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Effect of Yoga with Nirguna Chanting on Sleep Quality Among Aged Insomniac Women

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Abstract: Yoga has been shown to improve sleep quality. Reducing cortisol is one of the many benefits of yoga. For optimal performance, it raises the temperature of the brain's cortical, hypothalamic, and cerebral cortex regions. The circadian rhythm that controls sleep is optimal because of the pineal gland's regular release of melatonin hormone. The symptoms of insomnia, a frequent sleep condition, include difficulty falling asleep, difficulty staying asleep, or early awakening with an inability to settle back to sleep. At awakening, one may still feel exhausted. This research set out to test the hypothesis that elderly women who suffer from sleeplessness may benefit from yogic practises using nirguna chanting.

Keywords: Insomnia, Nirguna chanting, Yoga, Sleep quality

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Introduction

The symptoms of insomnia, a frequent sleep condition, include difficulty falling asleep, difficulty staying asleep, or early awakening with an inability to settle back to sleep. At awakening, one may still feel exhausted. A person's health, productivity at work, and overall quality of life may all suffer when they do not get enough sleep. Insomnia is defined as the subjective experience of poor sleep quality despite having sufficient

opportunities to do so. More than half of the older population has trouble sleeping, yet doctors seldom prescribe medication for it and rarely utilise nonpharmacologic therapies. While sleep needs and patterns change with time, difficulties falling or staying asleep are not a natural component of ageing (Rajput and Bromley, 1999). Comorbidities, environmental influences, and individual differences all play a role in shaping an

individual's sleep patterns.

A person is more likely to get insomnia as he/she become older. Less peaceful sleep is a common side effect of ageing, making it more vulnerable to disruption by external factors like noise and movement. It is common for the body's internal clock to advance with age, causing the elderly to feel fatigued sooner in the evening and to awaken earlier in the morning. Yet, the average quantity of sleep required by a person of any age remains unchanged. Physical and social activity levels tend to decline with age. Inactivity may prevent a person from getting a restful night's sleep. Less active people may also be more inclined to take naps on a regular basis, which may disrupt their nighttime sleep.

Conditions like arthritis or back pain, as well as mental health issues like sadness or anxiety, may all lead to disturbed sleep. More nighttime bathroom trips, as a result of conditions like an enlarged prostate or a weak bladder, may be a major sleep disruptor. Restless legs syndrome and sleep apnea both grow more prevalent as people age. Prescription drug usage is more common among the elderly, leading to a higher prevalence of medication-induced sleeplessness in this age group.

Yogic practices help in better sleep. The practice of yoga reduces cortisol levels. It increases the temperature of cortical, hypothalamus and cerebral cortex regions for better functioning. The balanced secretion of melatonin hormone by the pineal gland perfects the body's circadian rhythm that regulates sleep. The Vagus nerve is stimulated which activates the parasympathetic nervous system for restfulness.

Yoga regularizes the production of hormones, both endocrine and exocrine. A healthy secretion of feel-good hormones produced in the brain (such as dopamine, oxytocin) and gut (such as serotonin) is another major reason for overall good health and holistic development of practitioners.

Participating in yogic practises that are

accompanied with nirguna chanting was the focus of this study, with the intention of determining whether or not these activities are beneficial for older women who struggle with insomnia. It was expected that participating in yogic practises that included nirguna chanting would lead to a considerable increase in the quality of sleep, which is a physiological characteristic. The purpose of this study was to determine whether or not yogic practises using nirguna chanting would have a significant effect on selected physiological characteristics in older women who suffer from insomnia.

Materials and Methods

For this study, 30 elderly Chennai women with insomnia were recruited, all falling between the ages of 60 and 70. These women were randomly assigned to one of two groups (A and B), each of which consisted of 15 participants. Both Groups A and B were given the Pittsburg Sleep Quality Index (PSQI), and their results were recorded. Six days a week, Group A participated in an hour-long Yoga treatment session. Those in Group B (Control Group) were allowed to go about their daily business as usual. No special care was given to them. Following an initial eight-week study period, both Groups (A and B) were retested using the same dependent variable. Again, members of Groups A and B took the PSQI and had their results recorded. Significant differences between the experimental and control groups were identified using analysis of co-variance (ANCOVA). A significance threshold of 0.05 was used for the test.

Pittsburg Sleep Quality Index (PSQI) was developed by Dr. C.F. Reynolds and his team, Western Psychiatric Institute and Clinic, University of Pittsburgh. The overall quality of sleep experienced by clinical groups were analysed as part of this research in order to determine its purpose. Just a few of the seven categories that the 19 self-reported items in the questionnaire are organised which include the subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep

Table 1: Computation of Mean and Analysis of Covariance of Sleep Quality of Experimental And Control Group

Test	Group-A	Group-B	Source of Variation	Degrees of Freedom	Sum of Squares	Mean Sum of Squares	F-Ratio
	Yoga	Control					
Pre	17.87	17.40	Between	2	1.63	1.63	0.50
			With in	28	91.33	3.26	
Post	9.20	17.27	Between	2	488.03	488.03	149.62*
			With in	28	91.33	3.26	
Adjusted Post	9.03	17.23	Between	2	521.52	521.52	343.42*
			With in	21	41.00	1.52	

*Significant at 0.05 level of confidence (Table F ratio at 0.05 level of confidence for df 1 and 28 = 4.20, 1 and 27 = 4.21)



Fig. 1: Pre, post and adjusted post-test values of control group, experimental group on sleep quality

disturbances, utilisation of sleeping medication, and daytime dysfunction. The score might be anything from 0 to 21 out of a possible 35. The higher the score, the worse the quality of sleep.

Results and Discussion

Using the analysis of covariance (ANCOVA), the data related to the variable that were gathered from the two groups before and after the training period were statistically evaluated to identify the significant difference, and the level of confidence used was 0.05. The results showed that F-ratio

before the practice was 0.50 (Table 1). The fact that the F-ratio value for sleep quality that was obtained was higher than the value from the table suggests that there was a substantial improvement in Sleep Quality among the post-test and adjusted post-test means of the Yoga group in comparison to Control Group (Fig. 1).

Negi (2019) conducted research to investigate the efficacy of music and Yoga as interventions for the treatment of insomnia. A total of 74 participants were randomly divided into four groups: Group A (n1 = 17, the control group),

Group B (n2 = 17, the music group), Group C (n3 = 20, the yoga group), and Group D (n4 = 20, the yoga group with music). For the course of the study, participants in Groups B, C, and D were exposed to either music, yoga, or yoga combined with music. Depression was evaluated using the Hamilton Depression Rating Scale (HDRS), anxiety was evaluated using the Hamilton Anxiety Rating Scale (HAM-A), and insomnia was evaluated using The Insomnia Severity Index. Both pre- and post-tests were carried out (ISI). According to the findings, Groups B, C, and D had much less severe symptoms of anxiety, despair, and sleeplessness. It was determined that the intervention of yoga and music helped decrease symptoms of sleeplessness, anxiety, and sadness.

Twenty women in the urban region of Thane city were selected for study by Metri *et al.* (2020). The participants age ranged from 50 to 70 years. The research was conducted over the course of one month. Participants completed a questionnaire on their sleep both before and after the yoga intervention, which consisted of chanting AUM for thirty minutes. After participating in yoga chanting for one month, it was discovered that the ladies had improved

sleep quality and that their blood pressure returned to normal. The patterns of the participants' disrupted sleep, snoring, insufficient and inability to sleep were altered to patterns of sound, adequate sleep, and they were also able to fall asleep more quickly. It was determined that repeating the sound of AUM while chanting brings about a state of mental peace.

Conclusion

It was found that older women who suffered from insomnia benefited from yogic practises that included Nirguna chanting. These practises led to an improvement in the quality of sleep they experienced.

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