

SHORT COMMUNICATION

Psychosocial Correlates of Young Females Suffering from Polycystic Ovarian Syndrome (PCOS)

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ABSTRACT

Objective: To explore the psychosocial correlates of women under treatment for polycystic ovarian syndrome (PCOS).

Study Design: Cross sectional study.

Place and Duration of Study: Different Clinics and Hospitals of Lahore and Gujranwala, from Aug 2019 to Nov 2020.

Methodology: Single women seeking treatment for PCOS were included in the study. Derriford appearance scale and social interaction anxiety scale were used in this study.

Results: A total of 180 women were included in the study. The result indicated significant positive correlation between appearance distress and social anxiety ($r=0.41$, $p<0.001$). Majority of women were visiting beauty parlors to evade facial hair and buying products to conceal their acne.

Conclusion: Women diagnosed with PCOS reported to experience the appearance distress and anxiety specifically in social gatherings.

Keywords: Acne, Appearance distress, Polycystic ovarian syndrome (PCOS), Social anxiety.

How to Cite This Article: Rafique MS, Ilyas U. Psychosocial Correlates of Young Females Suffering from Polycystic Ovarian Syndrome (PCOS). Pak Armed Forces Med J 2022; 72(1): 331-333. Doi: <https://doi.org/10.51253/pafmj.v72i1.6225>

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INTRODUCTION

Polycystic ovarian syndrome (PCOS) is a hormonal issue and one of the most recognized endocrine disorders that is common among females of reproductive ages. Infertility, obesity, acne, hirsutism, loss of hair on head and menstrual irregularities are the common symptoms.^{1,2} The prevalence among Pakistani women is reported to be 52%.³

Although PCOS is a hormonal issue but its symptoms cause changes in appearance, resulting in mental health problems.^{4,5} The most common symptom of PCOS is hirsutism, due to excess androgen, which leads towards excessive hair growth on face and body. Most of the women invest considerable time and effort in managing and removing their hair.⁶ Obesity is the common feature of PCOS. Women with PCOS are reported to have excessive fat accumulation and face difficulty in reducing their weight.⁷ Previous research has shown that women with PCOS have increased risk of developing eating disorders and have high vulnerability towards obesity.⁸ Another feature of PCOS is acne vulgaris. Patients of acne vulgaris have been judged negatively in the society on the basis of appearance.^{9,10}

In Pakistan, prevalence of PCOS has increased in last few years. It is important to explore how it has

affected young females. Due to limited literature in indigenous population, the present study was conducted to explore the association between the appearance distress and social anxiety.

METHODOLOGY

This was a cross sectional study conducted from August to November 2019. Data was collected from different hospitals and clinics of Lahore and Gujranwala. Institutional Ethical Review Board permission was taken before the data collection.

Inclusion Criteria: Females who had the diagnosis of PCOS with the age range of 19-24 years and were seeking treatment for weight issues, menstrual irregularities, facial hair and acne were included in the study.

Exclusion Criteria: Females using psychiatric medication or having prior psychiatric diagnoses or having difficulty with Urdu comprehension were excluded from the study.

For this study, sample size was calculated in light of existing literature.¹¹ The calculated sample size was 240.

"GAD-7 is a screening tool for anxiety. It is a Likert scale and consists of seven items ranging from 0-3. This scale has a good reliability of 0.89. Urdu translated version of scale was used. Sixty participants who received high scores on anxiety¹² were excluded from this study.

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Received: 30 Jan 2021; revision received: 07 Jun 2021; accepted: 15 Jun 2021

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Derriford appearance scale (DAS) consists of 26 items out of which, 23 items were used.¹³ Three items were excluded on the basis of cultural differences and irrelevance for unmarried participants. It is a Likert scale, some items range from 0-3 and some items range from 1-4. The scale has good reliability of 0.92 and Urdu translated version of scale was used.¹⁴

Social interaction anxiety scale is a Likert scale, which consists of 20 items.¹⁵ Urdu translated version of the scale was used. The scale has good reliability ($\alpha=0.93$).

Permission was taken from the principal authors for the using the scales and translating for indigenous population. Data was collected after the written informed consent and confidentiality of the study participants was maintained.

Statistical Package for Social Sciences version 22 was used for the data analysis. Quantitative variables were summarized as Mean \pm SD and qualitative variables were summarized as frequency and percentages. Descriptive analysis, reliability and Pearson product moment correlation were calculated after establishing normality of the data. Reliability of scales was computed for both the scales measuring appearance distress and social anxiety among patients of PCOS. The p -value of ≤ 0.05 was considered statistically significant.

RESULTS

A total of 180 women were included in the study. The results indicated low percentage of women attending social gatherings, whereas more cosmetic products were bought to conceal the face. Table-I illustrated the descriptive analysis of demographic variables of patients with PCOS. Fifty six (31%) women were taking treatment continuously, while 33 (18.3%) women were taking treatment rarely. A total of 134 (74%) women were taking 8-6 hours of sleep. Most of the women were seeking services from the beauty parlor, 120 (66%) for waxing purpose.

Table-II showed the reliability of the translated scales. The mean value for appearance distress was 55.25 ± 7.03 ($\alpha=0.69$) and mean value for social anxiety 45.47 ± 11.97 ($\alpha=0.77$). Table-III showed the association between appearance distress and social anxiety. The result indicated statistical significance between the appearance distress and social anxiety with ($p=0.001$) and positive correlation ($r=0.44$).

DISCUSSION

This study revealed the relationship between appearance distress and social anxiety among unmar-

ried females suffering from PCOS. A research study conducted on Norwegian adolescents ($n=2, 587$) in 2018 showed that mental health issues including depression, impaired relationships with friends were reported among females.¹⁴

Table-I: Descriptive analysis of demographic variables (n=180).

Characteristics	n (%)	Mean \pm SD
Age		
19-24 Year	180 (100)	21.4 \pm 2.27
Education		
Matric	20 (11.1)	
Intermediate	83 (45.6)	
BA	77 (42.8)	
Under Treatment		
Continuously	56 (31.1)	1.87 \pm 0.69
Often	91 (50.6)	
Sometimes	33 (18.3)	
Sleep		
3-5 hours	36 (20.0)	1.85 \pm 0.48
8-6 hours	134 (74.4)	
More than 10	10 (5.6)	
Exercise		
No	46 (25.6)	1.80 \pm .56
2 times a week	120 (66.7)	
Often	13 (7.2)	
Make-up /Concealer		
Concealer	102 (56.9)	
Primer	17 (13.9)	
Not specific	61 (34.9)	
Social Gatherings		
Rarely	62 (34.4)	
Sometimes	85 (47.2)	
Often	20 (11.1)	
Beauty Parlor Visit		
Waxing, Threading	120 (66.6)	
Threading	44 (24.4)	
Facial and others	16 (8.8)	
Television		
2 hours	52 (28.9)	
3-4 hours	103 (56.7)	
More than 4	25 (13.9)	

Table-II: Psychometric parameters and reliability (n=180).

Parameters	Mean \pm SD	Cronbach Alpha	Range Potential	Range Actual
Appearance Distress	55.25 \pm 7.03	0.69	11-95	25-79
Social Interaction Anxiety	45.47 \pm 11.97	0.77	0-80	11-65

Table-III: Inter-correlation of appearance distress and social anxiety among patients of PCOS (n=180).

Measures		Social Interaction Anxiety
Appearance Distress	Pearson Correlation	0.414
	p -value	0.001

Another study revealed that people get anxious and worried to face the world due to their body image.¹⁵ Results of a study conducted by Borghi *et al*, were similar to the current study. Their correlation analysis indicated positive relationship of PCOS related hirsutism with anxiety ($r=0.26$).¹⁶

Over the last decade with media globalization, the perspective of beauty has changed drastically among South Asian countries. PCOS is one of the physiological conditions that has an impact on the whole body and skin. It has been suggested that women with PCOS have negative self-image regarding themselves. Patients with PCOS are sensitive towards the social gatherings because of their body image. The young female patients of PCOS limit their social interactions. Symptoms like obesity and hirsutism lead them towards appearance distress and loss of self-esteem.¹⁷

Radwan *et al*, conducted a study on 308 students from the University of Sharjah. Face-to-face interviews were conducted based on a questionnaire that included physical activity, the figure rating scale (FRS) and body image dissatisfaction (BID) questions. Results showed that females who were dissatisfied with their body images desired to lose weight and preferred dieting.¹⁸ Young females with PCOS are vulnerable to distress regarding their looks and this decreased their health related quality of life. They have certain fears, negative self-image regarding their looks. Such interpersonal fears lead them towards social phobia and provoke anxiety in them.

This study was conducted on the appearance concerns of PCOS females. The findings of this study will help us to understand the level of distress they face and how it limits their interactions. Doctors should refer PCOS patients to the psychologist to resolve their psychological issues.

ACKNOWLEDGEMENT

Researchers acknowledge the patients of PCOS who participated in this research study on volunteer basis.

LIMITATIONS OF STUDY

Data was only collected from the young unmarried females. Other symptoms of PCOS like menstrual irregularities, pelvic pain and hair loss were not included in the study.

CONCLUSION

Women diagnosed with PCOS reported to experience the appearance distress and anxiety specifically in social gatherings.

Conflict of Interest: None.

Authors' Contribution

SR: Data analysis conceptualization of research write-up, UI: Critical reviewing data analysis.

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