OPEN ACCESS

Greenfort International Journal of Applied Medical Science
Abbreviated Key Title: Grn Int J Apl Med Sci
ISSN 3048-6904(P) | ISSN 2584-2420(O)
Journal homepage: https://gijams.in

Research Article DOI: 10.62046/gijams.2026.v04i06.005

Illness Perception and Coping Mechanism in Patients with Polycystic Ovarian Syndrome in Reproductive Age

Dr Shruthi A[1*]

[1]Assistant Professor, Department of Obstetrics and gynecology, Kanachur Institute of Medical Sciences, Mangalore, Karnataka, India

*Corresponding Author: Dr Shruthi A Email: shruthisr198@gmail.com

Received: 12.08.2026 | Revised: 15.09.2026 | **Accepted:** 25.10.2026 | **Published:** 07.11.2026

Abstract: **Introduction:** Polycystic ovarian syndrome (PCOS) is increasing rampantly in our society and affecting nearly 10 to 15% of women in adolescence and reproductive age. It is the most common endocrine disorder affecting women of reproductive age group. When an individual is presented with a threat to their health, they form common-sense beliefs about their illness and these Illness Perceptions along with their emotional responses to the illness are used by them for coping and managing their illness. Given the long-term nature of the PCOS identifying the influential factors and explaining how they affect the Illness perception and the coping mechanism adopted by the patients can aid in effective management of the condition. **Aim:** This study aims to evaluate the Illness Perception, coping mechanism and its association with symptoms of PCOS in women of Reproductive age group. **Methods:** A study design of cross-sectional research was used with 140 women diagnosed with PCOS. A socio-demographic questionnaire, the Brief Illness Perception Questionnaire (BIPQ), and the Brief-COPE scale were used as the methods of data collection. The data were evaluated with the help of descriptive statistics and Spearman correlation, which helped evaluate how the perception of illness and coping patterns are correlated. **Results:** The illness perception score was relatively high (Mean = 56.76 ± 4.28) suggesting that the perceived duration of PCOS is moderately high and defined as a long-term or long-lasting disease among patients. Adaptive coping strategies like Acceptance (Mean = 2.92), Active Coping (Mean = 2.86), and Seeking Emotional Support (Mean = 2.81) were more commonly used than maladaptive coping strategies like Avoidance/Distraction (Mean = 2.25) and Self-blame (Mean = 2.12) and the least used strategies were Substance Use (Mean = 1.18) and Behavioural Disengagement (Mean = 1.68). These findings indicate that women with PCOS in our study group were largely proactive in managing the stress of their condition. While less frequent, maladaptive strategies were still observed within the sample. There is a positive correlation (r_s=0.3113, p<0.001) between high illness perception scores (viewing the condition as more threatening, chronic, or uncontrollable) and the use of maladaptive coping strategies. This suggests that women who perceived their illness as long lasting and uncontrollable, were more prone to adopt maladaptive coping strategies. However, there was no correlation between adaptative coping strategies and illness perceptions. **Conclusion:** The study underlines the significant aspect of illness perception in the development of coping behavior among the PCOS women. Psychological interventions with "cognitive restructuring" can help women challenge unfavorable beliefs about their condition and move away from self-blame and avoidance. Adoption of adaptive coping can eventually lead to positive psychological behavior and quality of life in women with PCOS.

Keywords: PCOS, Illness Perception, Coping Strategies, Psychological Health, Women.

Citation: Shruthi A. Illness Perception and Coping Mechanism in Patients with Polycystic Ovarian Syndrome in Reproductive Age. Grn Int J Apl Med Sci, 2026 Nov-Dec 4(6):559-565.

INTRODUCTION

PCOS is emerging as an important health issue in women of childbearing age all over the world [1]. It is a clinical condition that includes irregular menstrual cycles, hyperandrogenism, infertility and is accompanied by metabolic disorders including insulin resistance and obesity [2].

In addition to its physical symptoms, PCOS has become a condition with significant psychological as well as social consequences [3]. PCOS women often complain of increased anxiety, depression, body image dissatisfaction, and poor quality of life as compared to women of same age otherwise [4]. Symptoms like weight gain, acne, excessive hair growth and infertility are known to not only penalize those in terms of emotional torment but also place them at risk of being socially stigmatized. This has led to the interpretation of PCOS as a biopsychosocial disorder, instead of a strictly reproductive or metabolic disorder.

It is not strictly the severity of the physical symptoms that defines all the psychological effects of PCOS.

©The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0) that ensures authors retain full ownership of their published work. This license permits any non-commercial use, sharing, adaptation, distribution, and reproduction in any medium or format, as long as appropriate credit is given to the original authors and the source.

Recent studies indicate that the variations in perception and meaning of illness among women are significant in influencing their behavioral and emotional reactions [5]. The conceptualization of the Common-Sense Model of self-regulation and illness perception, describes what individuals perceive in regard to their illness is proportional to how they believe it developed, its effects, length and whether they can control it. Such perceptions affect the way people construct their understanding of their condition and determine their coping responses and health-related behaviors [6].

Coping mechanisms are the strategies that people use to cope with stress related to chronic illness. These can be either adaptive (problem-solving and active coping) or maladaptive (and avoidance denial) [7]. Psychological adjustment, adherence to treatment and well-being highly depend on the type and effectiveness of coping strategies adopted by the patients. Coping is a key factor of long-term adaptation and quality of life in chronic diseases, such as PCOS, where the symptoms are chronic and sometimes unpredictable.

Although the conceptual value of illness perception and coping is crucial, little research has been conducted to measure how these two relate to each other in the face of PCOS, especially in the Indian population [8]. The cultural aspects of illness and coping styles of this population group may also be shaped by such issues as the expectations of the society, infertility stigma, and body image. Thus, to create effective psychological interventions, it is important to learn how women with PCOS feel about their disease and how these feelings impact coping strategies [9].

Thus, the current research helps to fill this gap in understanding perception of illness and coping styles in women with PCOS, as well as investigating the connection between these variables. This association is essential to know and develop a holistic treatment plan that can be incorporated in PCOS management [10].

METHODOLOGY

Aim

To evaluate the Illness Perception, coping strategies adapted and their relation with the symptoms of PCOS as experienced by patients with PCOS.

Objective of the study

1. To evaluate the Illness perception in patients with PCOS.
2. To understand the coping strategies adapted by patients with PCOS.
3. To understand correlation of Illness perception and coping strategies with symptoms of PCOS.

Study Population

Patients attending the OPD in Kanachur Institute of Medical Sciences diagnosed with PCOS using Rotterdam's criteria are included in the study.

Study Design

Cross-sectional Prospective study.

Sample and Participants

The study included 140 women with PCOS. The selection of participants relied on purposive sampling technique depending on pre-determined inclusion and exclusion criteria.

Tools Used

1. **Socio-Demographic Data Sheet -** to gather information about the participants.
2. **BIPQ-** to assess both cognitive and emotional illness representations.
3. **Brief-COPE Scale -** to assess coping strategies.

Procedure

The purpose and objectives of the study were then communicated to the participants and their informed consent was obtained. A structured questionnaire was then used to collect the data, where it was performed face-to-face or online.

Statistical Analysis

Sample Size

$n = [Z_\alpha + Z_\beta]/C + 3$

$Z\alpha = 1.96$ for 95% confidence interval.

$Z\beta = 1.28$ for 90% statistical power.

R = The correlation between coping strategies and Illness perception = 0.27 (ref study).[16]

N = 140.

Statistical Analysis

Data will be entered in Microsoft excel and analyzed with SPSS. Categorical data will be presented as percentage. Continuous data will be presented as mean + or – SD or median and interquartile range.

Spearmans rank correlation will be used to find correlation between coping strategies and Illness perception.

P value of < 0.05 will be considered statistically significant.

Ethical Considerations

The study was reviewed and approved by the Institutional Ethics Committee (IEC) of Kanachur Institute of Medical Sciences, Mangaluru, Karnataka, India (Protocol No.: KIMS-IEC/2026/FC007), dated 5 August 2026. During the research, participants were informed about the research, their consent obtained and their anonymity was guaranteed.

RESULTS

The results of the study are summarized below with interest in the socio-demographic profile, clinical features, illness-perception and coping styles and how they inter-relate with one another among women with PCOS.

Copyright: © Author(s), 2026. Published by Greenfort International Journal of Applied Medical Science | This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

1. Socio-Demographic Characteristics

According to the socio-demographic data of the sample profile, majority of the women aged 26-35 which represents the reproductive age group. The sample seems to be comparatively highly educated as well, with a high percentage of the respondents citing college or university level education. Only a little more than half of the surveyed respondents were single; the rest were in stable relationships. The findings indicate that women with PCOS have a wide demographic (Table 1).

Table 1: Socio-Demographic Profile

Variable	Category	Frequency	Percentage (%)
Age Group	≤20 years	21	15.00
	21–25 years	36	25.71
	26–30 years	40	28.57
	31–35 years	43	30.71
	36–40 years	0	0
	>40 years	0	0
Educational Qualification	Primary Education	28	20.00
	Secondary Education	21	15.00
	Pre-University	25	17.86
	Undergraduate	30	21.43
	Post Graduate	36	25.71
Marital Status	Married	65	46.43
	Unmarried	75	53.57

2. Clinical Characteristics

Clinical picture of the participants indicated that typical symptoms related to PCOS were highly widespread. Menstrual abnormalities and weight-related problems became the most common symptoms reported by patients and these are the common features of the PCOS clinical picture. These results indicate the complexity of the condition with its impact on reproductive and metabolic health (Figure 1).

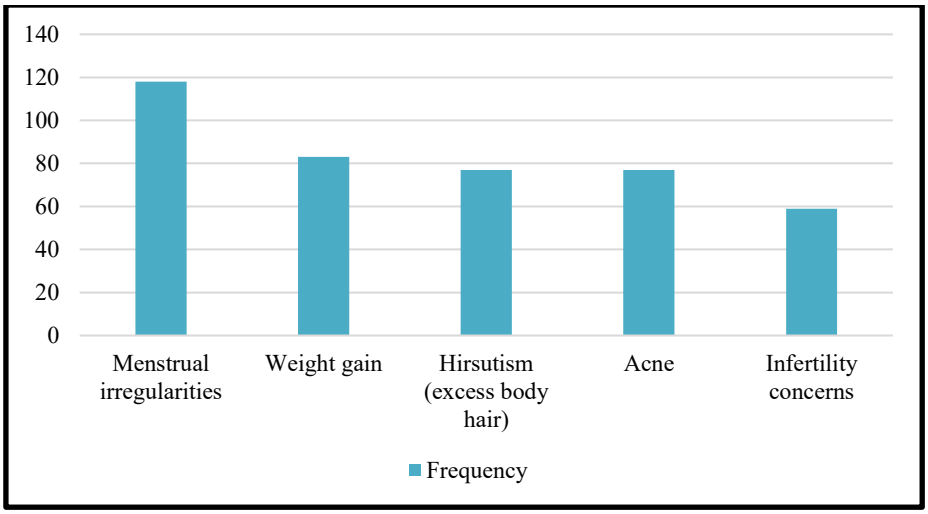


Figure 1: Prevalence of Major PCOS Symptoms

3. Illness Perception among PCOS Patients

The general illness perception scale of the participants was also moderately high, which in turn means that women perceive PCOS as a long-term and serious illness. This implies an increased concern about the implications and chronicity of the disorder (Table 2).

Table 2: Overall Illness Perception Score among PCOS Patients

Variable	Mean	Standard Deviation
Total Illness Perception Score	56.76	4.28

The average illness perception score (56.76 ± 4.28) indicates an important cognitive and emotional depiction of PCOS in participants.

As Figure 2 shows, the participants had a higher mean score in emotional response, consequences and timeline. This showed that PCOS is perceived as a serious and a

Copyright: © Author(s), 2026. Published by Greenfort International Journal of Applied Medical Science | This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

chronic condition. The scores of personal and treatment controls are moderate, which indicates the lack of a strong sense of control and the level of illness understanding is average. On the whole, the figure indicates a relatively high and negative illness perception of participants.

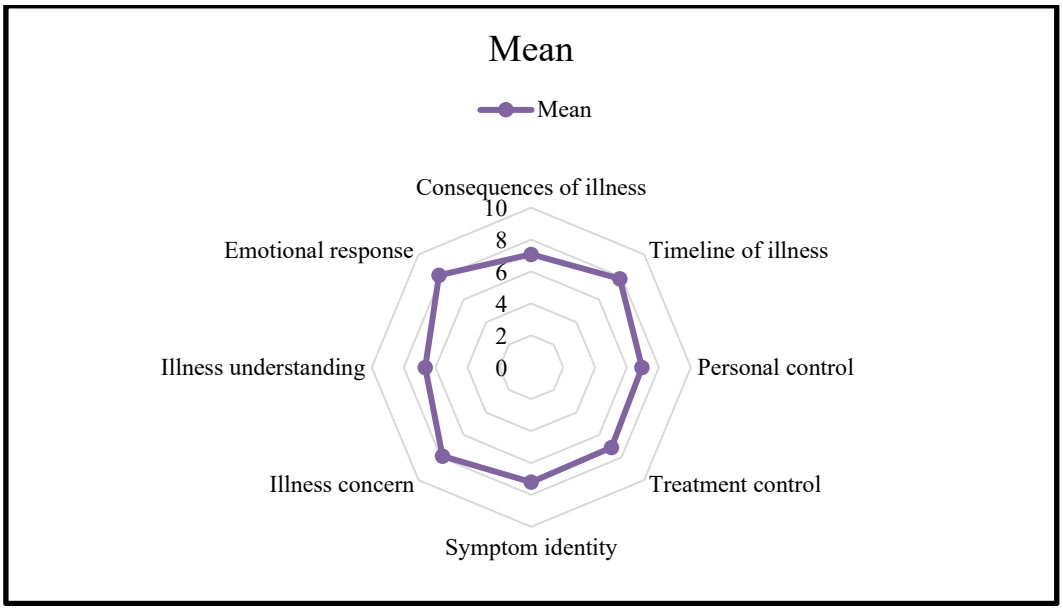


Figure 2: Illness Perception Dimensions

4. Coping Strategies

The results show that participants were using various coping strategies to cope with stressors related with PCOS. There were both adaptive and maladaptive coping and it was found that psychological reactions were varied with different people (Table 3).

Table 3: PCOS Patients' Total Coping Strategy Score

Variable	Mean	Standard Deviation
Total Coping Strategy Score	71.84	8.52

The mean score of coping (71.84 ± 8.52) indicates that the participants were using various coping strategies to cope with their situation.

Acceptance, active coping and emotional support were the most shared adaptive strategies as seen in Figure 3. There are also moderate planning and positive reframing and a relatively low instrumental support. This shows that the respondents use positive coping strategies to deal with stress due to PCOS to a great extent.

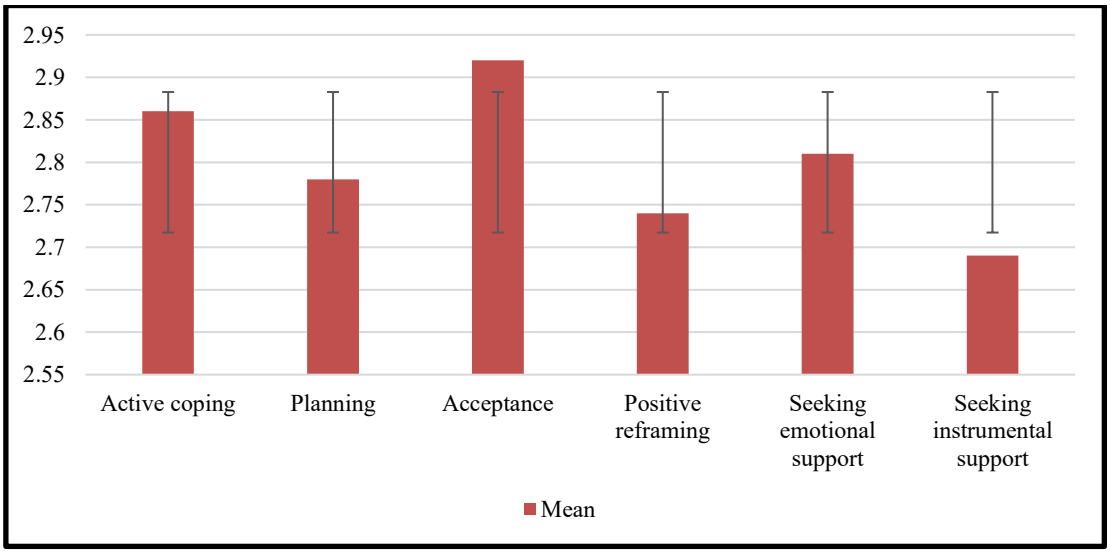


Figure 3: Adaptive Coping Strategies among PCOS Patients

Copyright: © Author(s), 2026. Published by Greenfort International Journal of Applied Medical Science | This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

The most commonly used maladaptive strategies were avoidance/distraction and self-blame as shown in Figure 4. Denial and behavioral disengagement were moderately used with minimal use of substances. This implies that in spite of the existence of maladaptive coping, its general utilization is relatively less.

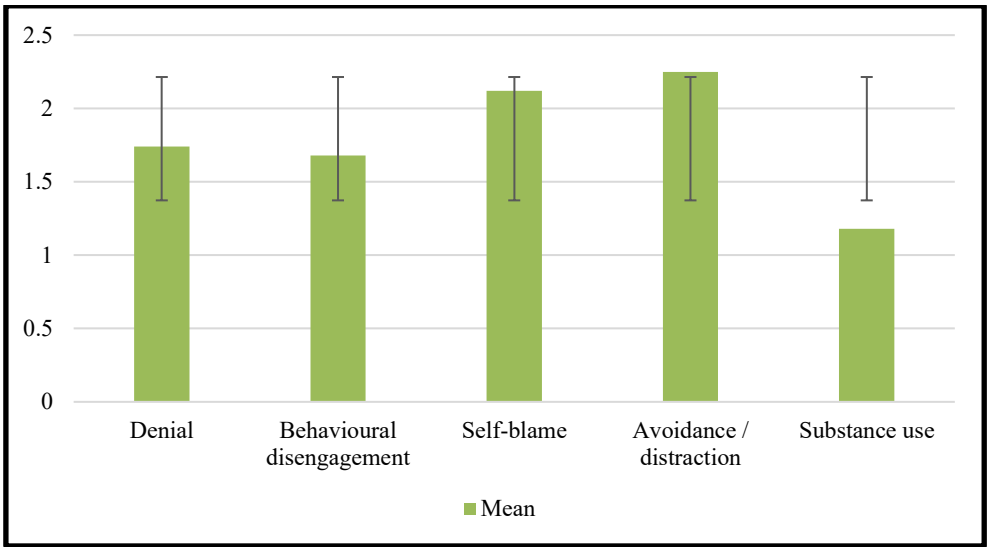


Figure 4: Maladaptive Coping Strategies among PCOS Patients

The coping domains were ranked by their mean scores in order to find out the most used coping strategies. The results showed acceptance, active coping and seeking emotional support were the most commonly used strategies. On the contrary, maladaptive methods, including substance use and behavioral disengagement were least frequent (Table 4).

Table 4: Ranking of Coping Strategies Used by Participants

Rank	Coping Strategy	Mean Score
1	Acceptance	2.92
2	Active coping	2.86
3	Seeking emotional support	2.81
4	Planning	2.78
5	Positive reframing	2.74
6	Instrumental support	2.69
7	Avoidance	2.25
8	Self-blame	2.12
9	Denial	1.74
10	Behavioral disengagement	1.68
11	Substance use	1.18

5. Relationship Between Illness Perception and Coping

The review found a strong link between the sense of sickness and maladaptive coping mechanisms. Table 5 shows that negative illness perception was positively associated with maladaptive coping practices, although adaptive coping and negative illness perception did not have a significant association.

Table 5: Correlation Between Illness Perception and Coping Strategies

Variables	Spearman Correlation (r_s)	p-value	Interpretation
Illness perception vs Adaptive coping	0.0373	0.66	Not significant
Illness perception vs Maladaptive coping	0.3113	1.81×10^{-4}	Significant positive correlation

There is a positive correlation (r_s=0.3113, p<0.001) between high illness perception scores (viewing the condition as more threatening, chronic, or uncontrollable) and the use of maladaptive coping strategies. This suggests that women who perceived their

Copyright: © Author(s), 2026. Published by Greenfort International Journal of Applied Medical Science | This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

illness as long lasting and uncontrollable, were more prone to adopt maladaptive coping strategies.
However, there was no correlation between adaptative coping strategies and illness perceptions.

6. Comparison with Previous Studies

The results of the current study are also in line with the earlier studies that show that coping and illness perception are important determinants of psychological outcomes in women with PCOS. The results showed similar patterns in both positive and negative coping mechanisms and the role of psychological factors is high in managing PCOS (Table 6).

Table 6: Comparison of Findings with Previous Studies

Study	Sample Size	Key Findings	Comparison with Present Study
Kolahi et al. (2015)	200 PCOS patients	Coping strategies significantly related to quality of life ($p < 0.05$)	Similar finding that coping mechanisms influence psychological outcomes
Morshedi et al. (2021)	200 women with PCOS	Emotional and problem-solving coping strategies associated with quality of life	Consistent with current study showing frequent use of adaptive coping
Ain & Gul (2023)	90 PCOS women	Perception of illness is substantially associated with coping mechanisms and psychological suffering.	Observation of a similar correlation between the sense of sickness and maladaptive coping strategies
Dybciak et al. (2022)	230 PCOS women	Passive coping strategies associated with higher anxiety and depression	Supports current finding linking maladaptive coping with illness perception
Present Study	140 PCOS patients	Positive correlation between illness perception and maladaptive coping	Consistent with previous psychological research in PCOS

DISCUSSION

The current research investigated the illness perception and coping styles among women with PCOS and their interdependence. The results correlated with Arshad, (2025) showing that the participants had a moderately high degree of illness perception, which shows that PCOS is perceived to a great extent as a chronic and long-standing disorder [1]. Dimensions like emotional response, perceived consequences and illness timeline were significantly higher, which indicates that women have serious psychological concern and consider the condition to be a long-standing illness [2]. This is in line with the available literature, which has always found increased illness-related distress and negative illness beliefs in women with PCOS.

Regarding coping, the researcher observed that adaptive coping strategies like acceptance, active coping and seeking emotional support were mainly employed by the participants [3]. These are positive attempts to cope with the psychological and physical issues related to PCOS. Nevertheless, the existence of the maladaptive coping strategies especially the avoidance and self-blame suggest that some people might not effectively adjust psychologically. These results are aligned with the earlier studies, which have indicated more the adaptive coping facilitates, better is the adjustment. Maladaptive coping in most instances was linked to heightened anxiety, depression and diminished quality of life among PCOS populations.

We also observed a strong positive association between pessimistic views of sickness and unhealthy coping mechanisms, but no such link between pessimistic views of illness and healthy coping mechanisms (Chaudhari, 2018). This suggests that while a more negative or "threatening" view of PCOS directly encourages unhealthy coping (like denial or avoidance), a "positive" or manageable view of the illness is not necessarily what drives a person to use healthy coping strategies. Adaptive coping may instead be influenced by external factors like social support, personality traits, or access to medical resources. This fits well with the Common-Sense Model's theoretical framework, which states that people's coping reactions are determined by their cognitive and emotional representations of their condition [4]. The more women felt that PCOS was serious, uncontrollable and distressing; more they were likely to use maladaptive coping behaviors. The findings indicate that the need to provide psychological interventions that transforms the perceptions of the illness and promote adaptive coping behaviors, which improves the quality of life and psychological well-being of women with PCOS.

CONCLUSION

The present study emphasizes the importance of the illness perception in women with PCOS. The results show that the participants in general view PCOS as a chronic and long-standing illness. Even though positive strategies like acceptance and active coping were used by most women, the maladaptive coping strategies such as avoidance and self-blame were also adopted significantly which is an indication of the psychological struggles and underscores the need for holistic

Copyright: © Author(s), 2026. Published by Greenfort International Journal of Applied Medical Science | This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

management of PCOS that goes beyond treating physical symptoms.

The positive correlation that is observed between negative illness perceptions and maladaptive coping highlights the need to deal with the cognitive and emotional rationalization of people towards illness. Healthcare providers can use illness perception scores to identify patients who are at a higher risk of emotional distress and can provide additional psychological support or counseling towards adaptive coping mechanism. Psychological interventions should focus on "cognitive restructuring" and help women challenge unfavorable beliefs about their condition and move away from self-blame and avoidance. Actively encouraging patients to adopt 'adaptive' coping behaviors can eventually lead to positive psychological and quality of life in women with PCOS.

Acknowledgments: Nil

Contributor
Principal investigator: Dr Shruthi A

Funding: No funding in any form was received for the above study.

Ethical approval: The study was reviewed and approved by the Institutional Ethics Committee (IEC) of Kanachur Institute of Medical Sciences, Mangaluru, Karnataka, India (Protocol No.: KIMS-IEC/2026/FC007), dated 5 August 2026.

Transparency: *This manuscript is an honest, accurate, and transparent account of the study being reported and no important aspects of the study have been omitted*.

REFERENCES

1. Arshad M. Coping among patients with physical chronic illnesses in Pakistani sample: a systematic review. *J Soc Sci Arch*. 2025;3(4):75–84. doi:10.59075/jssa.v3i4.353
2. Azeezuddin A, Nikitha. Stress, coping styles and symptom severity in women with PCOS. *Int J Multidiscip Res*. 2025;7(4). doi:10.36948/ijfmr.2025.v07i04.53584
3. Bharali MD, Rajendran R, Goswami J, Singal K, Rajendran V. Prevalence of polycystic ovarian syndrome in India: a systematic review and meta-analysis. *Cureus*. 2022;14(12). doi:10.7759/cureus.32351
4. Chaudhari AP, Mazumdar K, Mehta PD. A profile of coping skills in patients with polycystic ovarian syndrome. *Indian J Ment Health*. 2018;5(2).
5. Dewani D, Karwade P, Mahajan KS. The invisible struggle: The psychosocial aspects of polycystic ovary syndrome. *Cureus*. 2023;15(12):e51321.
6. Gautam R, Maan P, Jyoti A, Kumar A, Malhotra N, Arora T. The role of lifestyle interventions in PCOS management: a systematic review. *Nutrients*. 2025;17(2):310. doi:10.3390/nu17020310
7. Hopman P, Rijken M. Illness perceptions of cancer patients: relationships with illness characteristics and coping. *Psychooncology*. 2014;24(1):11–18. doi:10.1002/pon.3591
8. Qurat-ul-Ain, Gul A. Illness perception, coping strategies and psychological distress among polycystic ovary syndrome women. *Pak J Med Health Sci*. 2023;17(2):261–264.
9. Rosenfield RL, Ehrmann DA. The pathogenesis of polycystic ovary syndrome (PCOS): the hypothesis of PCOS as functional ovarian hyperandrogenism revisited. *Endocr Rev*. 2016;37(5):467–520.
10. Sawyer AT, Harris SL, Koenig HG. Illness perception and high readmission health outcomes. *Health Psychol Open*. 2019;6(1):2055102919844504. doi:10.1177/2055102919844504

Copyright: © Author(s), 2026. Published by Greenfort International Journal of Applied Medical Science | This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.