

# Psychological Morbidity in Polycystic Ovary Syndrome: A Study of Anxiety and Depression

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Publication Date: 2026/04/17

**Abstract:** Polycystic Ovary Syndrome (PCOS) is a common endocrine disorder associated with significant psychological comorbidities. This study aimed to assess the prevalence of anxiety and depression among women diagnosed with PCOS in Udaipur using standardized tools. A total of 160 women aged 25–28 years were assessed using the Beck Anxiety Inventory (BAI) and Beck Depression Inventory (BDI). Results revealed that the majority of respondents exhibited low levels of anxiety (98.75%), while mild depression was prevalent in 75% of participants. The findings highlight the need for early psychological screening and integrated management strategies in PCOS care.

**Keywords:** PCOS, Depression, Anxiety, Women.

**How to Cite:** Neha Shekhawat; Shilpa Rathore (2026) Psychological Morbidity in Polycystic Ovary Syndrome: A Study of Anxiety and Depression. *International Journal of Innovative Science and Research Technology*, 11(4), 927-929. <https://doi.org/10.38124/ijisrt/26apr447>

## I. INTRODUCTION

Polycystic Ovary Syndrome (PCOS) is a multifactorial condition distressing woman of reproductive age, characterized by hormonal inequity, menstrual loopholes, and metabolic instabilities. Beyond physical symptoms, PCOS has been progressively associated with psychological issues such as anxiety and depression. Hormonal dysregulation, body image alarms, infertility, and enduring nature of the disorder contribute to mental health contests.

Worldwide, studies indicate a complex occurrence of anxiety and depression amid women with PCOS related to healthy controls. However, limited region-specific data are available from Rajasthan, particularly Udaipur. Therefore, this study was conducted to evaluate the psychological status of women with PCOS using corroborated psychometric tools.

### ➤ Objectives

- To assess the prevalence of anxiety among women with PCOS using the Beck Anxiety Inventory (BAI).
- To evaluate the levels of depression among women with PCOS using the Beck Depression Inventory (BDI).
- To analyse the distribution of psychological distress among the study population.

## II. METHODOLOGY

### ➤ Study Design

A cross-sectional descriptive study was conducted.

### ➤ Study Area and Population

The study was conducted inside the municipal boundaries of Udaipur division, Rajasthan as the researcher is well accustomed with the area. Women belonging to Udaipur division, diagnosed with PCOS (age group 25-28) were selected through purposive sampling from hospitals/private practitioners/colleges/neighbouring colonies, colleges, whatsapp community groups and social media for the study.

### ➤ Sample Size

A total of 160 women aged 25–28 years were included.

### ➤ Inclusion Criteria

- Diagnosed cases of PCOS
- Age between 25–28 years
- Willingness to participate

### ➤ Data Collection Tools

- Beck Anxiety Inventory (BAI): Used to measure anxiety levels.
- Beck Depression Inventory (BDI): Used to assess depressive symptoms.

➤ *Statistical Analysis*

Data were analysed using descriptive statistics including frequency and percentage.

**III. RESULTS**

➤ *Anxiety:*

The results indicate that the overwhelming majority of respondents (98.75%) experienced low anxiety levels, while only a small fraction (1.25%) exhibited moderate anxiety. No participants reported severe anxiety.

Table 1 Anxiety Levels of Respondents N= 160

S. No.	Category	Score	Frequency
1.	Not at all	0	0
2.	Low anxiety	1-21	158 (98.75%)
3.	Moderate anxiety	22-35	2 (1.25%)
4.	Potentially concerning levels of anxiety	>36	0

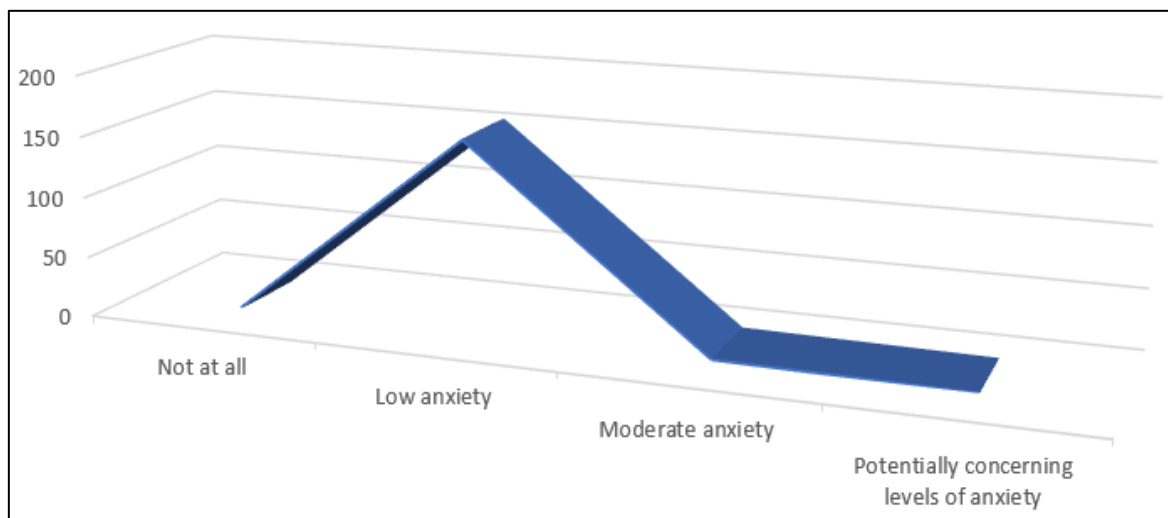


Fig 1 Anxiety Levels of Respondents

In the line of result study Conducted among 65 women with PCOS in Secunderabad, India found high prevalence of anxiety ( $\approx 56.9\%$ ) and depression ( $\approx 66.1\%$ ) using standardized clinical rating scales. Symptoms like menstrual irregularities were common and linked with psychological distress (Madhuri et. al., 2023).

Kriti *et.al.* (2026) also found that PCOS group had significantly higher anxiety scores and a 2.5fold greater risk of anxiety than controls.

➤ *Depression:*

Depression is a common psychological comorbidity in women with Polycystic Ovary Syndrome (PCOS). Hormonal

imbalance, insulin resistance, obesity, infertility, and body image dissatisfaction contribute to persistent sadness, low self-esteem, fatigue, and hopelessness. Untreated depression adversely affects quality of life, treatment adherence, and overall reproductive and metabolic health outcomes.

The depression levels of respondents shown in table 2 revealed that majority of respondents were found into mild depression category which scored 75 percent, followed by normal 23.75 percent and only 1.25 percent respondents were fall into borderline clinical depression. Not a single respondent was found to be having moderate depression, severe depression and extreme depression (fig 2).

Table 2 Depression Levels of Respondents N= 160

S. No.	Category	Score	Frequency
1.	Normal	1-10	38 (23.75%)
2.	Mild depression	11-16	120 (75%)
3.	Borderline clinical depression	17-20	02 (1.25%)
4.	Moderate depression	21-30	0
5.	Severe depression	31-40	0
6.	Extreme depression	>40	0

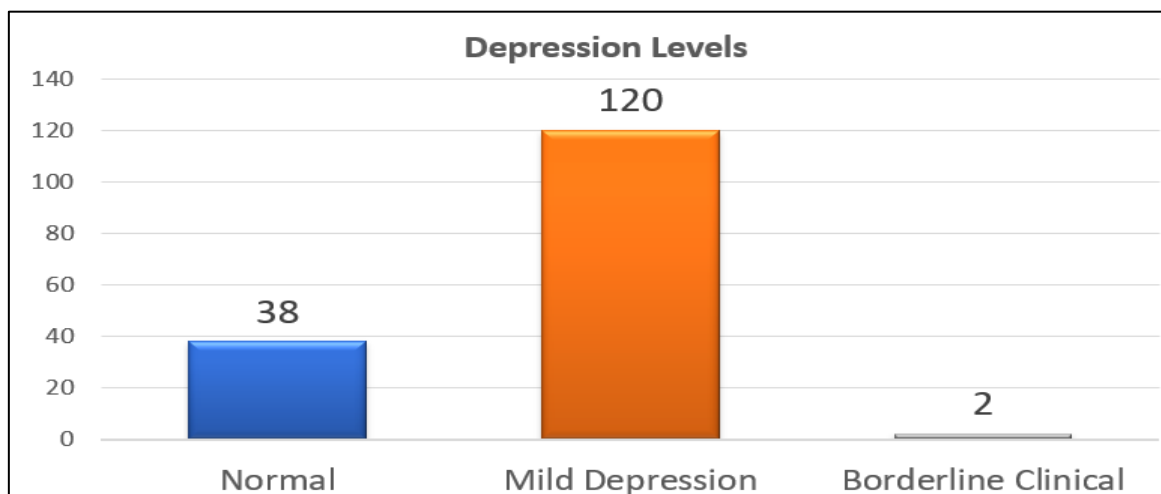


Fig 2 Depression Score of Respondents

#### IV. DISCUSSION

The conclusions of the present study advocate a low frequency of clinically significant anxiety but a high prevalence of mild depressive symptoms among women with PCOS. The majority of mild depression may be credited to long-lasting stress accompanying with PCOS, including concerns about physical appearance, fertility, and long-term health risks. A study involving ~800 PCOS women reported:

- Depression prevalence: 52%
- Anxiety prevalence: 26.1%
- Most cases were mild to moderate severity, but still clinically significant

These results are consistent with previous studies indicating that women with PCOS are more likely to experience psychological distress, particularly depression. However, the low levels of anxiety observed in this study contrast with some global findings, possibly due to sociocultural factors, coping mechanisms, or age-specific resilience in the selected population.

The absence of severe psychological symptoms may also reflect early-stage disease or effective family/social support systems.

#### V. CONCLUSION

The study achieves that while severe anxiety and depression are not vastly predominant among women with PCOS in Udaipur. In PCOS mild depression is significantly common. This highlights the importance of repetitive psychological screening in PCOS management. Integrating mental health support with clinical and nutritional interventions can improve overall quality of life.

#### RECOMMENDATIONS

- Incorporation of mental health screening in PCOS management protocols

- Awareness programs focusing on psychological well-being
- Counselling and lifestyle interventions to reduce depressive symptoms
- Further longitudinal studies to assess changes over time

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