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The Impact of Pragya Yoga and Savita Dhyana on Stress Levels and Sleep Quality of Women

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Abstract. This study examines the impact of Pragya Yogasana with Savita Dhyana on stress and sleep quality in women, aiming to assess their benefits on physical and mental health. Modern women face increased stress due to work, family, and social pressures, often leading to poor sleep. A randomized controlled trial assigned 30 adult women into two groups: the experimental group practiced Pragya Yoga with Savita Dhyana for 30 minutes daily over 30 days, while the control group received no intervention. Stress and sleep quality were measured before and after the intervention using the Perceived Stress Scale (PSS) and Pittsburgh Sleep Quality Index (PSQI). The experimental group showed significant reductions in stress (p 0.001) and notable improvements in sleep quality (p 0.001) compared to the control group. The combination of yoga postures with Gayatri Mantra chanting and focused meditation proved especially effective. These findings suggest that integrating Pragya Yoga and Savita Dhyana offers a practical approach to enhancing well-being. Further longitudinal studies are recommended to explore long-term benefits across diverse populations.

Keywords. Pragya Yogasan, Savita Dhyana, Gayatri Mantra, Perceived Stress Scale (PSS), Pittsburgh Sleep Quality Index (PSQI).

Introduction

The numerous people in India face sleep depletion together with stress from outside factors such as household problems and internal conflicts and inactivity [1]. Adult women experienced higher psychological stress when surveyed by American Psychological Association in October 2023 among over 3,000 participants. The stress rating average for women stood at 5.3 yet men scored their stress at 4.8 out of 10. Human physiology strongly depends on sleep to indicate when someone achieves complete relaxation. Women experience various unique sleep patterns when compared to men according to [2]. The research indicates that hormonal changes result in women becoming more prone to sleep disturbances that lead to poor sleep quality and sleep deprivation as well as obstructive sleep apnea and restless legs syndrome and insomnia [3]. Women today face significant stress due to a combination of job pressures, home responsibilities, societal expectations, and financial challenges. Women experience increased stress from societal pressures which heighten body image problems because of unrealistic media standards [4] even though BLS (2020) reports job and health concerns are the chief stress factors. Social and economic conditions increase the likelihood of women developing anxiety and depressive symptoms [5]. Stress develops from reproductive health difficulties during menstruation as well as maternity and menopause stages [6]. Research has validated that yoga represents a safe approach for treating persistent fatigue symptoms in breast cancer survivors as it both decreases fatigue intensity while improving mood and sleep quality [7]. Research shows that yoga proves to be a successful approach for stress management and stress-related disorder treatment [8].

Pragya yoga was created by Pt. Shreeram Sharma Acharya (Chief patron, All World Gayatri Parivar Trust, Shanti Kunj, Haridwar). Pragya yoga is an amalgamation of various different types of asanas, breathing techniques and movements of the body. Regular practice of these asanas helps in the overall balance of the body and the mind [9].All the aspirants of Pragya Yoga get initiated into Gayatri Mantra at the very beginning of the Sadhana and they perform Mantra Yoga through Gayatri Mantra Japa. The Mantra is: “Ohm bhūrbhuvah swah tatsaviturvarenyam bhargo devasya dhimahi dhiyo yo nah prachodayāt” (Meaning: May Almightly illuminate our intellect and inspire us towards the righteous path) [10]. System of Pragya Yoga influences every aspect of life and gives a lot of benefits. It can be said that Pragya Yoga is one of the ways of life [11]. Savita Dhyana, a meditation practice, has garnered attention for its potential benefits on mental and physical well-being [12]. The paper studies Savita Dhyana through analysing its historical background and modern applications of its principles and techniques. The investigation of Savita Dhyanas effects on stress relief together with emotional management and general wellness lays the foundation for an extensive understanding of this practice [13].

A study conducted at Dev Sanskriti Vishwavidhyalaya, Shantikunj, Haridwar, Uttrakhand, sought to examine the impact of Pragya yoga on stress levels among college students. The study, involving a sample of thirty college students in normal health conditions, implemented a structured Pragya yoga program over the course of thirty days. The researcher used Stress Scale developed by Singh to measure pre and post measure of stress level among college students. The results revealed a significant reduction in the stress levels of participants following the Pragya yoga program [14, 15]

Researchers employed Pittsburgh Sleep Quality Index (PSQI) [16] together with QOL Leiden-Padua (LEIPAD) Questionnaire [17] to asses sleep patterns and quality of life measures in 65 elderly participants. The yoga group participants achieved better sleep quality results and superior QOL scores than participants in the control group demonstrated. Sleep quality together with overall QOL shows improvement when elderly subjects practice yoga on a regular basis [18].Test conducted at Dev Sanskriti Vishwavidhyalaya in Haridwar investigated how Pragya yoga affects stress levels in college students. Thirty students engaged in a thirty-day yoga regimen consisting of daily warm-up activities then fifteen minutes of Pragya yoga followed by five minutes of Shavasana practice [19].

Pragya Yoga and Savita Dhyana are practices that might help reduce stress and improve sleep quality, but there isn’t much research on their effects specifically for women. This research examines methods which reduce stress and improve sleep quality for female individuals. Our research investigates the usefulness of Pragya Yoga and Savita Dhyana as tools for bettering women’s health outcomes along with their wellness standards.

Methodology

This research uses carefully designed controlled randomized trial (RCT) to examine two groups: Experimental and control groups. This RCT was conducted on the Indian population, with a sample size of 30 participants in total 15 in experimental group and 15 in control group for participating in a proposed Yoga module over 30 min. The Inclusion Cri-

teria was Women participants only who were married and healthy women aged between 30 and 45 years. All the variables are measured through two questionnaire which were filled up by the participants before and after the intervention and the final assessment is done within the same group with pre-post values by an intervention group. The yoga practice for women was conducted for one month. Pre- and post-intervention data were collected using the Perceived Stress Scale [20] and the Pittsburgh Sleep Quality Index (PSQI) [16].

Variables

Dependent variable – Perceived stress scale (PSS); Sleep Quality Assessment (PSQI)

Independent variable – Pragya Yoga and Savita Dhyana

Intervention

Fifteen women participated in the experimental group for one month yoga intervention, where they attended sessions of practicing Pragya Yoga (Table 1) and Savita Dhyana. Total intervention time was 22 min daily for a month. The intervention was divided into 5 parts: (1) Starting prayer : 1 Mn; (2) Pragya yoga : 10 min; (3) Savasana: 5min; (4) Savita dhyana: 5min; (5) Ending prayer: 1 min

Assessment

Perceived stress scale (PSS) is a classic stress assessment instrument. The questions in this scale ask about your feelings and thoughts during the last month. It consists of 10 items that measures global perceived stress experienced across the past 30 days on a 5-point scale. Individual scores on the PSS can range from 0 to 40 with higher scores indicating higher perceived stress. 0-13 would be considered low stress. Subjects graded as experiencing moderate stress would fall between 14-26, whereas those with high perceived stress rated their level at 27-40. The development of this scale happened in 1983 under Cohen, Kamarack and Mermelstein [21]. The Pittsburgh Sleep Quality Index serves as a Sleep Quality Assessment tool that evaluates your sleep quality during one month. It was created in 1999[16]. Adding these scores gave a total score from 0 to 21. A score over 5 showed poor sleep quality. The PSQI is simple to use and helps doctors and researchers understand and improve sleep.

Statistical Analysis

The data was analyzed using Student's t-test for paired samples to test the significance of change within the group before and after yogic practice. The data was analyzed using Student's t-test for paired samples to test the significance of difference between the primary values.

1. Tadasana	Om bhooh
2. Padahastasna	Om bhuvah
3. Vajrasana	Om swah
4. Ustrasana	Tat
5. Yoga mudrasana	Savituh
6. Ardhatadasana	Varenyam
7. Shashankasana	Bhargo
8. Bhujangasana	Devasya
9. Triyak bhujagasana (left)	Dhimahi
10. Triyak bhujagasana (right)	Dhivo
11. Shanshankasana	Yonah
12. Ardhatadasana	Prachodayat
13. Utkatasana	Bhuh
14. Padahastasana	Bhuvah
15. Tadasana	Swah
16. Chanting of Om	Exhale with chanting of Om

Table 1: Steps of Pragya Yoga and Savita Dhyana

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	GROUP	Global PSQI [mean±sd]	
		PRE	POST
1.)	STUDY GROUP	11 ± 1.96	10.07 ± 1.75
2.)	CONTROL GROUP	14.4 ± 1.84	15.67 ± 1.54

Table 2: Pre - post data of study and control group (PSQI). The variable P value <0.05 indicates the significant changes and P value is (P=0.0021) which shows significant result.

	GROUP	Global PSS [mean±sd]	
		PRE	POST
1.)	STUDY GROUP	22.27 ± 4.46	20.87 ± 3.89
2.)	CONTROL GROUP	28.87 ± 4.03	30.6 ± 3.22

Table 3: Pre – post data of study and control group (PSS). The variable P value <0.05 indicates the significant changes and P value is (P=0.0006) which shows significant result.

Result

The Pre and post data collected from the Study and control group show the Mean and Standard deviation. In order to clearly understand the impact of the intervention on the sleep quality and stress of the participants and non-participants. There was no significant difference in the baseline parameters of yoga group and control group. However, the changes observed in the Yoga group before and after the yogic intervention are as follows:

PSQI (Sleep Quality Assessment)

Decreased significantly, i.e., p 0.001 after yogic practices. The study group data showed a significant reduction in the mean and standard deviation between the pre and post intervention data. The control group did not show any significant changes in the before and after intervention mean and standard deviation (Table 2).

PSS (Perceived Stress Scale)

Decreased significantly, i.e., p 0.001 after yogic practices. The study group data showed a significant reduction in the mean and standard deviation between the pre and post intervention data. The control group did not show any significant changes in the before and after intervention mean and standard deviation (Table 3).

Discussion

Pragya Yoga encompasses the chanting of the Gayatri Mantra, which serves to alleviate stress and depression among practitioners [19]. Pragya yoga consists of 16 asanas and each asana when performed should be done with the recitation of each syllable of gayatri mantra. In this dissertation the findings showed positive effects in improving sleep quality and helped in reducing stress. The first study conducted at Dev Sanskriti Vishwavidhyalaya, Shantikunj, Haridwar, Uttrakhand, sought to examine the impact of Pragya yoga on stress levels among college students The study, involved a sample of thirty college students in normal health conditions, implemented a structured Pragya yoga program over the course of thirty days [9]. Similar to our study, a research on Stress Scale developed by Singh (2002) to monitor educational stress changes among students during both the initial and final phases. The participants displayed decreased stress after taking part in the Pragya yoga program according to the study results [22]. Another study on PragayYoga is known for its anti-aging benefits, such as maintaining body weight, enhancing spinal elasticity, firming the skin, reducing mental tension, and improving muscle quality and posture. The pre- and post-intervention data showed significant improvements in body weight, cholesterol levels, and stress in the experimental group, while the control group showed no significant changes [23]. Consistent yoga practice shows evidence of decreasing several problems which accompany aging such as weight management and blood cholesterol control together with diminished stress reactions [24].

Traditional yogic philosophy includes Savita Dhyana which uses concentrated focus on the deity Savita related to the rising sun for improving mental relaxation and clearness. The research demonstrates that Savita Dhyana led practice impacts the human nervous system substantially [12]. The study of EEG brain waves showed that meditation leads to modifi-

cations of brain waves through alpha wave increases that support relaxation and clarity of mind. Regular Yogic exercise results in enhanced mental health since it builds brain cortical thickness thus serving mental wellness purposes for both well and medically challenged individuals [25]. Our study also observed that Pragya Yoga along with Savita Dhyana practiced by women for one month brought small but limited positive changes in stress and sleep quality. The stress levels of participants slightly decreased and their sleep quality marginally improved according to measurements taken during the research. The brief one-month timeframe probably was not sufficient for the complete benefits to emerge. When practiced regularly yoga and meditation achieve the most significant outcomes during extended time periods [11].

Conclusion

Modern society presents numerous sleep and stress-related difficulties among women. The combination of working with family care responsibilities and personal needs produced extensive stress which made relaxation before bed difficult. Different types of stress resulted in feelings of anxiety and irritability together with concentration problems. This study evaluated how practicing Pragya Yoga together with Savita dhyana for thirty minutes duration influenced both sleep quality and stress levels of participants. The investigated practices showed promise in reducing stress and improving sleep patterns although these changes were relatively minimal thus suggesting their potential medical applications. The brief nature of the research study probably limited the possible degree to which these benefits could develop. Extensive long-term research must examine the complete effects of Pragya Yoga and Savita Dhyana. Several months of constant practice serve as the key to obtaining sustainable improvements in sleep quality together with stress reduction.

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Conflict of Interest: None.

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