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Impact Of Ahara And Vihara On The Nidra – An Ayurvedic Perspective

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Abstract: Sleep is a crucial biological necessity for human life, constituting about one-third of an individual's life and significantly impacting their well-being. Ayurveda views sleep as one of the three fundamental pillars of life, with Ahara and Brahmacharya. Sleep is a fundamental condition of relaxation, vital for revitalizing the Sharira, Manas, and Indriya. Proper sleep provides benefits like happiness, physical improvement, sexual potency, wisdom, and longevity, while sleep deprivation leads to sorrow, emaciation, sexual impotency, cognitive loss, and death. Sleep scheduling is essential, with daytime sleep advised to avoid dosha imbalances. Sleep and food consumption are closely related. The Dinacharya and lifestyle practices play a crucial role in promoting good sleep quality. In conclusion, the Ahara, Dinacharya activities and lifestyle practices (Proper Ahara and Vihara) have a significant impact on sleep quality. Further research is needed to establish causal relationships between diet and lifestyle changes with the sleep.

Index Terms **– Sleep, Ayurveda, Nidra, Ahara, Vihara, Dinacharya.**

I. INTRODUCTION

Sleep is a fundamental biological necessity for human life. Sleep constitutes approximately one-third of an individual's life and significantly impacts their well-being. Ayurveda regards sleep as one of the three fundamental pillars of life, known as Trayopastambhas, with Ahara and Brahmacharya. Ayurveda considers sleep as a fundamental condition of relaxation which is important for revitalizing the Sharira, Manas, and Indriya. Ayurveda associates sleep with the predominance of Tama guna during the night. Tama guna is said to induce relaxation of the Manas and Buddhi, resulting in sleep. Sleep transpires when the Manovaha Srotas are saturated with Shleshma, resulting in the mind's detachment from the senses owing to exhaustion. Ayurvedic scriptures categorize sleep into many forms according to its cause, timing, and dosha dominance. Vaishnavi Nidra is regarded as natural and healthy sleep, whereas Tamasi Nidra, resulting from the preponderance of Tama guna, induces lethargy and mental dullness. Ayurveda underscores the significance of sleep scheduling, correlating it with the natural dominance of Tama guna during the night. Daytime sleep (Divaswapna) is typically advised to avoid due to its potential to induce dosha imbalances. Nonetheless, exceptions exist, particularly during summer or for individuals recuperating from sleep deprivation. The inhibition of the innate need to sleep (Nidravegadharana) is seen detrimental, resulting in manifestations such as yawning, bodily discomfort, lethargy, headache, and ocular heaviness.[1-2]

II. IMPORTANCE OF SLEEP

Sleep induced due to nature of night is considered as normal sleep. Tamas guna of night and kapha dosha are responsible for sleep. Sense organs, body and mind are fatigued due to their continuous use during the day. In the night during the sleep the vishayas of Indriya are not perceived by Atma through manas as they are exhausted. Sleep helps to revitalize the mind, body, sense organs. Physical health, mental health and overall quality of life is dependent on sufficient quality sleep obtained at appropriate time. Proper sleep provides benefits like Sukha (happiness), Pushti (Physical improvement), Vrushata (sexual potency), Dnyana (Wisdom), and Jeevita (longevity). Sleep deprivation leads to Dukkha (Sorrow), Karshya (Emaciation), Klibata (Sexual impotency), Adnyana (Cognitive loss) and Ajeevita (death). Hence proper amount of sleep at proper duration is very important for the healthy life.[3]

III. AHARA AND NIDRA

Sleep and food consumption are closely related to each other. Tandra, a feeling of sleepiness, is a precursor of Nidra and it is evident after intake of Madhura, Snigdha, Guru and Kapha vardhaka ahara. Milk (Ksheera) is considered as one of the food items which induces sleep in various cultures. Many studies have been conducted to evaluate relationship between milk and milk products intake with the sleep quality and sleep duration. It is assumed that milk and milk products contain high levels of tryptophan. Tryptophan helps in synthesis of melatonin. It helps in reducing time to fall asleep and sleep quality.[4] A systematic review has found that tryptophan in lower quantity has limited role in sleep but it has a role in improvement of sleep if consumed as supplement more than 1 gm.[5] Gamma-aminobutyric acid (GABA) is a neurotransmitter that helps in regulating the sleep. GABA is present in fermented dairy products like yogurt in abundant quantity. It is synthesized from glutamic acid through decarboxylation facilitated by the enzyme glutamine decarboxylase, which is generated by lactic acid bacteria.[6] According to Ayurveda, Dadhi (Yogurt) is considered as Vatahara and Nidrakara ahara.[7] As per classical texts, one should drink milk at night before sleep to have a healthy life. As per Rajanighantu, fresh warm milk is helpful in revitalization and insomnia. In all types of milks, buffalo milk is more Guru and Snigdha and hence considered as beneficial for inducing sleep[8]. Buffalo milk has more micronutrients, fat and protein content and less water as compared to cow milk [9]. Milk obtained from an animal right after parturition, when coagulated, is referred to as Piyusha. Sour milk that is heated until it solidifies is referred to as Kilata. Milk that is soured by the addition of curd or buttermilk, with the liquid component removed, is referred to as Takra Pinda. The remaining liquid is referred to as Morata. As per Kaiyadeva Nighantu and Charakasamhiita, milk products like Kilaata, Piyusha and Morata are beneficial for improving sleep quality[10].

Among the various grains, Shali dhanya and Godhuma have the properties which help to improve sleep quality. Both of them have Madhura rasa, Madhura vipaka, Snigdha guna and sheeta virya. Both are included in the pathya nitya sevaniya ahara and satmya ahara[11]. Pishatnna or paishtika which is prepared from flour of grains is rich in carbohydrates. It is also considered as pathya ahara for improvement of sleep. Sugarcane juice (ikshurasa), Sugar (Seeta) and Jaggery products (Gaudika) are also included in the pathya ahara for Insomnia [3,12].

Mamsa (meat) and Mamsa rasa (meat soup) are also helpful in insomnia. Meat of Anupa desha animals, Audaka (aquatic) animals, Bileshaya (living in burrows) animals and Vishkira (birds that scratch the ground for food) animals can be given for people who suffer from sleep irregularities. Viskira includes birds that collect food by scratching the ground with beaks or claws. They include Lava (common quail), Vartika (grey partridge), Varttira (rain quail), Raktavartmaka (red jungle fowl), Kukkuba (crow-pheasant), Kapinjala (jungle bush quail), Upachakra (Sushi chukor), Chakora (chukor), Kottakaaraka (barking deer), Tittitri (partridge), Vartaka (male bustard), Naptrika (species of bird), Kalavinka (white caamara), Mayura (peacock), Krakara (crane), Kukkutta (cock), Sarangi (species of antelope), Vavaalaka (species of bird). Bileshayas are those animals living in burrows, they include Bheka (Frog), Godha (Iguana), Svaavid (Porcupine), Gandaka (Gecko), Cillata (Musk Shrew), Nakula (mongoose), Salyaka (porcuoines), Shasha (rabbit), Vrusadamsha (kind of animal living in a burrow), Lopaaka (kind of jackal), Lomasakarna (kind of animal living in burrow), Kaadali (deer), Ajagara (python), Sarpa (snake), Mushika (Mouse), Mahaababhru (cat). Usually mamsa is guru in nature but mamsa rasa when treated with spices is easier for digestion and is laghu as compared to Mamsa [3,12-15]. Although Ayurvedic texts recommend use of various meat and meat soups for sleep improvement, it has been found that red meat is related to sleep irregularities. Higher meat consumption (≥128 g/d) is associated with changes in sleep duration in both directions, with higher incidence of snoring and poor general sleep quality in older adults [16].

Various Ayurvedic texts have described madya varga as part of Ahara varga. Madya is also considered to be beneficial to induce sleep. It is interesting to note that Ksheera and Madya are nearly opposite in their properties and both are part of pathya ahara described for Nidranasha. Properties of madya differs by the nature of the content from which it is generated. Paishtika madya is prepared from fermentation of cereals is less likely to have harmful effects in low to moderate quantity. But it should be kept in mind that excessive quantity of alcohol might have deleterious effects on health as it is compared to the Visha (Poison) [3, 12, 17-18]. As per recent studies it has been found that sleep onset latency is reduced in healthy volunteers after intake of alcohol at all dosages. But sleep is more consolidated in first half while the second half of the sleep is disrupted. The proportion of total night REM sleep is diminished in most studies at moderate and high levels, with no discernible pattern observed at low doses. Most studies, regardless of dose, age, and gender, validate an elevation in slow wave sleep (SWS) during the initial half of the night compared to baseline values [19]. Alcohol is a potent somnogen and one of the most often utilized traditional remedies for insomnia. However, it is recognized to impair sleep homeostasis in the long term [19-20].

IV. VIHARA AND NIDRA

Various activities mentioned in the Dinacharya and lifestyle has important role in producing good quality sleep. Abhyanga, Udvartana, Utsadana, Samvahana and Mardana are very closely related to each other and all have soothing effect which is beneficial to induce sleep. Abhyanga is application of oil to the body followed by moderate massage. Udvartana and Utsadana includes use of various powders on the skin followed by gentle to moderate massage. Samvahana is very gentle touch massage. Mardana is similar to kneading type massage. All of these activities are included in daily regimen and can reduce stress levels. Abhyanga (application of oil to whole body), Shirobhyanga (head massage with oil), Karna purana (oil instillation in ear), Akshi tarpana (oil instillation in eyes) and lepa on face & head are beneficial for improving sleep quality. These Dinacharya procedures help to maintain balance of doshas according to their diurnal physiological variations [21]. Udvartana enhances peripheral blood and lymphatic circulation. Udvartana reduces kapha and meda from the body. Reduction in vitiated kapha and meda along with improved peripheral circulation may enhance sleep [22].

Abhyanga and Shiro-Abhyanga both help to reduce stress which evident by reduced cortisol levels and improved scores on various stress scales. Stress is one of the factor which causes sleep disruption. People who underwent Abhyanga and Shiro-Abhyanga procedures have shown significant improvement in Sleep Quality Scores as compared to others. Taila used for Abhyanga and Shiro-Abhyanga should have Vata and Pitta alleviating properties like Tungadrumadi Taila [23-24].

Snana which is malahara, Pavitra and vrishya in properties also improves Nidra. As per a systematic review and meta analysis, it is found that a warm water (40–42.5 °C) shower 1-2 hours before bedtime for a minimum of 10 minutes helps to significantly reduce Sleep onset time. These findings align with the mechanism whereby warm water shower bath facilitates a reduction in core body temperature by increased blood circulation to the palms and soles, hence increasing the distal-to-proximal skin temperature gradient and promoting body heat dissipation [25]. Even only foot baths with warm water (40°C and above) have shown positive results in various clinical trials. A non-pharmacological, cheap, easy to use, simple and safe intervention like warm water foot bath can help to improve general sleep quality [26].

Few other sleep improvement measures suggested in classical Ayurvedic texts are comfortable bed and home, Pleasant smell and sound, getting habituated to sleeping at a particular time, engaging in pleasant activities, hugging your beloved, and thinking that your daily work is accomplished. All of these measures help to reduce stress and improve emotional, cognitive and mental well being of the person. Exact mechanism for these behavioral measures needs to be explored in the future research studies.

V. CONCLUSION

Nidralpata is considered as Vataja Nanatmaja vyadhi. Hence all the Ahara and Vihara should have Vata hara properties. It includes Madhura rasa, Madhura vipaka and Snigdha Ahara. Vihara should have shramahara, vatahara and snehana properties. As per Ayurvedic texts various Ahara and Vihara is mentioned along with few things which have impact on psychological as well as behavioural level. As per recent advances there are many studies which show association between diet and sleep. But more robust studies are needed to establish causal relationships [27-28]. Factors affecting emotional and behavioural aspects like comfortable bed and home, Pleasant smell and sound, getting habituated to sleeping at a particular time, sleep hygiene, Engaging in pleasant activities etc need clinical studies for further pursual.

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