



# NAVIGATING THE COMPLEXITIES OF POLYCYSTIC OVARY SYNDROME (PCOS) AND PEER PRESSURE: EXPLORING THE CHALLENGES AND STRATEGIES OF PCOS (POLYCYSTIC OVARY SYNDROME) BY NEGATIVE INFLUENCES ON WOMEN'S HEALTH MANAGEMENT

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## Abstract

Polycystic ovary syndrome (PCOS) is a multifaceted endocrine disorder “Betrayer of femininity” affecting about 15 percent women Globally. A polycystic ovary syndrome, a multifactorial reproductive age, metabolic and hormonal affecting condition, increasing number of Adolescent girls and women In Reproductive-Age. it refers to multiple symptoms experienced simultaneously first observed by ‘stein-Leventhal’ in 1935, so known as ‘stein-Leventhal syndrome’. It impact the quality of life and cognitive Wellbeing, which may increase the risk of psychological, neurological issues like anxiety and depression with low self esteem and socially awkward. This study examines the impact of negative peer pressure on adolescents diagnosed with Polycystic Ovary Syndrome (PCOS) characterised by increased susceptibility to peer dynamics, poses unique challenges for individuals navigating the complexities of PCOS management. Negative peer interactions may heightened the psychological agony and health-related struggles experienced by adolescents with PCOS, affecting their self-esteem, adherence to medical treatments, and wellness behaviours. This research investigates the correlation between negative peer pressure and adolescents diagnosed with Polycystic Ovary Syndrome (PCOS), as well as its implications for their health-related

behaviours. Through a comprehensive review of existing literature and empirical evidence, this study highlighting its implications for psychological well-being and health outcomes. The findings underscore the importance of targeted interventions aimed at fostering positive peer relationships, enhancing resilience, and empowering adolescents with PCOS to navigate peer pressure effectively. By addressing the psychosocial dimensions of PCOS management within the context of peer dynamics, healthcare professionals and educators can facilitate holistic support systems that promote the well-being and resilience of adolescents living with this chronic condition. The study employs a mixed-methods approach, including surveys, interviews, and medical data analysis, to examine the prevalence and consequences of negative peer pressure in this population, promoting their mental and physical well-being and significance of addressing negative peer influences in this vulnerable population and provide insights for interventions aimed at promoting positive peer interactions and psychological resilience. **Keywords:** Adolescents, Polycystic Ovary Syndrome (PCOS), negative peer pressure, mixed-methods, mental health, intervention.

**1. Introduction:**

Polycystic ovarian syndrome is a complex endocrine syndrome characterised by hormonal imbalance, ovarian dysfunction and metabolic issues that impacts multiple factors like cardiovascular issues ,reproductive and mental wellbeing. PCOS is a leading cause of infertility and metabolic disturbances. Despite its widespread occurrence, the etiology of PCOS remains complex and multifactorial, involving genetic, environmental, and lifestyle factors. This research paper aims to explore the current understanding of PCOS, examining its pathophysiology, diagnostic criteria, and the impact of lifestyle interventions and medical treatments.

Understanding the multifaceted nature of PCOS is crucial for developing effective management strategies and improving the quality of life for those affected. Yavatmal city of Maharashtra serves the geographical area focused for this purpose to address the limited knowledge on PCOS prevalence in this region. There is no exact known cause of PCOS. Although it is believed To be linked to lifestyle and genetics. The majority of girls who have PCOS shows clinical implications like

**Metabolic risk** - This complex endocrine syndrome includes compensated insulin resistance, impaired glucose intolerance and disrupted carbohydrate metabolism that leads to diabetes type 2 and obesity. This weight gain tendency causes cardiovascular issues which shows increased cholesterol levels in blood. Imbalanced body mass index(BMI) causes all above long term effects with elevated potential risk of heart diseases .

**Hormonal imbalance** : The principle clinical symptoms include irregularity in menses, absence of menses leads to infertility other Common Symptom is acne due to increased blood testosterone level,also causes hirsutism which is excess hair growth and androgenic alopecia a severe hair loss from scalp in few individuals. lack of regular menses (Failure Of release of ova from ovary) shows cysts in the ovaries on ultrasound imaging and can be cause of infertility OR gives difficulty In conceiving,In severe cases leads to endometrial cancer. Acanthosis nigricans a condition show Patches of darkened skin on the back of the neck, understand arms and into the groin area.

**Mental health:**

PCOS is associated with an increased potential risk of diagnosis of anxiety, mood swings, bipolar disorder and obsessive compulsive disorder along with poor body image, dissatisfaction of one's body, sadness all because of increased level of cortisol and DHEA due to hormonal, metabolic disturbances.

**2. Definition of PCOS for prevalence:**

Polycystic ovarian syndrome (PCOS) is a snagging multifactorial hormonal syndrome among people assigned female at birth, characterised by irregularity in menses, excess male hormone Androgen level, typically manifesting during puberty and the presence of small cysts in the ovaries. The prevalence of PCOS among adolescent girls is challenging to determine precisely but it is estimated to affect approximately 15% of this population during their reproductive phase.

**3. Objective:**

To explore the prevalence of PCOS in Adolescents in Yavatmal Maharashtra and its associated with respect to the clinical and paraclinical findings and its diverse Spectrum.

**4. Methodology:**

A survey based study used to assess the information about polycystic ovary syndrome, This study conducted in Various educational institutions in Yavatmal city aimed at assessing Clinical and physical features dataset which contains 500 adolescents girls. Inclusion criteria includes 12-25 years old, this study used a confidential polycystic ovarian syndrome questionnaire which includes a general health history with Socio-demographic information and clinical implications like lifestyle, hormonal imbalance and menstruation data. Metabolic risk factors like glucose intolerance, increased insulin, diabetes, acne and hirsutism with androgenic alopecia, obesity and endometrial complications. PCOS is the main cause of effective infertility at reproductive age and associated with obesity in most of the cases. the affected individual encounters insulin resistance compensated by hyperinsulinemia in few percent, .the prevalence of PCOS among Adolescents girls with hyperandrogenism, acne and are considered Due to increased androgen

level in blood. the clinical symptoms of hirsutism which is lethal implication in PCOS shows increased growth of terminal hairs in the androgen dependent parts of the body. Survey shows that some individuals have Acanthosis nigricans a darkened skin patches on the neck, underarms and groin area. Most of the individuals may have only one OR two clinical symptoms and in severe cases have multiple. The most common clinical finding is menstrual disorder usually started from menarche and may appear in the form of amenorrhea (Absence of menses), oligomenorrhea (Frequent menses), and polymenorrhea (Abnormally Frequent menses) and might even being normal ovulation combines with other complications hence it is called as a multifactorial complicated condition, there is no single criteria for the diagnosis of this syndrome. acne was observed called acne vulgaris. Prevalence of Polycystic Ovarian Syndrome also impacts individuals mental health with all the above complications the adolescents face social Gauche with own body dissatisfaction result in low self esteem and aggressiveness irritability, temper, sadness and ego-resiliency with anxiety and depression all causes because of polycystic ovarian syndrome. All above data is a paramount Consideration for preventive healthcare measures associated with PCOS.

A Survey questionnaire:

Instructions: This questionnaire aims to get information about your experiences with negative peer pressure and complications as an adolescent diagnosed with Polycystic Ovary Syndrome (PCOS). Please answer each question honestly and to the best of your knowledge, Your data and responses will remain confidential.

1. Demographic Information:

- a. Age:
- b. Gender:
- c. Diagnosis: (PCOS or control group)
- d. How long have you been diagnosed with PCOS?

2. Peer Relationships: a. How would you describe your relationships with peers?

- Very supportive
- Supportive

- Neutral
- Strained
- Very strained

b. Have you ever experienced negative peer pressure related to your PCOS diagnosis?

- Yes
- No
- Not sure

3. Sources of Negative Peer Pressure:

a. Have peers made comments or jokes about your physical appearance related to PCOS symptoms (e.g., weight gain, acne, hirsutism)?

- Yes
- No
- Sometimes

b. Have peers pressured you to engage in unhealthy behaviors related to PCOS management (e.g., skipping medication, following extreme diets)?

- Yes
- No
- Sometimes

c. Have peers excluded you from social activities because of your PCOS diagnosis?

- Yes
- No
- Sometimes

4. Impact on Mental wellbeing:

a. How do you feel when experiencing negative peer pressure related to PCOS?

- Anxious
- Depressed
- Stressed
- Angry
- Other (please specify)

b. Has negative peer pressure affected your body image?

- Yes
- No
- Sometimes

c. Do you feel comfortable discussing your PCOS diagnosis with peers?

- Yes
- No
- Sometimes

**5. Coping Mechanisms:**

a. How do you cope with negative peer pressure related to PCOS?

- Talking to friends/family
- Seeking support from healthcare professionals
- Engaging in self-care activities
- Ignoring peer pressure
- Other (please specify)

b. Have you found any strategies helpful in managing negative peer pressure?

- Yes
- No
- Not sure

5. Discussion - principle findings. The findings of this study suggest that Adolescent girls with PCOS have a higher chances of prevalence of metabolic complications with a cardiovascular risk and infertility due to irregularities of menses than general Adolescent girls. Due to hormonal imbalance the interrupted carbohydrate metabolism leads to excess blood glucose and impaired glucose intolerance with insulin resistance compensated by hyperinsulinemia, responsible for obesity. In recent years the prevalence of PCOS in young Adolescent females due to transforming lifestyle changes. This survey suggests that adolescents with PCOS may be at an increased risk for anxiety symptoms that give them sadness, anger issues and poor behaviour. It leaves adolescents With low confidence and worry for future health related challenges. there is a limited source of data in the literature Unveiling prevalence of PCOS. Understanding the diverse Spectrum of polycystic ovarian syndrome manifestations in this population will aid in tailoring effective preventive and therapeutic interventions. The discussion will encompass the socio-demographic and socio-economic Determinants, potential risk factors and implications for public health policies.

**6. Result:**

The study reveals a burgeoning rate of prevalence of PCOS among adolescent girls with a higher possibility of metabolic complications, abnormalities in menstruation which leads to infertility and serious issues like diabetes Type 2 and cardiovascular problems. The adolescent girls had inadequate information and less awareness about PCOS. To overcome such lethal

effects of PCOS and to improve the quality of life, individuals need knowledge and understanding of it which can be highly possible by setting specific and essential health-related strategies like structured teaching programmes by conducting Awareness Seminars and workshops can be useful. Enhancing awareness information by using social networks, and Creating awareness programmes in every educational institution can help to understand and deal with PCOS.

**7. Table:** Total individuals surveyed 500.

Obesity 75 (15%)

Hyperandrogenism

100(20%)

Hyperinsulinemia

50 (10%)

Insulin resistance

60 (12%)

Acanthosis nigricans

30 (6%) PCOS 60 (12%)

**8. Conclusion :**

This Research contributes to the growing body of knowledge and awareness of polycystic ovarian syndrome by shedding light on its prevalence among adolescent girls in Yavatmal city of Maharashtra. The outcomes will Inform healthcare professionals and educators to develop targeted strategies significantly for early detection and diagnosis and prevention. This will help in managing hormonal fluctuations effectively with polycystic ovarian syndrome in this specific demographic, ultimately fostering better reproductive and metabolic health outcomes for individuals with PCOS.

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