



# A SYSTEMIC REVIEW ON IMPROVED SLEEP (NIDRA) -AN AYURVEDIC PROSPECTIVE

**Dr. Prashant Srivastava<sup>1</sup>, Dr. Anjana Dixit<sup>2</sup>, Dr. Urmila Maurya<sup>3</sup>**

1. Final Year PG Scholar, Department of Kriya Sharir, Major S.D. Singh P.G. Ayurvedic Medical College & Hospital, Bewar Road, Farrukhabad, Uttar Pradesh.
2. Guide, Department of Kriya Sharir, Major S.D. Singh P.G. Ayurvedic Medical College & Hospital, Bewar Road, Farrukhabad, Uttar Pradesh.
3. Co -Guide, Department of Kriya Sharir, Major S.D. Singh P.G. Ayurvedic Medical College & Hospital, Bewar Road, Farrukhabad, Uttar Pradesh.

**Corresponding Author** - Dr. Prashant Srivastava, Final Year PG Scholar, Department of Kriya Sharir, Major S.D. Singh P.G. Ayurvedic Medical College & Hospital, Bewar Road, Farrukhabad, Uttar Pradesh.

## ABSTRACT

According to our ancient science Ayurveda, the three Stambha (pillars) termed Vata, Pitta, and Kapha are described. The foundation of a healthy existence is the harmony of these three. Ayurveda has also highlighted the three Upstambha (supports) in addition to the Three Stambha for maintaining health and happiness. The three Upstambhas are Aahar's Intake (meal), Nidra (sleep), and Brahmacharya's Obedience. It implies that in order to live a life free of sickness, sleep must also be a must in addition to diet and Brahmacharya compliance. Ayurveda and contemporary viewpoints both agree that improper sleep may have numerous negative repercussions on a person's life. A typical adult needs seven to eight hours of sleep every day.

**KEYWORDS** – Nidra, Sleep, Brahmacharya'

## INTRODUCTION

One of the oldest holistic healing philosophies in the world is "Ayurveda." It is predicated on the idea that mental, physical, and spiritual wellness are intricately entwined. According to Ayurveda, sleep is a basic instinct of life and is necessary for all living things. It is necessary for our physical, mental, and spiritual renewal and resurgence. One of the three Nidras, or pillars, of good health according to Ayurveda, is sleep. Sleep is a regularly occurring physical and mental condition characterized by altered awareness, substantially suppressed sensory activity, decreased

muscular activity, and, during rapid eye movement (REM) sleep, virtually complete inhibition of nearly all voluntary muscles.<sup>1</sup>

The doshas of Kapha (Sharirik dosha) and Tama (Mansik dosha) control nidra (sleep). According to Acharya Charka, a man sleeps when his intellect is worn out and his sense organs are too tired to focus on their objective. According to Pelayo, the brain needs sleep. Because our brains are powered by electricity, the chemical energy that the brain needs to function produces waste materials (known as metabolites) that must be removed. That is what occurs while you sleep, according to Pelayo. The brain eliminates these waste products and regenerates the adenosine triphosphate, or ATP, that it utilizes all day long.<sup>2</sup>

**Charak Samhita, mentions six types of sleep. They are**

- Tamobhava (Caused by tamas)
- Shleshmsamudbhava (Caused by kapha)
- Manah Shareer Shram Sambhava (Caused by physical and mental exertion)
- Aagantuki (Adventitious)
- Vyadhyanuvarthinee (As sequelae to a disease)
- Ratriwabhavprabhava (Normal sleep that occurs in night).

### **NREM and REM Sleep Cycles**

A sleep episode starts with a brief time of NREM stage 1, then moves through stage 2, stage 3, stage 4, and eventually stage 5 to reach REM. About 75 to 80 percent of the time spent sleeping is spent in non-rapid eye movement (NREM) sleep, with the remaining 20 to 25 percent occurring during REM sleep. The initial NREM-REM sleep cycle lasts, on average, 70 to 100 minutes.<sup>3</sup>

### **FOUR STAGES OF NREM SLEEP**

Each of the four NREM sleep phases is accompanied by a different pattern of physiology and brain activity. In the cycle of sleep stages, NREM stage 1 sleep acts as a transitional state. Except for newborns, people with narcolepsy, and those with other particular neurological problems, the average person's sleep session starts in the NREM state. A loud disturbance can quickly end this stage, which typically lasts 1 to 7 minutes in the first cycle and accounts for 2 to 5 percent of total sleep.<sup>4</sup>

Initially lasting between 10 and 25 minutes, stage 2 sleep gradually extends over subsequent cycles, finally making up between 45 and 55 percent of the whole sleep episode. Stage 2 sleepers require more powerful cues to awaken than stage 1 sleepers do.<sup>5</sup>

Slow-wave sleep (SWS), which mostly takes place in the first part of the night, is the term used to describe sleep phases 3 and 4. Each one stands out in its own way. Stage 3 only lasts a few minutes and makes up 3 to 8% of total sleep time. Stage 4 of the NREM cycle, which lasts for 20 to 40 minutes and accounts for 10 to 15% of sleep, is the final stage.<sup>6</sup>

## REM Sleep

Muscle atonia, bursts of fast eye movement, and desynchronized (low-voltage, mixed-frequency) brain wave activity are the hallmarks of REM sleep. The REM phase may only last 1 to 5 minutes during the first cycle; but, as the sleep session develops, it gradually gets longer.<sup>7</sup>

## Physiological Changes During NREM and REM Sleep

REM sleep is most frequently linked to dreaming. Because it stops a person from "acting out" their dreams or nightmares while they are sleeping, the loss of muscular tone and reflexes probably serves a vital purpose. After being awakened from this sleep period, vivid dream recollection occurs in around 80% of cases. Memory consolidation may also benefit from REM sleep.<sup>8</sup>

### PHYSIOLOGY DURING SLEEP

Physiological Process	NREM	REM
Brain activity	Decreases from wakefulness	Increases in motor and sensory areas, while other areas are similar to NREM
Blood pressure	Decreases from wakefulness	Increases (up to 30 percent) and varies from NREM
Sympathetic nerve activity	Decreases from wakefulness	Increases significantly from wakefulness
Muscle tone	Similar to wakefulness	Absent
Blood flow to brain	Decreases from wakefulness	Increases from NREM, depending on brain region
Respiration	Decreases from wakefulness	Increases and varies from NREM, but may show brief stoppages; coughing suppressed
Airway resistance	Increases from wakefulness	Increases and varies from wakefulness
Body temperature	Is regulated at lower set point than wakefulness; shivering initiated at lower temperature than during wakefulness	Is not regulated; no shivering or sweating; temperature drifts toward that of the local environment
Sexual arousal Greater than NREM	Occurs infrequently	Greater than NREM

**2307572\_521785\_575\_578DISCUSSION**

Sleep and mental health are closely related. Sleep is very important to psychiatric disease and is typically included in the diagnostic standards for certain illnesses. Due to hectic schedules and overload, individuals do not get enough sleep these days. As a consequence, work hours have taken over sleep time. Another factor that decreased the amount of time spent sleeping was tension. A healthy individual will become a patient if they don't get enough sleep. At first, it's not a major issue. But later on, it causes a variety of health issues and maladies.<sup>9</sup>

**CONCLUSION**

This article's primary goal is to introduce and emphasize the concept of nidra and its significance to human life. Nidra is one of the most significant variables to be examined in the modern period. Nidra is an important component of living a healthy existence. In the modern world, when everyone has a lot on their plate, stress and overthinking rob people of all their comforts, including sleep. Yoga and pranayama exercises might assist you relax your emotions in this circumstance.

**CONFLICT OF INTEREST -NIL****SOURCE OF SUPPORT -NONE****REFERENCES**

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