

Navigating The Challenges Of Polycystic Ovary Syndrome (PCOS): Implications For Reproductive Health, Mental Well-Being, And Career Management

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Abstract- Polycystic Ovary Syndrome (PCOS) is a common hormonal disorder that primarily affects women, carrying substantial consequences for both reproductive health and general well-being. This article explores PCOS's diverse and heterogeneous complications, emphasizing its impact on infertility and mental health. The emotional burden of PCOS can lead to depression and anxiety, affecting the quality of life for affected individuals. Additionally, societal attitudes and stigmas surrounding PCOS further compound the challenges faced by women with this condition. The article discusses the role of occupational stress and its potential impact on PCOS in working women, highlighting the need for comprehensive career management models. The Holland Occupational Themes and the Life Design Approach are proposed as effective tools to address career choices and work-life integration, particularly in Indian rural housewives. Understanding these concepts can help empower women with PCOS to make informed decisions and improve their overall well-being and career satisfaction. Greater awareness and support for PCOS-related challenges are crucial for better patient care and social acceptance.

Keywords- Polycystic Ovary Syndrome (PCOS), Infertility, Mental health, Occupational stress, Career management

I. INTRODUCTION

PCOS is a prevalent endocrine disorder primarily impacting women in their reproductive years, and its occurrence among adolescents is on the rise. This condition is characterized by diverse and heterogeneous complications influenced by genetic factors leading to varied phenotypic expressions. The manifestation of PCOS includes polycystic ovaries (PCO), irregular ovulation, and the presence of clinical and/or biochemical signs of excess androgens. PCOS patients' are significant, particularly regarding reproductive dysfunctions, emphasizing the need for appropriate clinical management and support.

Being the most prevalent female endocrine disorder, PCOS plays a crucial role in infertility cases worldwide, with its prevalence ranging from 6% to 26% across different populations. In the Indian context, the prevalence falls between 3.7% to 22.5%¹. PCOS development is influenced by various risk factors, such as genetic predisposition, the functioning of the neuroendocrine system, a sedentary lifestyle, dietary habits, and obesity¹.

DIAGNOSIS

Though there are many methods, predominantly, the diagnosis of PCOS in adults relies on the Rotterdam criteria, necessitating the presence of any two out of three findings: (i) Oligo-ovulation/anovulation, (ii) Excess androgen activity, and (iii) Polycystic ovaries^{2,3}.

SIGNS AND SYMPTOMS

The etiology of PCOS, a complex condition that significantly impacts women's fertility, remains unclear and is influenced by various contributing factors. PCOS symptoms vary significantly from woman to woman, with some experiencing only a few mild symptoms, while others may have more severe manifestations or exhibit the full range of PCOS-linked symptoms. Hormonal imbalances lead to hirsutism (excess terminal hair), alopecia (hair loss), menstrual irregularities, metabolic disorders, and a cystic appearance on the ovaries. The presence of ovarian cysts hampers ovulation, reducing the chances of conception and leading to infertility. Around two-thirds of women with PCOS experience metabolic disturbances, leading to a higher risk of cardiovascular disease and type-2 diabetes mellitus⁴. It further leads to psychosocial issues in PCOS patients, primarily associated with factors such as obesity, excessive body hair, infertility, and changes in physical appearance^{5,6}.

PCOS also exerts significant effects on behavior and emotions^{7,8}, leading to feelings of embarrassment, frustration, and stress in affected individuals, particularly among girls.

These emotional challenges can profoundly impact their overall quality of life. Females affected by PCOS can undergo a range of emotional responses, including grief, shock, fear, disbelief, anger, sadness, anxiety, frustration, acceptance, and determination. The sequence of these emotions may vary from person to person, and there is no fixed order in which they occur. Experiencing these negative emotions can lead to stress and anger, which can have adverse effects on one's social life. If left unaddressed over an extended period, the emotional burden of PCOS can even culminate in depression and anxiety^{9,10}.

II. DEPRESSION AND STRESS

Depression and stress are prominent risk factors in patients diagnosed with Polycystic Ovary Syndrome (PCOS), further complicating their already compromised metabolic and reproductive health. Individuals with PCOS often experience heightened levels of depression and anxiety, which can be linked to several factors. These may include having an elevated Body Mass Index (BMI) and facing demoralizing experiences in society due to their condition, leading to potential social withdrawal¹¹.

Numerous international studies have shown that Polycystic Ovary Syndrome (PCOS) has a significant negative impact on the quality of life (QOL) of affected patients¹². This global attention towards the QOL aspect is crucial, as it reflects the genuine influence of the condition on patients' overall well-being¹². Despite this growing focus, the Indian perspective concerning QOL in PCOS remains largely unexplored.

The elevated prevalence of anxiety and depression in individuals with PCOS can be attributed to multifaceted reasons. Women diagnosed with PCOS may experience emotional distress due to a combination of psychosocial and/or pathophysiological factors¹³. Psychosocial factors encompass various elements of an individual's social and psychological environment. The challenges of dealing with PCOS, such as fertility issues, weight gain, and hormonal imbalances, can lead to increased stress, body image concerns, and reduced self-esteem. Moreover, the social stigma associated with conditions like PCOS can also contribute to emotional distress, making it difficult for affected individuals to cope effectively. On the other hand, pathophysiological factors refer to the biological and physiological changes that occur in PCOS. Hormonal imbalances, particularly elevated levels of androgens (male hormones), may influence mood regulation and increase vulnerability to mood disorders like anxiety and depression. The metabolic disturbances commonly seen in PCOS, such as insulin resistance, may also affect

mood and exacerbate emotional symptoms. In the long term, women with PCOS are at an increased risk of developing obesity, dyslipidemia, and type II diabetes mellitus. Additionally, they may face higher risks of cardiovascular disorders due to the elevated prevalence of subclinical atherosclerosis, hyperlipidemia, hypertension, inflammation, and endothelial dysfunction. These health implications underscore the importance of early detection and management of PCOS to minimize its potential complications¹⁴.

Researchers in behavioral science have extensively observed significant levels of mental stress among PCOS patients, with particular emphasis on young girls¹⁵. This may be attributed to young girls' heightened awareness and concern about their physiology and physical well-being during adolescence. Multiple studies have provided evidence of distinct stress symptoms in women affected by PCOS compared to those unaffected by the condition. In severe cases, this emotional burden can lead to social withdrawal, further isolating individuals and impacting their overall well-being.

A recent study focused on infertility, and its social implications revealed noteworthy findings regarding women with PCOS. Specifically, these women placed significant importance on domains related to infertility, emotions, and social impact¹⁶. In the infertility domain, participants expressed frustration, powerlessness, worry about irregular menstruation, fear of not being able to conceive, and concern about not having children. In the social impact domain, participants reported discomfort due to a lack of eye contact from relatives and friends, pressure from the husband's family to have a child, misunderstandings between partners, parental pressure, negative comments from neighbors, social isolation, domestic violence during social events, and fear of divorce. The study highlights the emotional and social challenges faced by women with PCOS, emphasizing the need for comprehensive care and support in addressing these issues.

QUALITY OF LIFE IN PATIENTS WITH PCOS

Patients with Polycystic Ovary Syndrome (PCOS) often experience a significantly lower quality of life than those without the condition^{17,18}. The quality of life of patients with PCOS is adversely affected by various factors, including obesity, hyperandrogenism (elevated levels of male hormones), PCOS-related complications, and depression¹⁹. Lifestyle modifications (diet modification, increased physical activity, stress management) are the primary non-pharmacological approach for managing PCOS, particularly in cases of overweight or obesity, and can significantly improve symptoms and overall health²⁰. In

modern society, girls are increasingly pursuing professional careers, which has led to a significant rise in work burden and stress. The entry of girls into traditionally male-dominated fields, engaging in activities considered more "boyish," and adopting similar dressing styles may have contributed to an increase in the prevalence of PCOS, potentially linked to elevated male sex hormones. Gorzynski and Katz's research supports the idea that girls with PCOS show a higher inclination towards career-focused aspirations rather than family-oriented goals. They also display reduced concern for style and appearance, and exhibit more tomboyish behavior²¹.

SOCIAL STIGMA RELATED TO PCOS

In India, certain events related to reproduction and women have been historically associated with notions of taboo or impurity. Sociologist Louis Dumont categorized the notion of 'impurity' into two types: permanent and temporary. The permanent impurity is interconnected with the caste system, while the temporary impurity is primarily associated with the female gender. For instance, menstruation and the postpartum period are often considered periods of temporary impurity. Unfortunately, in many Indian households, menstruating women are still regarded as impure and are deemed unfit to participate in religious activities.

This perception has led to various cultural beliefs, such as the notion that a menstruating woman's shadow may adversely affect items like pickles, supposedly accelerating fungal activity and spoiling the contents. These traditional beliefs and practices are deeply ingrained in certain communities and continue to influence societal norms surrounding the status of women during their reproductive phases.

While it is a biological disorder, certain cultural and societal attitudes have contributed to stigmatizing it in traditional Indian society. As with many menstruation and reproductive health issues, there can be misconceptions and taboos surrounding PCOS. In some conservative settings, discussions about menstruation and reproductive health are considered private and are not openly discussed, especially with individuals of the opposite sex²². Girls and women may feel hesitant to discuss their menstrual problems, including PCOS, outside of their close circles, which can include their female friends and family members. Infertility poses both personal and social challenges for women. When coupled with a lack of awareness about the condition and pressure from family members to conceive, it can lead to turmoil in the patient's personal life.

IMPACT OF PCOS AT WORK

Polycystic Ovary Syndrome (PCOS) can give rise to fatigue and exhaustion, leading to difficulties in maintaining focus and productivity at work. Regrettably, PCOS often remains undiagnosed in many cases, resulting in numerous women silently enduring its symptoms. Research has indicated that female managers often experience higher stress levels than their male counterparts. This disparity in stress levels can be attributed, at least in part, to the additional pressures and expectations that come with women's social roles and societal norms²³. Occupational stress and other risk factors in the workplace can indirectly affect PCOS in working women by contributing to insulin resistance, obesity, and hormonal disturbances. These factors can exacerbate the condition and its associated health implications.

HOLLAND OCCUPATIONAL THEMES FOR CAREER MANAGEMENT

The RIASEC model, also known as the Holland Codes or Holland's Occupational Themes, developed by John Holland (the same psychologist behind the RIASEC model), emphasizes the importance of person-environment fit in career choices. It can be a valuable tool in career management for working women dealing with PCOS and the potential impact of occupational stress on their health. The model categorizes individuals into six different personality types based on their preferences for certain work environments and activities:

- Realistic (R): Individuals who prefer practical, hands-on work and enjoy working with tools and machinery.
- Investigative (I): Those who are analytical, curious, and enjoy problem-solving and research-oriented tasks.
- Artistic (A): Individuals who have a creative and imaginative nature, enjoying self-expression through various artistic mediums.
- Social (S): Those who are empathetic, outgoing, and enjoy working in roles that involve helping and interacting with others.
- Enterprising (E): Individuals who are ambitious, persuasive, and enjoy leadership roles and business-related activities.
- Conventional (C): Those who prefer structured and organized work environments, enjoying tasks involving data and detail-oriented work.

RIASEC model can aid in career management for working women with PCOS:

- Self-awareness: Understanding their RIASEC personality type can help women with PCOS identify

career paths that align with their natural strengths and interests. By choosing careers that match their personality preferences, they may experience less stress and better job satisfaction.

- **Work Environment:** The model also provides insight into the ideal work environment for each personality type. Women with PCOS can benefit from choosing workplaces that promote a balanced and supportive atmosphere, reducing potential occupational stressors. As an employer, it's important to recognize that some staff members might be silently suffering from PCOS without being aware of it. Being supportive and understanding can create a positive work environment. Raising awareness about the symptoms of PCOS can help improve its visibility and encourage affected employees to seek medical advice and support. By fostering a supportive workplace culture, employees with PCOS will feel more comfortable and empowered to manage their condition effectively while maintaining their well-being and productivity.
- **Stress Reduction:** Certain career choices, such as those involving high levels of stress, irregular working hours, or physical demands, can exacerbate the health challenges associated with PCOS. The RIASEC model can guide working women towards careers that are less likely to cause insulin resistance, obesity, or hormonal distress. Stress reduction through yoga and meditation can help maintain emotional health.
- **Work-Life Balance:** Understanding one's personality type can also help in achieving a better work-life balance. For example, women with certain personality types may thrive in jobs with flexible schedules or remote work options, allowing them to better manage their health needs. Employer should provide flexible working options to help staff deal with their physical and emotional symptoms.

The RIASEC model can be a valuable tool for working women with PCOS to navigate career management effectively. By understanding their personality type and aligning their career choices accordingly, they can reduce occupational stressors and create a more supportive and balanced work environment, ultimately benefiting their overall health and well-being.

LIFE DESIGN APPROACH FOR INDIAN RURAL HOUSEWIVES

In the context of Indian rural housewives facing occupational stress and its indirect impact on PCOS, a career management model that emphasizes holistic well-being and

addresses the unique challenges they face would be best suited. The Life Design Approach, proposed by Mark Savickas, aligns well with the needs of this specific group. Here's how the Life Design Approach can be applied:

- **Focus on Self-Concept and Values:** The Life Design Approach emphasizes understanding one's self-concept, values, and aspirations. For rural housewives dealing with occupational stress and PCOS, it's essential to reflect on their personal goals, values, and interests to make career choices that align with their well-being and fulfillment.
- **Emphasis on Adaptability:** The Life Design Approach recognizes that careers are dynamic and ever-changing. This is particularly relevant for rural housewives who may face various life roles and challenges. Encouraging adaptability can help them navigate the social stigma, health concerns, and other stressors while maintaining their career paths.
- **Work-Life Integration:** For rural housewives, the boundary between work and personal life may be less defined. The Life Design Approach considers the importance of integrating work and life roles to achieve overall well-being. This model can help rural housewives strike a balance between their roles as housewives and potential career pursuits, taking into account their unique circumstances.
- **Personal Agency and Autonomy:** The Life Design Approach empowers individuals to take ownership of their career decisions. Encouraging rural housewives to explore various career possibilities and make informed choices can promote a sense of agency and autonomy, leading to greater career satisfaction.
- **Lifelong Career Development:** This approach views career development as a continuous process that evolves over a lifetime. For rural housewives, who may experience different life stages and challenges, this model can provide guidance and support for ongoing career exploration and development.
- **Incorporating Social Support:** The Life Design Approach acknowledges the influence of social networks on career decisions. For rural housewives facing societal stigma and occupational stress, providing social support and resources can help them cope with challenges and pursue their career aspirations.

This model encourages a personalized, flexible, and inclusive approach to career management, focusing on holistic well-being and self-directed career decisions. By aligning career choices with personal values, adaptability, and social

support, rural housewives can navigate challenges and improve their overall health and career satisfaction.

III. CONCLUSION

In conclusion, Polycystic Ovary Syndrome (PCOS) is a complex endocrine disorder that significantly impacts women's reproductive health and overall well-being. Its diverse and heterogeneous complications, including infertility and mental health issues, pose considerable challenges for affected individuals. The emotional burden of PCOS can lead to depression and anxiety, further affecting the quality of life. Moreover, societal stigmas surrounding PCOS contribute to the difficulties faced by women with this condition. Occupational stress is another critical factor that indirectly affects PCOS in working women, necessitating the need for comprehensive career management models. The Holland Occupational Themes and the Life Design Approach are valuable tools to guide career choices and promote work-life integration, particularly for Indian rural housewives. By understanding these concepts and empowering women with PCOS to make informed decisions, we can enhance their overall well-being and career satisfaction. Increased awareness and support for PCOS-related challenges are essential in fostering social acceptance and improving patient care. Moving forward, it is crucial to prioritize research, education, and awareness initiatives better to understand PCOS and its impact on women's lives. Implementing effective strategies for managing PCOS-related complications, addressing mental health concerns, and promoting work-life balance will lead to a healthier and more supportive environment for women affected by this condition. Ultimately, a collaborative effort from healthcare professionals, policymakers, and society at large is necessary to address the multidimensional challenges posed by PCOS and pave the way for a brighter and healthier future for women living with this condition.

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