

Relation between Yoga and PCOD

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Abstract.

PCOS, a hormonal disorder in women of reproductive age, is characterized by irregular menstrual periods, excess androgen levels, and the development of fluid-filled follicles in the ovaries. Afflicting 7-10% of women, PCOS is a psychosomatic condition with uncertain origins, manifesting as obesity, anovulation, hirsutism, abnormal menstrual patterns, increased pregnancy loss, and related complications. Current medical approaches offer only symptomatic relief with side effects, costly interventions, and, in some cases, surgical procedures. In contrast, Ayurveda, with its holistic approach, advocates yoga as a comprehensive solution to address the root causes of PCOS, particularly obesity and stress. Daily yoga, meditation, and asana practice for 30 minutes contribute to weight reduction and stress management, ultimately restoring the normal function of the hypothalamo-pituitary-ovarian axis and promoting the reduction of PCOS.

Keywords: weight loss PCOS, Yoga asanas, Ovulation.

1. Introduction

Polycystic Ovary Syndrome (PCOS) stands as a prevalent hormonal disorder affecting women of reproductive age. This multifaceted condition disrupts the normal functioning of the ovaries, leading to irregular menstrual cycles, elevated levels of male hormones (androgens), and the formation of fluid-filled follicles on the ovaries. With an incidence rate of 7-10% among women, PCOS encompasses a spectrum of symptoms, including obesity, anovulation, hirsutism, abnormal menstrual patterns, increased pregnancy loss, and complications during pregnancy. Often characterized as a psychosomatic disorder of uncertain origin, PCOS poses significant challenges in its management. While contemporary medical approaches primarily provide symptomatic relief, Ayurveda and yoga offer holistic

interventions aiming at addressing the root causes, such as obesity and stress, to promote a more comprehensive and sustainable solution for individuals dealing with PCOS.

Polycystic Ovary Syndrome (PCOS) is characterized by a range of symptoms that can vary in severity among individuals. Common symptoms of PCOS include:

Irregular Menstrual Cycles: Women with PCOS often experience irregular periods, with intervals between menstrual cycles that may be longer than 35 days.

Ovulatory Dysfunction: Anovulation, or irregular ovulation, is common in PCOS, leading to fertility challenges.

Excess Androgen Levels: Elevated levels of male hormones (androgens) may lead to symptoms such as hirsutism (excessive hair growth), acne, and male-pattern baldness.

Polycystic Ovaries: As the name suggests, the ovaries may develop small fluid-filled sacs or cysts, visible on ultrasound. However, not all women with PCOS have cysts.

Weight Gain: The risk factor is often related with obesity or difficulty losing weight.

Skin Issues: Skin problems such as acne and darkening of the skin, particularly along neck creases, in the groin, and underneath breasts (acanthosis nigricans), can be associated with PCOS.

Emotional and Mental Health Issues: PCOS women may have a higher prevalence of mood disorders, including anxiety and depression.

It's important to note that not all individuals with PCOS will experience all of these symptoms, and the severity can vary. Diagnosis is typically based on a combination of clinical symptoms, physical examination, and laboratory tests. If you suspect you have PCOS, it's recommended to consult with a healthcare professional for proper evaluation and management.

2. Design/Methods/Modelling

This review was conducted by synthesizing information from classical Ayurvedic literature, contemporary sources, magazines, and research journals, including references from PUBMED and the MEDLINE database.

Yoga is a holistic system of physical, mental, and spiritual practices that originated in ancient India. The word "yoga" is derived from the Sanskrit word "yuj," which means to unite or join, reflecting the integration of mind and body that is central to its philosophy.

Here are key aspects of yoga:

Physical Postures (Asanas): Yoga includes a variety of physical postures or asanas that aim to promote flexibility, strength, and balance. These postures also play a role in preparing the body for meditation and promoting overall well-being.

Breath Control (Pranayama): Pranayama involves breath control techniques that focus on regulating and enhancing the breath. These practices are believed to bring balance to the body and mind and increase the flow of energy (prana).

Meditation (Dhyana): Dhyana is a fundamental aspect of yoga, emphasizing mindfulness, concentration, and self-awareness. It aims to quiet the mind, reduce stress, and foster a sense of inner peace.

Ethical Principles (Yamas and Niyamas): Yoga incorporates ethical guidelines known as yamas (restraints) and niyamas (observances). These principles guide practitioners in leading a balanced and ethical life, promoting social and personal harmony.

Philosophical Foundations (Yoga Sutras): The Yoga Sutras of Patanjali, a foundational text in yogic philosophy, outline the principles and practices of yoga. It consists of aphorisms that provide guidance on the path of self-realization and liberation (moksha).

Various Styles: There are various styles of yoga, each with its emphasis on different aspects. Hatha yoga focuses on physical postures, Kundalini yoga on energy awakening, Bhakti yoga on devotion, Jnana yoga on wisdom, and Karma yoga on selfless action.

Health Benefits: Yoga is known for its positive impact on physical health, including increased flexibility, strength, and cardiovascular health. It is also associated with mental health benefits, such as stress reduction, improved focus, and emotional well-being.

Yoga is a versatile practice that can be adapted to suit individuals of all ages and fitness levels. It has gained widespread popularity globally, and many people incorporate it into their daily routines as a means of promoting overall health and well-being.

Yoga for women with PCOS:

Polycystic Ovary Syndrome (PCOS) is a hormonal condition surrounded by women of reproductive age, which leads to various health issues, including irregular menstrual cycles, infertility, and metabolic disturbances. Yoga has been explored as a complementary approach

to managing PCOS symptoms, providing potential benefits for women with this condition. Here are some ways in which the science of yoga may work for women with PCOS:

Stress Reduction: Yoga incorporates relaxation techniques, meditation, and controlled breathing (pranayama), which can help reduce stress levels. Stress management is crucial for women with PCOS, as elevated stress may exacerbate hormonal imbalances and worsen symptoms.

Hormonal Balance: Certain yoga practices are believed to support hormonal balance by stimulating the endocrine system. Specific asanas (postures) may target the reproductive organs, promoting better blood flow and potentially contributing to hormonal regulation.

Improved Insulin Sensitivity: Yoga has been associated with improved insulin sensitivity, which is particularly relevant for women with PCOS, as insulin resistance is a common feature of the condition. Poses that involve stretching and strength-building may help enhance glucose metabolism.

Weight Management: Many women with PCOS struggle with weight management. Yoga can be a gentle yet effective form of physical activity that supports weight loss or maintenance. Certain yoga styles, such as vinyasa or power yoga, can be more physically challenging and contribute to calorie burning.

Enhanced Fertility: While more research is needed, some studies suggest that yoga may have a positive impact on fertility by addressing underlying factors such as stress and hormonal imbalances. Yoga's emphasis on overall well-being and relaxation may create a more favorable environment for conception.

The sample sizes of 150 PCOD patients of up to 19 years were selected from each urban areas of Tadepalli and Mangalgiri of Guntur district, Andhra Pradesh. And they were made to practice yoga daily to decrease the risk factors of PCOD like overweight, obesity and irregular.

Periods in the yoga centers of their respective areas.

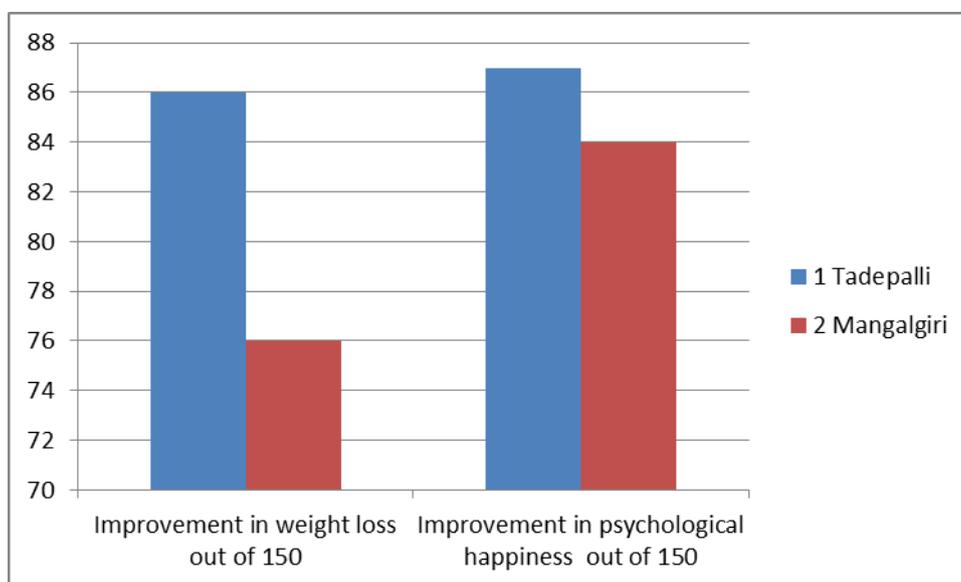
3. Results and Discussion

Table – 1 – Shows the age wise distribution of the sample

| S.No | Name of the village | Age | No |
|------|---------------------|------------|-----|
| 1 | Tadepalli | Upto 19yrs | 150 |
| 2 | Mangalgi | Upto 19yrs | 150 |

Table – 2 – Shows the improvement after yoga

| S.No | Name of the village | Improvement in weight loss | Improvement in psychological happiness |
|------|---------------------|----------------------------|--|
| 1 | Tadepalli | 122 members | 87 members |
| 2 | Mangalgi | 102 members | 84 members |



It is observed that with continuous yoga practices for 4 months in each area out of 150, 122 members (81%) were lost weight in Tadepalli and 68% of teens lost weight in Mangalgi. And 58% of people in Tadepalli and 56% in Mangalgi improved their psychological happiness.

4. Conclusions

Yoga emerges as a comprehensive science and art of living, addressing the holistic well-being of individuals. The prescribed Yoga routines, including Asanas (poses),

Pranayamas (breathing techniques), and Kriyas (cleansing exercises), contribute to the overall toning of the body's systems.

In the case of women diagnosed with PCOS, characterized by insulin resistance, obesity, and elevated androgen levels, a pivotal approach involves weight reduction through lifestyle modifications. Ayurvedic dietary practices, emphasizing wholesome food (Pathya Ahar), coupled with Yoga interventions outlined in Ayurvedic literature, play a crucial role in maintaining health and regulating the endocrine system. The incorporation of breathing techniques (Pranayama) proves beneficial in alleviating PCOS symptoms associated with deep-rooted mental stress, empowering individuals to combat this challenging syndrome. These lifestyle modifications not only enhance fertility but also elevate the overall quality of life for PCOS patients.

Engaging in yoga asanas for half an hour daily, with, 4 Pranayama's, meditation, and Shavasana, proves effective in both weight decrease and stress management. This, in turn, contributes to stabilizing the normal functioning of the hypothalamo-pituitary-ovarian axis and effectively treating PCOS. It is imperative to recognize and appreciate the role of Yoga as a safe and efficacious management for PCOS.

Acknowledgements

The author drawn-out their honest gratitude to all those individuals who have extended their direct or indirect assistance throughout the various stages of this study, expressing gratitude for their valuable support at each significant juncture of the research process

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