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## YOGA AND ITS EFFECT ON POLYCYSTIC OVARIAN SYNDROME

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### ABSTRACT

PCOS is defined by polycystic ovaries, chronic anovulation, and hyperandrogenism, which results in menstrual irregularity, infertility, and hirsutism. and is linked to polycystic ovaries that are enlarged. there are various signs and symptoms such as Bloating, mood swings, pelvic pain, backaches, irregular menstrual periods. Yoga practise, cures PCOS without any side effects and at no cost. YOGA literally means "union." Union of mind with supernatural power after separation from discordant worldly objects the mind is a battleground for nature's satva (tranquil), Rajas (passionate), and Tamas (inert) qualities. Yogic practises benefit both physical and mental health by regulating the hypothalamic pituitary adrenal axis, the sympathetic nervous system, and the neuroendocrine axis. Suryanamshkar (Sun Salutation), Suptbandhkonasan (Reclining Butterfly Pose), Halasana (Plough Pose), Dhanurasan (Bow Pose), Bhujangasana (Cobra Pose), Chakki chalanasan (Moving wheel pose) , Padmasan (Lotus pose), Naukasan (Boat pose).

**KEYWORDS:** PCOS, Asana, Yoga, Syndrome

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## **INTRODUCTION**

A woman is a symbol of beauty. Beauty should not be superficial; it should be maintained internally as well. Many physiological changes occur in women's bodies, which are most noticeable during reproductive life. God has bestowed the most valuable gift on women: motherhood. Motherhood preparation begins with puberty and ends with menopause.

Polycystic ovary syndrome, or PCOS, is an endocrine system disorder that primarily affects women during their reproductive years. PCOS is defined by polycystic ovaries, chronic anovulation, and hyperandrogenism, which results in menstrual irregularity, infertility, and hirsutism. and is linked to polycystic ovaries that are enlarged. (Stein, 1935).

## **SIGN, SYMPTOMS AND COMPLICATIONS**

Among the signs and symptoms are Somatic symptoms include oligomenorrhoea and amenorrhoea-irregular menstrual periods; cycles that do occur may be heavy, irregular, or absent. Anovulation-related infertility Dyspareunia, PMS-like symptoms that last for a long time (Bloating, mood swings, pelvic pain, backaches), Hirsutism is the condition in which unwanted body hair grows in a male pattern on the face, chest, and legs. Male pattern baldness, androgenic alopecia, Acne, oily skin, seborrhoea, etc. Acanthosis-dark patches of skin that range from tan to dark brown or black and are associated with PCOS (Unfer et.al.,2014 and Nicandari et.al.,2012) and Psychic symptoms such as depression, anxiety, bipolar disorder, stress, sleep apnea, general fatigue, and loss of self-confidence can all worsen Quality of Life (QoL) (Sirmans et.al., 2014).

The most serious complications associated with PCOS are as infertility, diabetes, cardiovascular diseases, dyslipidemia, hypertension, glucose intolerance, and metabolic syndrome (Teede et.al.,2010., Barber et.al., 2006 and Legro et.al., 2003). The Risk assessment for PCOS can greatly aid in early detection and better treatment. Menstrual cycle disorder, bad mood, family history of diabetes, family history of infertility, menstrual irregularity of mother, and lack of physical exercise were identified as risk factors for PCOS in one study (Shan et.al., 2015) Obesity, central obesity, and insulin resistance are all strongly linked to its aetiology, and treating these risk factors should be the primary goal. Shortterm weight loss has consistently been found to be effective in reducing insulin resistance and restoring ovulation and fertility (Giallauria et.al., 2008).

## **PREVALENCE OF PCOS**

The prevalence of PCOS in India varies greatly, ranging from 2.2 percent to 26 percent (Moro et.al., 2009). PCOS is prevalent in South Indian states such as Andhra Pradesh, with a prevalence of 15.4 percent in the Nellore district of the same state (Vos et.al., 2010 and Nagaraja et.al.,2014). Telangana, a neighbouring South Indian state, has a prevalence of about 20%. (Radha et.al., 2016). PCOS is becoming an epidemic in the city of Bangalore in the state of Karnataka (Trina et.al., 2013). PCOS prevalence among people aged 18 to 25 years old is 3.7 percent in Lucknow, a city in northern India, 46.8 percent in New Delhi, India's capital city, and 26.4 percent in Kerala, a state in southern India (Gill et.al., 2012 and Vijayanet.al., 2013). Moreover, the prevalence rate of PCOS among medical undergraduate girls in Pondicherry was 12.18%, even though they had basic knowledge about the reproductive system and PCOS, and 9.8% in Thiruvananthapuram both these cities are in South India(Vijaya et.al., 2014 and Nair et.al., 2012).

## **EFFECT OF YOGA ON PCOS**

Modern medical science has no cure for PCOS; they can only provide symptomatic treatment, which has unsatisfactory results, many side effects, and is also expensive; and when medication does not provide even symptomatic relief, they resort to ovaries drilling surgery. There are several medications available to treat PCOS, with varying degrees of success and risks associated with drug interactions. It has been well established that lifestyle changes such as proper diet, yoga, and exercise can help to reduce the symptoms and severity of the disease (Puurunen et.al., 2011 and Verma et.al., 2015). On the other hand, our divine ancient science, Yoga practise, cures PCOS without any side effects and at no cost. YOGA literally means "union." Union of mind with supernatural power after separation from discordant worldly objects The mind is a battleground for nature's satva (tranquil), Rajas (passionate), and Tamas (inert) qualities. Yogic processes significantly aid in the development of mental abilities and powers. Yoga is a complete prescription for a healthy body and mind that can eliminate the underlying causes of PCOS, such as obesity and stress. Yoga can help with the prevention and management of PCOS. Yoga is an important refreshing and revitalising modality. Yoga is also an excellent stress reliever. Stress in women's lives can even result in unwelcome weight gain. Entering a peaceful state reduces the production of the stress hormone cortisol, which is one of the primary causes of fat storage in the body. Yoga basically encourages taking one step outside of one's comfort zone in order to better understand oneself from a very different perspective. Ultimately, this leads to a

higher quality of life. Acharya Charak has emphasised the importance of physical exercise (Vyayam) in the treatment of oversaturation disease (Santarpanoth Vyadhi) and has quoted regular exercise (Vyayam nitya) (Charak, 2014).

PCOS has a variety of effects on women's health, ranging from a decreased sense of wellbeing to impaired reproductive health. Yoga helps to regulate the endocrine glands in the body, which aids in hormone balance. Yoga assists in balancing the tridoshas. Yoga was found to be more effective than conventional physical exercise in improving glucose, lipid, and insulin sensitivity in PCOS subjects after practising it daily for 1 hour for 12 weeks (Nidhi, 2012).

Yoga poses stretch the abdominal region, increasing blood flow to the reproductive organs and relieving any tension around the reproductive organs. Yoga poses help to improve ovulatory functions by relieving stress (Field, 2011). Schmidt et al. discovered that after yoga therapy, there is a decrease in urinary excretion of adrenaline, noradrenaline, aldosterone, serum testosterone, and LH levels, indicating optimal hormonal changes (Pallov, 2012). Yogic practises benefit both physical and mental health by regulating the hypothalamic pituitary adrenal axis, the sympathetic nervous system, and the neuroendocrine axis. Suryanamshkar (Sun Salutation), Suptbandhkonasan (Reclining Butterfly Pose), Halasana (Plough Pose), Dhanurasan (Bow Pose), Bhujangasana (Cobra Pose), Chakki chalanasan (Moving wheel pose), Padmasan (Lotus pose), Naukasan (Boat pose).

- ❖ *Suryanamshkar (Sun Salutation)* improves blood flow to the organs and thus regulates the menstrual cycle (Kaduskar, 2015). It significantly lowers blood sugar levels, improves insulin sensitivity, and improves lipid profile, resulting in weight loss, an improved BMI, and a low waist hip ratio (Malhotra et.al., 2005).
- ❖ *Suptbandhkonasan (Reclining Butterfly Pose)* - Stimulates abdominal and pelvic organs such as the ovaries and urinary bladder, stretches the inner thighs and groyne, and aids in the relief of stress and menstrual irregularities (Yoga journal, 2018).
- ❖ *Halasana (Plough Pose)* - By reducing belly fat, it improves cardiovascular health and menstrual irregularities.
- ❖ *Dhanurasan (Bow Pose)* - This is the best pose for losing body fat and weight because it stretches the abdominal muscles to their maximum strength.

- ❖ *Chakki chalanasan (Moving wheel pose)* - This pose aids in the modification of endocrine glandular functions.

## **CONCLUSION**

Women with PCOS have severe insulin resistance, obesity, and an elevated level of androgens. Weight loss is the primary preventive and therapeutic potential to combat this disaster, which can be accomplished by incorporating lifestyle changes. The wholesome food in the Ayurvedic diet (Pathya Ahar). Yoga is both a holistic science and an art form. Yoga Asanas (poses), Pranayamas (breathing techniques), and Kriyas (cleansing exercises) prescribed in Yoga help to tone up the entire system. Yoga for 30 minutes daily with 4 Asanas, 4 Pranayama, meditation, and Shavasana aids in weight loss and stress management, ultimately stabilising the normal function of the hypothalmo-pituitary-ovarian axis and curing PCOS. So it is time to recognise Yoga's role as a safe and effective treatment for PCOS.

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