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# ROLE OF NIDRA IN PREVENTION OF LIFESTYLE DISORDERS

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#### **ABSTRACT**

Lifestyle diseases are the diseases primarily based on daily habits of people because of inappropriate relationship with environment. *Ayurveda* aims to maintain the health of a healthy person and to restore the health of the diseased. Diseases due to *pragyaapradha* (intellectual blemish) or *asathymaindriyarthasamyoga* (unhealthy sensory perception) are considered as lifestyle diseases in Ayurveda. *Trayopsthambha* is an important factor for maintain health as well as for prevention of the disease. *Aahar, Nidra* and *Brahmacarya* are compared with the three legs of sub-support and termed as *trayoupsthambha*. *Nidra* is the second important factor of *trayoupsthambha*. Lifestyle diseases are problem to our society. Such diseases arise mainly from the unhealthy food, sedentary living, drinking, Smoking and because of poor sleeping habits.

**Keywords:** Lifestyle Disorder, *Pragyaapradha, Asathymaindriyarthasamyog, Trayopsthambha, Nidra* 

#### INTRODUCTION

Ayurveda emphasizes on both physical and mental well being along with prevention of occurrence of diseases. As "prevention is better than cure" nidanprivarjana is the first line of treatment & to avoid occurrence of diseases various regimen (dincharya, ritucharya) are given in ayurveda which should be followed. To fulfill the aim of prevention of disease in ayurveda, the theory of trayoupasthambha (Aahar, Nidra & bramcharya) plays a key role in maintenance of health and long life span. <sup>1</sup> Being supported by these three upasthambha, the body is endowed with strength, complexion, and grow up till the full life span. But when a person is indulged in unwholesome behavior or ignorance of health principles, three upastambhas cannot perform their functions

successfully. These three are designated as *upastambha* of life because they support tri-*stambhas* (*vata*, *pitta* & *kapha*) of body. Theory of *trayoupstambhas* is one of important principle in preventive medicine. Among *trayoupstambhas*, *nidra* placed second, and affects both physical and mental factors equally.

In recent era, due to rapid changes in lifestyle many new disorders have come up, & collectively known as lifestyle disorders. Lifestyle diseases are the diseases primarily based on daily habits of people because of inappropriate relationship with environment.<sup>2</sup> The most common lifestyle diseases include Hypertension, Diabetes, Arthritis, obesity & Insomnia. The recent epidemiological studies suggest minimum sleep of

duration 7-8 hours to be obtained to discover health in adults above 18 years.<sup>3</sup> Researchers suggest that an appropriate sleep can help to lower the prevalence of hypertension, cardiovascular diseases, anxiety, Obesity etc which are derived from lifestyle disorder.

**AIM:** Study the role of *Nidra* (Sleep) in lifestyle disorder.

#### **OBJECTIVE:**

- 1. To study the normal physiology of sleep (Nidra) & its impact on health.
- 2. To evaluate the role of *nidra* in causing lifestyle diseases.

#### **MATERIAL & METHODS:**

For this study *Ayurvedic* literature is collected from classical text of *Ayurveda*. For modern aspect various text books on concerned subject and various websites were referred.

#### AYURVEDIC ASPECT:

As per *Acharya Charak*, *Nidra* is a condition in which *mana* including *Indriyas* dissociate themselves from their objects. <sup>4</sup> According to *Acharya Sushruta*, *Nidra* is related to God *Vishnu*. <sup>5</sup> *Acharya Vagbhat* has said that *Nidra* is produced from *Tamas* at the time of commencement of the creation. It is another form of *Tamas* itself and manifest when *tama* is predominant, generally at night.

Nidra has been considered as brihana factors (nourishing factor) in routine life means it promotes health by nourishing dhatus & increasing kapha which is responsible for the strength and immunity of body as well as mind. One who gets sound sleep at night, can digest the food well, his kayaagni is enhanced & there is proper nourishment of body.

#### **MODERN ASPECT:**

Sleep is the natural periodic state of rest for mind and body with closed eyes characterized by partial or complete loss of consciousness.<sup>6</sup> Human body has many rhythms that influence and regulate physiological functions, performance, moods, and behavioral responses. Sleep is regulated by the circadian rhythm. Any disruption of this rhythm can result in interrupted

sleep and causes a myriad of problems, including fatigue, mental changes and physical changes.

#### PHYSIOLOGY OF NIDRA:

According to Acharya Charak, When the mana gets exhausted or becomes inactive and the gyanendriyas and karmendriyas become inactive then the individual gets sleep. Acharya Charak explained the physiology of sleep that when the strotas of body is covered by kapha, then body is fatigued by exertion and sense organs stop functioning, nidra manifest in the body.

Acharya Sushruta stated that, when the hridhyam (chetana sthana) invaded by tamoguna, person falls sleepy. <sup>7</sup> Tamoguna is the cause of sleep.

According of Howell, sleep is due to cerebral ischemia. Cerebral cortex is the seat of higher mental function like pre and posts central gyres, association area etc; which have the correlation with mental activities. Sleep has an internal organization regulated by different areas of brain. This rhythm is regulated by two brain processes. The restorative process is a response to how long one stays awake. The second process controls timing of sleep and wakefulness during the daynight cycle. The timing of sleep is controlled by suprachiasmatic nucleus of hypothalamus, which responds to light and causes sleepiness at night when it is dark.

## Hormonal Regulator:

Melatonin is important to regulate normal sleep cycles.<sup>8</sup> Hormone is produced by pineal gland. Melatonin is produced during dark hours of sleep and is released in response to changes in light and inhibits neurotransmitters involved in arousal, such as Histamin, dopamine and serotonin.

#### IMPORTANCE OF NIDRA:

Quality of adequate sleep (Samyak Nidra): According to Acharya Charak, sukha, dukha, karshya, bala,abala, vrushta, klibata, gnyanam, agnyanam, jivana and death all these depends on proper or improper Nidra.<sup>9</sup>

Acharya Sushruta has said that by proper and adequate sleep, the person will be free from diseases, will have pleasure in mind endowed with strength, complexion.<sup>10</sup>

According to *Acharya Vagbhata*, *nidra* is observed judiciously, it will lead to happiness and long life just as the mind of *yogic* become clear from knowledge of soul.

*Atinidra:* Over sleep leads to obesity and diseases due to increased *kaphadosha* such as Diabetes.

Anidra: Inadequate sleep leads to increase Vata dosha, results in wasting of tissues, emaciation and insomnia.

In ayurveda, nidra is the second sub pillar on which health and life is based. Several do and don't are given in dincharya and ritucharya which should be followed like, brahmamuhurtauttishateya (wake up before sunrise), prohibition of divaswapan (sleep during daytime) excepted during grishamritu (summer) prohibition of ratrijagaran (wakening during night) etc. In Charak sutrasthan, Nidra in Astauninditiyaadhyaya described as a therapy for the atikrisha.

In modern science, Sleep plays a vital role in good health & well being. Sleep is important for the healthy function of brain and emotional well-being. While sleeping brain is preparing for next day, has it is forming new pathway to help in learning information. <sup>11</sup>

Studies shows lack of sleep affects the mood, and a depressed mood can lead to lack of sleep. To combat this vicious cycle, sleep experts recommend the teens prioritize sleep and focus on healthy sleep habits. Lack of sleep causes trouble in making decisions, solving problem, controlling emotions and behavior.

Improper sleep causes mental as well as diseases like diabetes mellitus, hypertension, obesity, congenital heart diseases. Due to stressful lifestyle and improper sleep increase the risk of hypertension had increases. Sleep is also important for physical health, as sleep is involved in repairing and healing of tissues. Ongoing sleep deficiency is linked to an increased risk of heart disease, kidney disease, high blood pressure, diabetes & stroke.

Lifestyle diseases are the diseases primarily based on daily habits of people because of inappropriate relationship with environment. Certain habits, behavior, practice such as poor eating habits, inactivity, smoking, lack of physical exercise and poor sleep are the main causes of lifestyle diseases. According to the study in times of India newspaper, lack of sleep is the biggest cause for lifestyle diseases. As unhealthy lifestyle-habits have long been recognized to increase the risks of lifestyle-related diseases and their worsening, it is natural that sleep, is markedly associated with disorders such as hypertension, diabetes.

#### DISCUSSION

In ayurveda, Traypopsthambha is considered as three sub-pillar of life on which life depends. To maintain life along with health, aahar, nidra and bramacharya should be followed. Nidra is the second sub-pillar which suggests its importance in life. According to modern science as well, Sleep is helpful in repairing the degenerated tissues to maintain homeostasis. Sleep is one of the main causes for different lifestyle disorders. Improper sleep causes mental as well as diseases like diabetes mellitus, hypertension, obesity, congenital heart diseases. The most common lifestyle diseases include Hypertension, Diabetes, Arthritis, obesity & Insomnia. Researchers suggest that an appropriate sleep can help to lower the prevalence of hypertension, cardiovascular diseases, anxiety, Obesity etc which are derived from lifestyle disorder. According to Acharya Sushruta by proper and adequate sleep, the person will be free from diseases, will have pleasure in mind endowed with strength, complexion. So, adequate nidra (Sleep) should be taken. As Sleep plays vital role in maintaining health of an individual, several strategies should be made for getting enough sleep like:

- 1. Go to bed and wake up at the same time every day.
- 2. Try to keep same sleep schedule every-day.
- 3. Avoid heavy or large meal within couple of hour before sleep.
- 4. Avoid nicotine and caffeine before bedtime.
- 5. Use the hour before bed for quiet time.
- 6. Avoid use of mobile and other applications.

### CONCLUSION

"Lifestyle diseases" are internationally known as 'non-communicable diseases' (NCD's) emerge from inappropriate relationship of people with their envi-

ronment. India is the new hub for non communicable diseases, due to modernization and advanced scientific technology, availability of gadgets and tools which influenced people and results in changing the lifestyle completely. Night shifts of work, use of mobiles and over ambition to achieve aim of their life result in stressful life which affected the sleep. Sleep plays an important role in maintaining the health and helps in repairing of damaged cells. Lack of sleep is one of the common causes in lifestyle diseases. Hence, for prevention of lifestyle disorders adequate amount of sleep is necessary. To combat the lifestyle disorders and lead a healthy life, Nidra plays important role. So, for maintaining the proper health, daily regimen should be followed along with adequate amount of sleep intake.

#### REFERENCES

- Acharya Charak, chakarpaniteekha, yadavjitayambhamjia acharya, Chaukhambha Surbharti Prakashan, Varanasi. Reprint 2011, chapter11, Triashaneeya adhayam, Sutrasthana, page74, shlok no.35.
- 2. Sharma M, Majumdar P K, Occupational lifestyle diseases, An emerging issue, Indian J Occupation Environment Medicine, 2009 Dec;13(3):109-12.
- 3. https://www.nchi.nlm.nih.gov (Insomnia and lifestyle diseases)
- Acharya Charak, chakarpaniteekha, yadavjitayambhamjia acharya, Chaukhambha Surbharti Prakashan, Varanasi. Reprint 2011, chapter21, Ashtaninditeeya adhayam, Sutrasthana, page118, shlok no.35.
- Acharya Sushrut, Kaviraj Dr. AmbhikaduttShastri, Sushrut Samhita (Volume1) Chaukhamba Sanskrit Sootrasthan, Varanasi,(2007) p – 44 Chapter4 Sharirsthan, Garabhavyakarana Adhaya, Shlok no.32.
- K Sembulingam, Essentials of Medical Physiology, Nervous system, chapter 157, Physiology of Sleep, pg no.966.
- Acharya Sushrut, Kaviraj Dr. AmbhikaduttShastri, Sushrut Samhita (Volume1) Chaukhamba Sanskrit Sootrasthan, Varanasi, (2007) p – 44 Chapter4 Sharirsthan, Garabhavyakarana Adhaya, Shlok no.33.
- 8. K Sembulingam, Essentials of Medical Physiology, Endocrine system, chapter 69, Endocrine function of other Organs, pg no.461.

- Acharya Charak, chakarpaniteekha, yadavjitayambhamjia acharya, Chaukhambha Surbharti Prakashan, Varanasi. Reprint 2011, chapter21, Ashtaninditeeya adhayam, Sutrasthana, page118, shlok no.36.
- Acharya Sushrut, Kaviraj Dr .Ambhikadutt Shastri, Sushrut Samhita (Volume1) Chaukhamba Sanskrit Sootrasthan, Varanasi, (2007) p – 44 Chapter4 Sharirsthan, Garabhavyakarana Adhaya, Shlok no.39.
- 11. https://www.nhlbi.nih,gov>sleep deprivation and deficiency. National heart, lung,and blood intestine(NHLBI).

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