Kirti Bhati, Vijay Bhalsing, Rakesh Shukla

Abstract
Ayurveda “Science of life” is a unique blend of science and philosophy that balances the physical, mental, emotional and spiritual components necessary for holistic health. Ayurveda is becoming more and more acceptable globally as it is eco-friendly, toxicity free and cost effective due to its holistic approach. Its aim is to promote and preserve physical and mental health and cure of disease too. Ayurveda has recognized Nidra as one of the most important dimensions of health associated with happiness and good health and is an outcome of relax mental state. The disturbance in Nidra might be related to the life style, environmental influence, mental tension, changed food habits and day to day stress which ultimately disturb the psychoneuro-biological rhythm of sleep. The aim of this conceptual article is to compile and re-evaluate the various principles related to different aspects of sleep (Nidra).

Keywords: Ayurveda, Sleep, Nidra, Anidra

1. Introduction
Ayurveda “Science of life” is a unique blend of science and philosophy that balances the physical, mental, emotional and spiritual components necessary for holistic health. Ayurveda was introduced to the earth so that man could enjoy a long and healthy lifespan. [1] Ayurveda considers all the states, which are not pleasant in nature, to be disease: they cause suffering to mankind and any suffering is termed as a disease. For the living beings, it is an essential phenomenon for maintenance and restoration of both - body & mind. Thus, Nidra is a harmonious gift of nature. Man of this techno-world is trying to get overcome such harmonious features by elaborating his mental dimensions. But the biological clock which is mandatory for the well-being of human life’s rhythm is not ready to recognize these upsetting created by him. Once this harmony is violated his sleep as well as total health is hampered, because sleep exactly runs according to biological clock. The importance of sleep is well accepted by modern science also because of its restorative, recuperative and resting actions to the living organisms.

Several types of principles have been described in Ayurveda. Aahara (food), Nidra (Sleep) and Bramhacharya (Abstinence) are described to be the Trayopasthambas [2] (Three supportive pillars). Inclusion of Nidra in the three Upastambha proves its importance. While discussing about Nidra, the ancient Acharyas have stated that happiness and sorrow, growth and wasting, strength and weakness, virility and impotence and the knowledge and ignorance as well as the existence of life and its cessation depend on the sleep, a detailed description regarding the prevention, maintenance and treatment has been given. Some of the measures that have been advised can be followed in our day to day activities.

To re-evaluate, discuss, and elaborate the various Ayurvedic concepts and principles related to sleep and understand the health-related problems of the Anidra. This article is based on a review of Ayurvedic texts. Materials related to sleep (Nidra) Anidra, and other relevant topics have been collected. The main Ayurvedic texts used in this study are Charak Samhita, Sushrut Samhita, Ashtang Samgraha, Ashtang Hridaya, Bhava Prakash and Sharangdhara Samhita, and available commentaries on these. We have also referred to the modern texts and searched various websites to collect information on the relevant topics.

2. Nidra
Inclusion of Nidra in the three Upastambha (pillars) proves its importance. While discussing about Nidra, the ancient Acharyas have stated that happiness and sorrow, growth and wasting, strength and weakness, virility and impotence and the knowledge and ignorance as well as the existence of life and its cessation depend on the sleep (Nidra).
2.1 Etymological derivation of Nidra

The word Nidra is feminine formed by the prefix ni+dra++ra+kt+ta. This is a state of nature which causes encapsulation to the consciousness of a person [3].

2.2 Definition

Ever since modern people are unable to define it accurately from the time it is a question in every mind that what is sleep, how it occurs and what is its role in health. But the great sages of India had the perfect knowledge regarding the sleep. The definitions are as follows –

Sleep is the mental operation having the absence of cognition for its grasp, Vyasa while commenting Patanjali Yoga Durshana made a statement as “Sleep is a state of unconsciousness, but the consciousness remains about his own unconsciousness” [4]. Charaka affirmed that when the mind (as well as soul) gets exhausted or becomes inactive and the sensory and motor organs become inactive then the individual gets sleep [5]. Sushruta described the sleep occurs when the Hridaya the seat of Chetana is covered by Tamas [6] Astanga Sangraha, Vagbhatya stated that - the Manovaha Srotas become accumulated with Shleshma and mind is devoid of sense organs because of fatigue, when individual falls asleep [7].

2.3 Types of Nidra

Ayurveda has different opinions regarding the types of sleep. Basically Nidra can be classified into type’s viz. Svabhavika (natural) and Asvabhavika (abnormal). Out of the former Svabhavika Nidra is regular every night, which offers beneficial effects for the living beings, whereas the later Asvabhavika is one can be due to different causes of pathological in origin.

Charaka classifies the sleep condition into seven folds.

1. Tamobhava Nidra
2. SleshmaSamudbhava Nidra
3. Manah Shrama Sambhava Nidra
4. Sharira Shrama Sambhava Nidra
5. Anantuki Nidra
6. Vyadhyamavartini Nidra
7. RatriSvabhava Prabhava Nidra

2.4 Physiology of sleep (Nidra)

When Manas is exhausted then sleep occurs this phenomenon can be understood in this manner. According to Howell, sleep is due to cerebral ischemia. Cerebral cortex is the seat of higher centers like pre and post central gyres, association area etc., which have the correlation with mental activities described in Ayurveda. So due to the reduction in cerebral blood supply Manas becomes Klianta that causes sleep (Nidra) [8]. Further, during sleep, Indriyas (both Jnanendriya and Karmendriya) become inactive by the detachment from their sense organs or from their work.

3. Anidra

By going through the previous description, it is quite evident that Nidra is not only an important but an essential phenomenon of life, which affects the body and mind equally in a favorable way when it is enjoyed in a rightful manner. Otherwise the inadequate Nidra leads to various problems like Dukha, Karshya, Abala, Klishata, Ajnana at last leads to death also [9].

3.1 Pathophysiology –Nidana Panchaka

Nidana: Charaka mentions the causes for Anidra as Eva eva cha vigneyo Nidranashasyahetavaha [10] the factors are Atiyoga of Yamana, Atiyoga of Virechana, Atiyoga of Nasayakarma, Atiyoga of Raktamokshana and Atiyoga of Dhoomapana. Due to the excess use of these factors makes the Vata vitiation and Anidra is induced. Atichinta, Atikrodha and Atibhaya are the Manasikakarana leading to Tama Kshaya and Rajo Vrudhi induces the Anidra. Along with these, Charak considers, some others Chikitsa procedures of Atinidra as causative factors for Anidra, which are as follows - Satvaardhara (increased Satwa), Tamayyavee (conqueror of tama), Karya (engaged in work), Kala (old age), Vikara (disease), Prakriti (personalities such as Vata) and Vayu (Vata Dosha) are the causes of Anidra. [11] Further Sushruta has mentioned some extra Nidana factors which may cause Anidra; these factors are Vata Vridhi, Pita Vridhi, Manastapa, Kshaya and Abhigata.

Purvarupa: Purvarupa is not mentioned for Anidra in any Ayurvedic classics.

Rupa: In Ayurvedic classics some symptoms are mentioned due to holding up of sleep schedule. They are in the following table.

<table>
<thead>
<tr>
<th>Rupa</th>
<th>Charak</th>
<th>Sushruta</th>
<th>A. Hrudya</th>
<th>A. Samgraha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jrumba</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Angama</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Tandar</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Shiroroga</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Shirogaurava</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Akshigaurava</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Jadya</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Glani</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Bhrama</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Apakri</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Vatasroga</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

~ 10 ~
Samprapti of Anidra

Fig 1: Samprapti of Nidranash

There are various theories regarding the pathophysiology of sleep in modern medicine, but we will limit ourselves to the Ayurvedic point of view. Growth, development, and maintenance of the anatomy and physiology of the body is completely dependent on four factors: Kala (time), Swabhava (nature), diet (which should be excellent in the terms of nutrients), and absence of obstructive factors in the growth and development of the body [12].

Prevention of Anidra only the basic principles are described here. As previously stated, the process of sleep (Nidra) is totally dependent on diet and lifestyle. Anidra can be prevented by including some important principles of Dincharya (daily regimen) in the daily routine, for example, Anjana (a type of eye treatment); Abhayanga (body massage), especially Shiro-Abhayanga (head massage); Nasya (oily nasal drops); Sneha-Gandusha (retaining of oil in the mouth); cleansing of feet and external orifices; exercise; and so on.

By following the other principles of Swasthavritta such as utilization of Tryopastambha (diet, sleep, and coitus) according to the rules, to bear suppressible urges (i.e., mental fluctuations) and to expel insuppressible urges (i.e., natural urges), regular removal of aggravated Dosha according to Ritu (season) by Panchakarma; regular utilization of Rasayana (rejuvenating treatment) and Vajikarana (aphrodisiacs); following the principles of Sadvrirtta (social and personal ethics) and Achara Rasayana (ethics having effects of Rasayana), and so on [24]. Taking a diet strictly in accordance with the prescribed rules.

3.2 Management of sleep

It is a natural and Yapya (palliative) condition; it occupies the prime place among the Yapya diseases in the context of Ayurveda. Some measures, which can be advised to the patient of Anidra or Nidranasha, are mentioned in Ayurvedic texts, as follows:

- Maintain regular time for going to bed.
- Avoid seeing excited pictures at night.
- Avoid smoking, tea, coffee or alcohol at night before going to sleep.
- Not indulge in any type of work or reading till late night.
- Should devoid of thoughts tensions before going to bed.
- Hearing soft music or favorite songs also induces sleep.
- 5-10 minutes meditation before going to sleep.
- Offering prayer before sleep.
- Washing of hand, feet and face before going to sleep.
- Avoid of excess coitus.
- Avoid of day sleep.
- Proper evacuation of stool and urine.
- Avoid mosquito bites.
- Maintenance of adequate privacy and free from disturbances.

There is no specific line of treatment mentioned for Anidra in our texts. Depending upon the Chikitsa mentioned is in different contexts, However, the methods described are practical and can be followed in this era, are either available or are effective, the lifestyle of the people is fast and busy, there is a low level of Satva or defective mental constitution, and so on.

As Nidra is said to be Kapha dominant process, it also maintains the equilibrium between three humors. In Ayurvedic
classics, it is mentioned that in the Kaphajvikaras, Nidra and Tandras are commonly seen and in Vatajvikaras sleeplessness occurs and in Pittajvikaras lack of sleep is one of the symptoms. The equilibrium of the Dhatus also depends upon the sleep. Proper sleep achieves the Dhatu samyuta, the nourishment of the body, the increase of strength and the stability of life. When the decrease of Rasa Dhatu occurs, the sleep is diminished and the Dhatus get proper nourishment again only when the proper sleep is enjoyed. By the proper sleep the digestion power is properly mentioned and the Agni functions remain normal. The evacuation of the bowel and the emptying of the urinary bladder take place properly, if a person has slept well. The bad habits of waking at night and sleeping at day time have been stated to provoke all the three Doshas.

4. Conclusion
The aim of this conceptual article is to compile and re-evaluate the various principles related to different aspects of sleep (Nidra). Sleep is one of the basic instincts of life. Health and longevity is conquered by proper sleep. Ayurved has recognized Nidra as one of the most important dimensions of health associated with happiness and good health and is an outcome of relax mental state. The disturbance in Nidra might be related to the life style, environmental influence, mental tension, changed food habits and day to day stress which ultimately disturb the psychoneuro-biological rhythm of sleep. Various measures provided in Ayurveda can certainly help to overcome this situation. Avoiding causative factors is a must to tackle the condition more precisely with administration of herbs in single or compound form, having sedative activity.

5. References