^[4] In the *Upanishads*, there are four psychosomatic stages are described: Jagradawastha (Awakening), Swanawastha (Dream/Sleep), Sushuptawastha (Hibernation) and Turiyavastha (Samadhi condition-Hyperactive condition of brain as in super spiritual person at particular time). *Shankaracharya* has cited various views regarding the state of sleep and has considered it as a special state in which activity of senses diminished greatly, only life trade like respiration, digestion, blood circulation etc. goes on. *Yogashastra* has mentioned that in this state

there is neither any kind of desire nor dream; neither the senses and nor the mind able to perceive its function. In this state the mind is pervaded by *tamoguna*, so it cannot apprise anything through the senses, yet its action does not stop completely. According to *Maharishi Patanjali*, *nidra* is modification of mind where there is no mental contentment. *Yogashastra* says that sleep itself is a state of mind and there is abundance of *tamoguna*. Relationship between soul, mind, senses and sense objects continues in the awakening state, hence the mental business continues. In sleep, the work of the senses diminished, the mind also remains calm and peaceful, so the person remains engrossed in natural sleep. In this state, the body and mind get complete rest, due to which the body and mind feel healthy. With happiness and enthusiasm, the person again becomes focused in his work. Many of *Acharyas* have given description of *nidra* in several scriptures and *Ayurvedic* texts. In this review article, an attempt made to compile dispersed references regarding the concept of *nidra*.

SLEEP PHYSIOLOGY

In Ayurveda, there are four causes of sleep: Tama(Darkness), Kapha, Kapha -Tama and Uparati(Disconnection).^[5] According to *Charaka* when the mana(mind) along with the atma(soul) gets exhausted and the sensory and motor organs also become inactive, the individual sleeps.^[6] Sushruta described the sleep occurs when *hridaya* the seat of *chetana*(consciousness) is covered by *tamas* which predominates along with kapha.^[7] Sleep is another form of *tamas* (mental darkness).^[8] Sleep manifests when *tamas* naturally predominates at night and affected by kapha, the mind and intellect are in deep rest.^[9] *Vagbhata* stated that the *Manovahi Strotas* accumulated with *kapha* and mind is devoid of senses because of fatigue, then individual falls asleep.^[10] Sleep influence at a certain time in the night and ends in the morning. Ayurveda has accepted *tama* and *sattva* as *swabhava*, even though they are the cause of sleep and wakefulness. Sleep is an unconsciousness from which the person can be aroused by sensory or other stimuli.^[11] Duration and requirement of sleep varies with age and individual. It varies from person to person.

TYPES OF SLEEP

According to Caraka Samhita, Sleep is of the following types according to causative factors^[12]

Tamobhava : caused by increased *tama guna*

Shleshmasamudbhava: caused by vitiated kapha *doshas*

Manah sharirshramasaambhava: caused by mental and physical exertion

Agantuki: indicative of bad prognosis, leading imminent death

Vyadhyanuvartini: due to complication of other diseases

Ratri swabhavaprabhava: caused by the very nature of the night (physiological sleep).

Though, mental and physical exertion is responsible for sleep. But if there is excessive exertion, this may cause vitiation of *vata* leading to sleeplessness. Sleep during the day time is caused by *tamas*.^[13]

The Commentator of Sushruta Samhita, Acharya Dalhana has classified *nidra* into three types.^[14]

Tamsik: Tamsi *Nidra* is occurs when *sangyavahi strotas* become filled with *shleshma* and dominated by *tamoguna*

Vaishnavi or Swabhaviki: It occurs naturally and daily in all living beings

Vaikariki: It occurs due to diseases

Astang Sangraha classified seven types of sleep^[15]

Kala swabhawaj: caused by the very nature of night (physiological)

Amayaja prabhava: caused as a complication of other diseases

Citta kheda prabhava: caused by mental exertion

Deha kheda prabhava: caused by physical exertion

Kapha prabhava: caused by vitiated *kapha doshas*

Agantuka: It occurs due to external factors and indicative of bad prognosis leading to imminent death.

Tamo prabhava: it occurs due to predominance of *tamoguna*.

DISHA (DIRECTION) AND POSITION FOR SLEEP

It is always advised to sleep in the left lateral position because *agni* lies in the left side of the body above the *nabhi*, which is responsible for the proper digestion. While sleeping, one should position the head towards the east or south *disha*, but never towards the north.^{[16],[17]} Never position the legs towards teachers or any other respected person.^[18] The body is considered as a magnet with the head, the heaviest and most important part, as the North Pole, and the feet as the South Pole. Sleeping with the head directed to the north is believed to cause a repulsive force with Earth's magnetic north and thus is considered harmful.^[19]

DURATION OF SLEEP

The duration of sleep varies according to age, occupation, practice and nature. *Vatika* Prakriti gets short sleep, *Pittaj* Prakriti gets moderate and *Kaphaj* Prakriti gets more sleep.^[20] Those who work hard physically and mentally need more and those who do less work need less amount of sleep.

Table: Recommended Sleep according to age.^[21]

Age	Sleep Recommended
Birth to 1 month	18-20 hrs.
1-6 months	15-18 hrs
. 6 months – 1 year	14-16 hrs.
1-2 yrs.	12-14 hrs.
2-5 yrs.	10-12 hrs.
5-16 yrs.	9-10 hrs.
Adults	7-8 hrs.
Old persons	6-7 hrs.

CONSEQUENCES OF PROPER SLEEP

The inclusion of *Nidra* in the three *Upastambha* proves its importance. Proper sleep is as important as proper diet to maintain good health. According to Acharya Charaka, *Nidra* when taken properly in terms of quantity and quality gives *Sukha* (Pleasure), *Pushti* (Growth and development), *Bala* (immunity), *Vrishataa* (Potency and sexual vigor), *Gyanam* (Knowledge and intellect) and *Jeevitam* (Good life span, longevity of life).^[22] It increases the sense of well-being by refreshing the body and mind and also restores the natural equilibrium among different body tissues.^[23] Proper sleep even enhances longevity in humans.^[24] Sleep indicated in the management of emaciation and over leanless and provide good development to the person.^[25] During sleep, secretion of Growth Hormone (GH) of pituitary rises especially in infants. Good sleep causes somatic growth, development of brain and consolidation of memory in children.^[26] Therefore, we can assume that sleep in multiple ways restores both normal levels of brain activity and normal "balance" among the different functions of the central nervous system.^[27]

CONSEQUENCES OF IMPROPER SLEEP

Improper and inadequate sleep causes harmful effects on the body. It results in Karshyam (emaciation), Abalam (Loss of strength), Dukha (Grief), Kleevta (Impotence), Agyanam (Ignorance) and even Death. This type of sleep is called as kalaratri nidra which takes away both happiness and longevity of the individual and causes headache, bodyache and burning sensation in eyes. Lack of proper sleep can affect the natural urge to eat resulting in irregular bowel movements.^[28] Lack of sleep certainly does, however, affect the functions of the central nervous system. Prolonged wakefulness is often associated with progressive malfunction of the thought processes and sometimes even causes abnormal behavioral activities. We are all familiar with the increased sluggishness of thought that occurs toward the end of a prolonged wakeful period, but in addition, a person can become irritable or even psychotic after forced wakefulness.^[29]

INDICATIONS OF DAY SLEEP

Sleeping during the day time in the seasons other than summer is not advisable as it causes vitiation of kapha and pitta. In summer season nights become shorter and vata gets aggravated in the body due to Adana Kala. Therefore, during this season, day time sleep is prescribed for all.^[30]

Sleeping during the day time in all seasons is prescribed for those who are exhausted by singing, study, alcoholic drinks, sexual acts, carrying heavy weight, walking long distance, suffering from wasting, thirst, diarrhoea, colic pain, dyspnoea, hiccup, insanity and those who are too old, too young, weak and emaciated; those injured by fall and assault, exhausted by journey by a vehicle, anger, grief and fear and are habitual to day sleep.^[31] All these acts maintains the equilibrium of dhatus increases strength and the kapha nourishes the organs and ensures longevity.

CONTRA-INDICATION OF DAY SLEEP

Persons with excessive fat, having kaphaj constitution, suffering from diseases due to the vitiation of kapha and those suffering from dushiviṣa should never sleep during day time.^[32] If one contravene the rules regarding day sleep, may have halimaka (chronic jaundice), headache, obesity, loss of digestive power, oedema, anorexia, nausea, rhinitis, abscess, drowsiness, coughing, throat problems, loss of memory and intelligence, obstruction of the circulating channels, fever, weakness of sensory and motor organs.^[33] So one should keep in view, merits and demerits of day sleep in various seasons and situations.

CONSEQUENCES OF NIGHT AWAKENING

Awakening during night causes dryness in the body; sleep during day time causes unctuousness and dozing in sitting posture does neither cause dryness nor unctuousness.^[34] Awakening during night and day-sleep both are responsible for causing Kshaya and Vriddhi of *doshas*.

CAUSES OF INSOMNIA

Insomnia can be caused by the excessive elimination of doshas from the body and head through virechana (purgation) or vamana (emesis), excessive worry, fear, anxiety, anger or grief, excessive smoke, physical exercise or sexual intercourse, bloodletting, fasting, uncomfortable bed, excessive work, old age or diseases, and especially due to the vitiation of vata like colic pain, etc.^[35] Some people suffer from sleeplessness by nature Imbalance of vata and pitta, diminution of kapha doshas and mental stress are the causes of insomnia.^[36]

MANAGEMENT OF INSOMNIA

Massage, bathing, soup of domestic or aquatic animals, *shali* rice with yogurt, milk, spicy food, alcohol, mental pleasure, pleasing fragrances, listening to relaxing music, mild massage, application of soothing ointment on the eyes, head and face, comfortable bed and home, and proper time.^{[37][38],[39]}

CAUSES OF HYPERSOMNIA

Hypersomnia (Atinidra) is a neurological disorder of excessive time spent in sleeping. Aggravated kapha dosha obstructs the orifices of the tissues and causes heaviness of the body developing laziness and excessive sleep.^[40]

MANAGEMENT OF HYPERSOMNIA

Management of atinidra are vamana (emesis), samshodhana (purification therapies), fasting therapy, bloodletting, and by involving the mind-agitating as in strenuous mental activity or emotions, strong nasal drops or smelling of snuff, application of strong eye ointment, Purgation all these procedure decrease kapha and thus lead to the reduction of sleep.^[41] Charaka has, emphasize on increasing sattva guna (mental purity) and suppressing tamo guna rather than samshodhana to overcoming excessive sleep.^[42]

CONCLUSION

Sleep is a chief nourisher at life's feast. It occurs due to increased *tamoguna*. During sleep anabolism is active and catabolism relatively passive thus prevents body organs from damaged and repairs damage at cellular level. Proper sleep at proper time is very essential for the growth and development of the body and mind. Sleep is very necessary for the wellbeing of a person's life. Sleep is a state when both the mind and the body are at rest. Adopting the principles of Ayurveda and the guidelines for good sleep are the best ways to encourage healthy sleep and a healthy life. Sleep plays a very essential role in our well being and good health throughout our life, nidra is part of lifestyle and may cause many diseases if it is not proper so why ancient seers have well elaborated this topic in their literatures. We might postulate that the principal value of sleep is to restore natural balances among the neuronal centers. The specific physiologic functions of sleep remain a mystery, and they are the subject of much research.^[43]

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