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Exploring Scientific Pranayama's Role in Thyroid Regulation

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Abstract - *Thyroid disorders are common globally, and often requires lifelong medication. People around the world, and especially in India, are showing increasing interest in methods and practices that can aid in regulating thyroid health and levels. This research was done to find out the effect of a structured 21-day Scientific Pranayama practice on thyroid stimulating hormone (TSH) levels. It included daily practice of Bhastrika, Kapalabhati, Ujjayi, Anulom Vilom, Bhramari, Udgeetha, and Pranava breathing techniques. We suggested the participants to test TSH levels before and after the 21-day practice to determine changes in TSH values. We observed that the TSH levels had decreased after practicing Scientific Pranayama for 21 days, along with improvements in energy, better sleep, and stress reduction. Our findings point that Scientific Pranayama is a valuable support for thyroid management.*

Key Words: Scientific Pranayama, Thyroid Disorders, TSH Reduction, Yogic Breathing, Bhastrika, Kapalabhati, Ujjayi, Anulom Vilom, Bhramari, Udgeetha, Pranava, Physical and Mental Health

1. INTRODUCTION

Pranayama, derived from the Sanskrit words, prana (life force) and ayama (extension), is the fourth limb of Ashtanga Yoga and an important practice that helps one to regulate and consciously control the breath. Pranayama techniques known from our ancient wisdom is rooted in our traditions, and is useful to control and regulate the body, breath, and mind. Pranayama includes Pooraka (controlled inhalation), Rechaka (controlled exhalation), Kumbaka (internal breath retention), and Bahya Kumbaka (external retention), using which one can regulate the flow of prana (vital energy) within the body, thereby calming the mind and improving the health.

The term Scientific Pranayama is coined by Dr. Devaki Madhav. She has done extensive research in this field and provided the techniques, which when done as per the package greatly works on decreasing the TSH levels, along with physical and mental well-being.

Thyroid disorders affect people, especially women globally, leading to hormonal imbalance, tiredness, anxiety, and fertility issues in women, to name a few. While medication is critical and has to be the primary treatment, many look for holistic approaches that address both physical and mental well-being. There have been many studies that link Pranayama, the fourth limb of Ashtanga yoga according to Sage Patanjali. Pranayama is used to control breathing, and thereby improve bodily functions, help stress management, and regulate the endocrine system.

Research Objectives: To evaluate the role of Scientific Pranayama as a primary intervention for thyroid regulation.

Hypotheses: Scientific Pranayama practice has a significant positive effect on thyroid hormone regulation.

2. NEED FOR THE STUDY

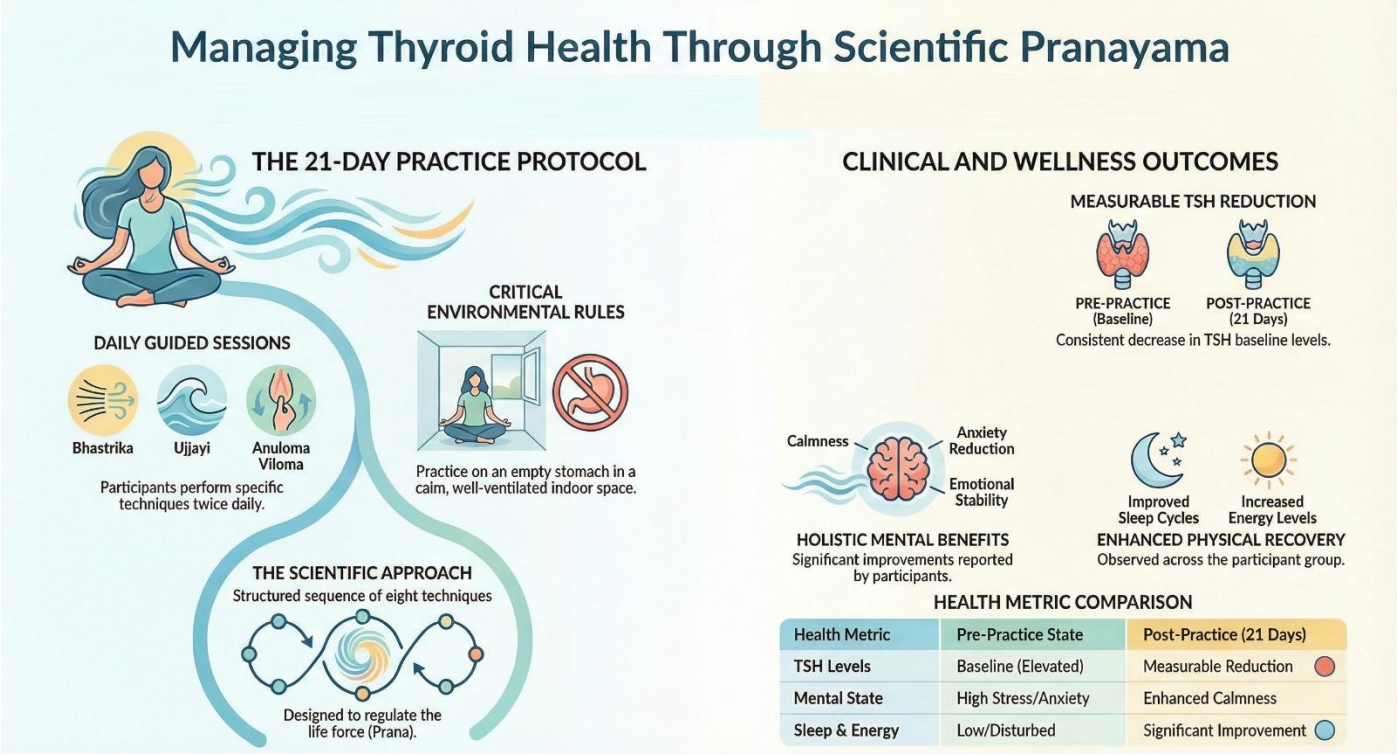
Thyroid disorders are increasingly common because of lifestyle changes. To tackle the issue, lifelong medication is suggested. However, we all know that along with medication comes associated issues such as exhaustion, anxiety, and low energy levels. Stress is also known to increase thyroid imbalance.

As part of the literature survey, our findings concluded that in addition to medications, people opt for yoga, mudra therapy, color therapy, and pranayama, along with diet changes to tackle thyroid issues. However, upon closer look, we found that Scientific Pranayama, when practiced regularly and correctly, emerges as a winner to address the issue.

Thus, including Scientific Pranayama as part of lifestyle might offer benefits and lead to a better life. In this study, we investigated the impact of a structured 21-day Scientific Pranayama package on TSH levels. Our aim was to establish Scientific Pranayama as a complementary therapy for thyroid health and regulation.

2. METHODOLOGY

Participants with thyroid imbalance, who were taking medications to control their TSH levels were requested to participate based on their availability. They were requested to provide their recent TSH levels and follow the Scientific Pranayama rules, such as being consistent, having an empty stomach, sitting on a mat or chair with no direct contact with the ground, a calm environment with gentle air circulation, and preferably indoors. Of course, the participants were advised to continue their medications along with the Scientific Pranayama practice.



The Scientific Pranayama package included the following techniques, which the participants practiced daily for 21-consecutive days under guided supervision. Each session for applying the Scientific Pranayama package for regulating thyroid lasted a specified duration to ensure consistency:

Morning:

- Bhastrika - 5 mins
- Kapalabhati - 10 mins
- Bahyakumbhaka - 10 repetitions.
- Ujjayi - 15 mins
- Anuloma Viloma - 15 mins
- Bhramari - 10 repetitions
- Udgeetha - 21 mins

- Pranava - minimum 5 mins and no maximum limit

Evening: Food after two hours or before food

- Ujjayi - 15 mins
- Anuloma Viloma - 15 mins
- Pranava - minimum 5 minutes and no maximum limit

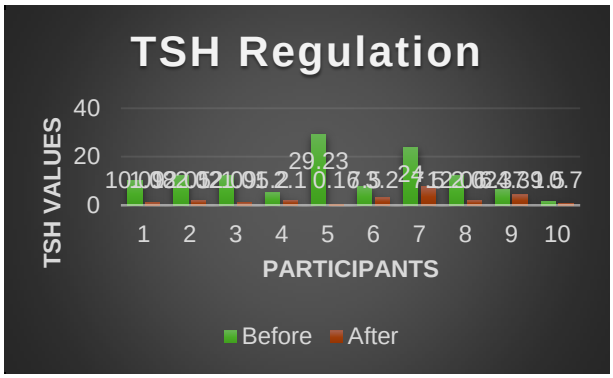
3. DATA COLLECTION

The participants' baseline TSH levels were recorded prior to the Scientific Pranayama practice. After 21 days, participants were requested to undergo follow-up testing of their TSH levels. The results were then measured and compared find out the changes between the pre and post-practice of the Scientific Pranayama package.

4. RESULTS

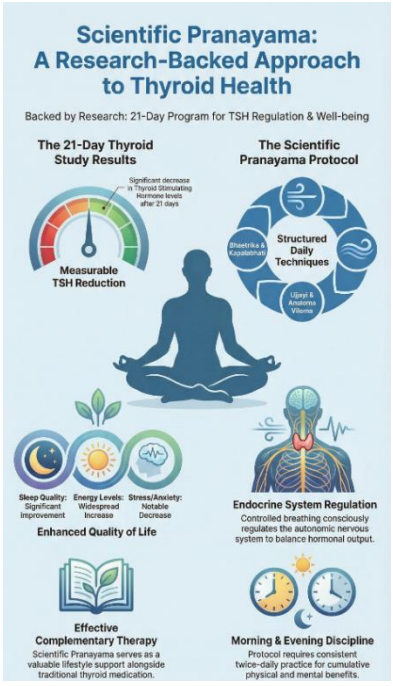
The TSH levels showed variation. When we compared the pre and post Scientific Pranayama package, there was a considerable reduction in the TSH levels from the initial values.

The participants mentioned that their sleep cycles had improved. They weren't anxious like before and were much calmer.



5. INTERPRETATIONS AND CONCLUSIONS

My interpretation and conclusion are that when the Scientific Pranayama is done as per the package, it reduces the TSH values.



The 21-day package of Scientific Pranayama helped participants to reduce the TSH levels, get better thyroid health, reduce restlessness/anxiety, and get mental calmness So, we can conclude that Scientific Pranayama helps in regulating and improving the thyroid health.

6. LIMITATIONS

The following were the limitations of this research:

- We couldn't completely check whether the participants were consistent and accurate in their practices.
- We need to apply this research on larger samples and longer duration. This will help us to spread about Scientific Pranayama and its lasting effects to wider audience.

7. ACKNOWLEDGEMENT

I take this opportunity to thank Dr. Devaki Madhav, my Guru. Her guidance and teachings have helped me to prepare this research paper.

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