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EFFECT OF PRANAYAMA ON SLEEP- A REVIEW

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ABSTRACT

Pranayama is one among the Ashtanga. After the ethical practice Asana and Pranayama is mentioned for the maintenance of wellbeing of the Mind. In the present era people are leading busy unhealthy life style, not considering the wellness of mental health, this in turn leads to the development of Anxiety, depression, sleep disturbances etc. In India 33% of adults have insomnia. Another study found that 57.2% of respondents had poor sleep quality.^[1] Sleep is the important one which nourishes the body and maintains the body's wellbeing.

KEYWORDS: Pranayama, Sleep, Chitta Vritti, Insomnia.

INTRODUCTION

Insomnia is the most common sleep disorder. According to the third edition of the *International Classification of Sleep Disorders* (ICSD-3), insomnia is characterized by difficulty in either initiating sleep, maintaining sleep continuity, or poor sleep quality. These symptoms occur despite the presence of adequate opportunity and circumstance for sleep and result in daytime dysfunction. Chronic insomnia can

adversely affect the health, quality of life, academic performance, increase the risk of motor vehicle accidents, decrease the productivity at work, irritability and increase daytime sleepiness. Insomnia is also considered a contributing risk factor for medical problems like Cardiovascular diseases, Chronic pain syndrome, Depression, Anxiety, Diabetes, Obesity, and Asthma.

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Modern lifestyles, characterized by constant stimulation and heightened stress levels, frequently lead to imbalances in the autonomic nervous system, contributing to sleep disturbances or poor-quality sleep. By practicing pranayama, individuals can activate the parasympathetic nervous system, commonly referred to as the "rest and digest" system, which fosters relaxation and prepares the body for restorative sleep. Pranayama is composed of two words Prana and Aayama. Prana is the Vital force which controls the activities of the body and energizing the vital organs to work their maximum capacity and the regulation of that is known as Pranayama.

Man is endowed with Manas (Mind), Buddhi (Intellect) and Ahamkara (Ego) Collectively known as Chitta (Consciousness), which is a source of thinking, understanding and acting. As the wheel of life turns, consciousness experiences the five miseries of Avidya (Ignorance), Selfishness (Asmita), Raga (Attachment), Dvesha (Aversion) and Abhinivesa (Love to life). Chitta is a kind of dullness which can be purified through Asana and Pranayama. In Hatha yoga manipulation of Pranic currents is utilized in for bringing about control of chitta vritti and changes in consciousness. In Raja yoga, Chitta vritti are controlled by consciousness through the will and prana thus comes under the control of mind. Thus, Pranayama is utilized for preparing the mind for Dharana, Dhyana and Samadhi on the one hand and Samyama on various objects or principles used for acquiring siddhi on the other. In Hatha yoga Pradeepika Swatmarama states that as long as breath and Prana is present the Chitta will also be steady. Asana and Pranayama helps the wandering mind to stay stabilized.

METHODOLOGY

Pranayama has to be practiced with Puraka (Inspiration)and Recaka (Expiration) for a long period of time, the period of Kumbhaka (Retention) has to be increased gradually. Kumbhaka which is Accompanied by Puraka and Recaka is known as Sahita Kumbhaka. After Long practice it is possible to dispense with Puraka and Recaka and practice Kumbhaka alone is known as Kevala Kumbhaka.

All functions of Body are performed by the Prana Vayu. There are Five Varieties of Vayu is mentioned in the classics. Prana, Apana, Samana, Udana and Vyana Vayu. Prana flows through the thoracic region, regulating breathing and absorbing vital energy. Apana operates in the lower abdomen, managing the elimination of urine, semen, and faeces. Samana ignites the digestive fire, supporting digestion and ensuring the smooth functioning of abdominal organs. Udana, Centered in the throat, governs the vocal cords and the intake of air and food.

Vyana spreads throughout the body, distributing the energy obtained from food and breath via the arteries, veins, and nerves. Upaprana also mentioned in the Yogic Classics.

Table no. 1: Upaprana and their functions.

Upaprana	Functions
Naga	Relieves pressure on the abdomen by belching
Kurma	Controls the movements of eye lids
Krkara	Prevents substances passing up the nasal passages
	and down the throat by making sneeze or cough
Devadatta	Causes Yawning and induces Sleep
Dhananjaya	Produces Phlegm, Nourishes the body

Table No. 2: Pranayama types.

Types	Effect on the body
Anuloma -Viloma	Practice brings the ease and lightness to the body
	Rest the nerves and soothes the brain
Ujjayi	Soothes the nerves and calms the brain
	Reduces Phlegm, Relieves pain in the chest
Sitali	Cool the system and soothe the eyes and ears
Sitkari	
Bhastrika	Strengthen the abdominal organs, improves
	digestion, Create feeling of Exhilaration.
Bhramari	Humming sound induces sleep and good for
	person with insomnia.
Murcha	Not in Practice
Plavani	

DISCUSSION

The most common comorbidities associated with insomnia are psychiatric disorders. It is estimated that 40% of all insomnia patients have a coexisting psychiatric condition. Among these psychiatric disorders, depression is the most common, and insomnia is a diagnostic symptom for depressive and anxiety disorders.^[5]

The practice of pranayama helps to cleanse the Nadi, through which the energy flows to the entire body, keeps the Nadi in a healthy condition and prevents their decay. Pranayama starts from the base of the diaphragm on either side of the body near the pelvic gridle as such. The thoracic diaphragm and accessory muscles of neck is relaxed, This in turn helps to relax the facial muscles. When the facial muscles relax, they loosen their grip over the organ of perception, there by lessening the tension in the brain. [6] Hence the person will get the natural sleep.

Insomnia is associated with substantial impairments in an individual's quality of life. In several studies, insomniacs reported decreased quality of life on virtually all dimensions of the 36-item Short Form Health Survey of the Medical Outcomes Study (SF-36), which assesses 8 domains: (1) physical functioning; (2) role limitation due to physical health problems; (3) bodily pain; (4) general health perceptions; (5) vitality; (6) social functioning; (7) role limitations due to emotional health problems; and (8) mental health.^[7-9] One study compared SF-36 results in groups of mild and severe insomnia patients with groups of patients diagnosed with depression or congestive heart failure (CHF).^[10]

Pranayama helps to maintain overall body health. When mental health is in balance, other aspects of health naturally align as well. During Pranayama, a significant amount of oxygen enters the lungs and circulates throughout the body, nourishing vital organs, relaxing the entire system, and reducing unnecessary thoughts. These effects contribute to improved sleep quality in individuals.

CONCLUSION

Chronic insomnia is a common condition, affecting about 30% of the general population. It disrupts cognitive and physical performance and is linked to numerous daytime impairments across emotional, social, and physical aspects. Compared to those who sleep well, individuals with ongoing sleep issues are at greater risk of accidents, experience higher rates of work absenteeism, reduced job performance, lower quality of life, and greater reliance on healthcare services. Factors that increase the likelihood of chronic insomnia include older age, being female, and the presence of coexisting medical or psychiatric conditions.

According to Tantric texts, the objective of pranayama is to arouse the Shakti called Kundalini, the energy lies in the base of the spinal column in Muladhara chakra, the nervous plexus situated in the pelvis above the anus at the root of the spine. This energy has to be aroused and made to ascend through the Sushumna from the Muladhara Chakra to the Sahasrara. The energy generated by prana is like electricity. It is stepped up or down by the Chakras and distributed throughout the system along the nadi, Dhamani, Sira- which are the transmission lines. If the power generated not properly regulated it will destroy the machinery and equipment. In the same way if the prana is not regulated by Pranayama it can destroy the body of an individual. Pranayama, as a non-pharmacological intervention, offers less side effects or No side effects and has greater benefits compared to other sleep-inducing medications available in the market.

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