

Intimacy and Emotional Well-Being in Partners Living With Polycystic Ovarian Syndrome Women

Rubina Kausar¹, Hifza Imran²

1. Rubina Kausar, School of Professional Psychology, University of Management and Technology, Lahore, Pakistan.

2. Hifza Imran, National Institute of psychology, Quaid-i-Azam University, Islamabad, Pakistan

For Correspondence: Rubina Kausar. Email: rubinakausar.psychology@gmail.com

Abstract

Objective. PCOS is a persistent medical condition that can act as a vulnerability to psychological well-being and reduce marital satisfaction. Chronic illness that makes an individual vulnerable to poorer health greatly reduces marital satisfaction and intimacy in a relationship. This study aimed to find out the association between emotional intimacy, social intimacy, and emotional well-being in partners living with PCOS women.

Method. The study used a correlational cross-sectional research design. The sample consisted of N=76 couples of PCOS women and their husbands. Emotional Intimacy Scale (Sinclair & Dowdy, 2005), Miller Social Intimacy Scale (Miller & Lefcourt, 1982), and Warwick-Edinburgh Mental Well-Being Scale (Teede, et al. 2018) were used for data collection from men and PCOSQOL Scale (Williams, et al. 2018) was used for assessment of HRQOL from women.

Results. Pearson product-moment correlation analysis revealed that HRQOL of women is significantly positively correlated with emotional intimacy, social intimacy, and emotional well-being of partners living with PCOS women. Furthermore, it was revealed that Emotional intimacy and social intimacy are significantly positively correlated with emotional well-being. Hierarchical regression analysis found emotional intimacy and social intimacy as significant positive predictors of emotional well-being.

Conclusion. It was a unique contribution to the field of health, family, and counseling psychology. It can help in understanding problems associated with management and adherence in PCOS women. It also highlights the impact of these types of metabolic chronic illnesses on the family members and their spouses. It is a very initial study that could act as a groundwork that could help healthcare providers to raise awareness about the psychological well-being of couples where women are suffering from PCOS, and design and create couple-based interventions for PCOS women and their partners.

Keywords. *Marital quality, emotional intimacy, social intimacy, hrqol, emotional well-being.*



Introduction

Polycystic ovarian syndrome is a common endocrine disease of reproductive-age women characterized by an irregular menstrual cycle, hirsutism, acne, obesity, and infertility (Rao et al., 2020). Other features of PCOS involve insulin resistance, metabolic abnormalities, and hormonal imbalance leading to increased risk of Type 2 diabetes, cardiovascular disease (CVD), and infertility that significantly affect a women's quality of life. Diagnostic criteria for PCOS by the National Institute of Health in 1990, Rotterdam in 2003, and Androgen Excess Society and PCOS Society in 2006 include all three features of a) Chronic Oligo/anovulation, b) Clinical or biochemical signs of hyperandrogenism, and c) Polycystic ovaries and the exclusion of other etiologies (Cushing's syndrome, androgen-secreting tumors, congenital adrenal hyperplasia). It is estimated to affect 6-22% of the women in their reproductive years depending upon the criteria used (Azziz et al., 2016; Escobar-Morreale, 2018).

PCOS is prevalent across the globe, first diagnosed in Caucasians. In 2018, a new international evidence-based guideline for PCOS reported ethnic variation in presentations and manifestations of the disease (Teede et al., 2018). The prevalence of PCOS has been reported highest among South Asian women who migrated to developed countries and Australian Aboriginal women. Both women's populations reported increased Body Mass Index. There is also a clear difference in cut-off scores for clinical features e.g. for Hirsutism i.e. excessive hairs on androgen-dependent areas, South Asian and Middle Eastern women scored higher cut-off as compared to women of East Asian origin. Metabolic dysfunction i.e. insulin resistance is also high in South Asian women as compared to other populations. Except for quality of life, psychological manifestations of the disease are not well-discovered because of culturally bound perspectives of infertility (Dokras et al., 2018).

In Pakistan, several recent studies have been done about the knowledge and prevalence of PCOS. The prevalence study Zafar et al. (2019) found prevalence study PCOS to be the most prevalent gynecological disorder among reproductive-age women with a ratio of 54.41% followed by endometriosis, cervical cancer, and breast cancer. In Lahore frequency of polycystic ovary syndrome was assessed among students of the military hospital and found that 19.4% of females met the Rotterdam criteria of PCOS (Ahmad et al., 2020).

Another PCOS prevalence study done among the students of public universities in Quetta revealed a prevalence rate of 17.5% (Haq et al., 2017). All these studies revealed that the prevalence of PCOS is increasing over time.

Treatment of PCOS in women mainly focuses on treating medical conditions like irregular periods and other physical health problems. Psychological aspects of PCOS are rarely discussed with its sufferers (Niet et al., 2012). PCOS greatly affects the quality of life and psychological well-being of women due to depression, anxiety, body dissatisfaction, lack of sexual satisfaction, infertility, and reduced interpersonal functioning. Elsenbruch et al. (2003) had explored the determinants of emotional distress in PCOS women. They recruited 143 untreated PCOS women from different outpatient clinics in Germany. The inclusion criterion was NIH 1990 diagnostic criteria for PCOS. Different self-reported measures were used to assess psychological distress, health-related quality of life, and sexual satisfaction. 15.4% of patients out of the total sample had possible psychological and emotional distress. High body mass index was associated with decreased quality of life and sexual satisfaction. The conclusion was most emotional problems go undetected and untreated in PCOS women. These psychological problems greatly diminish the quality of life in PCOS women.

Polycystic ovary syndrome in married women causes even more damage. When a member of the family goes through some stressful condition, other members in many also get affected. It greatly influences affected individuals psychologically that in turn disrupts family functioning. Marital communication, marital satisfaction, and intimacy in close relationships are significantly get affected by such stressors (Story & Bradbury, 2004; Repetti et al., 2009). Revenson and DeLongis (2011) argued that diagnosis of chronic illness opens the door for multiple stressors for the couple which is why chronic illness should be perceived as an interpersonal experience rather than an individual phenomenon. Several empirical pieces of evidence from the past explored the impact of chronic illness on the spouse (Manne & Badr, 2008). A study by (Dorval et al., 2005) provides evidence of emotional challenges faced by partners of chronically ill patients. They have observed that spouses of chronically ill had to provide support to partners along dealing with their emotional distress. Although the illness is thought to bring couples closer together sometimes it can cause damage to marital relationships.

Theoretical Framework

Moos and Schaefer (1984) Crisis Theory explains how problems or crises in life impact the patterns of our personal and social relationships with others. Crisis theory holds the view that individuals try to maintain a state of balance or equilibrium. When this state of equilibrium is disrupted by any external factor the individual tries to restore the balance by employing ways that bring success. When an individual's psychological resources become insufficient or inadequate to deal with the problem, the crisis begins. This state of crisis brings psychological distress to individuals and people experience anxiety and fear. Knafelz and Deatrick (2002) said as people cannot tolerate this crisis for a long time so they adopt behavioral patterns that normalize their life as much as possible. The crisis is not itself unhealthy or pathological but a turning point in an individual's life.

Illness is a form of crisis. When a person contracts a chronic illness, he copes with the illness by focusing on the positive aspects of the disease (Lobel et al., 1992). Patients who seek social support, and emotionally detach themselves from the disease experience less psychological distress, on the other hand, psychological distress is common among those who use the avoidance coping approach. They may use cognitive and behavioral avoidance strategies such as wishful thinking or binge eating. The uncertainty about the disease status of chronic illness puts the patient at the risk of developing emotional problems. In this scenario, maintaining personal relationships becomes another challenge for chronically ill patients. Chronic illness changes the person and meeting the expectations of the friends, family and intimate relationship put a strain on the individual. Moreover, as chronic illness patients do not fit in sick role criteria as in acute illnesses, it profoundly changes family expectations as well (Wiley & Camacho, 1980).

Rationale of the Study

To date, most empirical evidence on PCOS in an indigenous context mainly addresses prevalence, knowledge, and awareness in females as mentioned above (Gul et al., 2014; Zafar et al., 2019; Naz et al., 2020). Even in an international context, recent literature on PCOS women lacks in providing experiences of their partners. All previous research is done on PCOS women only and explores their personal experience and quality of life (Pekhlivanov et al., 2006; Amini et al., 2012; Shishehgar et al., 2016; Sánchez-Ferrer et al., 2020).

In eastern and south Asian contexts PCOS women exhibit much more symptoms (Wijeyaratne et al., 2002) as compared to Caucasian or East Asian Chinese women having the same condition (Lookingbill et al., 1991). So it was intended in our study to explore how living with PCOS women affects the emotional well-being of their partners, intimacy, and marital quality of their relationship. The present study aimed to explore how PCOS-related manifestations in married women impact their partners' marital satisfaction and intimacy. It was also intended to explore how living with PCOS women impacts the emotional well-being of their partners. This study will add to the literature on the impact of chronic illness on interpersonal relationships in the context of PCOS.

The present study aimed to fulfill the following objectives:

1. To investigate the relationship between emotional intimacy, social intimacy, and emotional well-being in partners living with PCOS women.
2. To investigate the predictive role of emotional and social intimacy in the emotional well-being of PCOS women's partners.
3. To investigate the predictive role of HRQOL of PCOS women in the emotional well-being of their partners.

Hypotheses

The present study hypothesized that:

1. There is likely to be a positive relationship between emotional intimacy, social intimacy, and emotional well-being in partners of PCOS women.
2. There is likely to be a positive relationship between HRQOL in PCOS women and the emotional intimacy, social intimacy, and emotional well-being of their partners.
3. Emotional intimacy and social intimacy will likely be positive predictors of emotional well-being in partners of PCOS women.
4. HRQOL in polycystic ovarian syndrome women will likely be a significant predictor of the emotional well-being of their partners.

Method

Purposive sampling and snowball sampling technique was used to recruit subjects. A sample of 76 couples (Male age, $M=33.08(6.24)$ and Female age, $M=37.12(5.85)$) were selected to participate in the study. The data was collected from different private gynecologists' clinics and healthcare units. Out of 76 couples, only 26 couples have children and 51 couples were childless. 55 couples were from Gujranwala, 13 from Islamabad, and 8 from Lahore. The average duration of marriage was 6.86 years.

Assessment Measures

Duration of marriage, type of marriage, children, age, family system, and education level were assessed in demographics. The study uses the following assessment measures;

The Emotional Intimacy Scale. Sinclair and Dowdy (2005) developed this scale which assess emotional intimacy. It consists of 5-items scored on a 5-point Likert scale. It measures the degree of closeness that allows sharing of personal feelings accompanied by the expectation of understanding and demonstration of caring. In the present study, the internal reliability of the emotional intimacy scale was $\alpha=.92$.

The Social Intimacy Scale. It was developed by Miller and Lefcourt (1982). A 17-item scale allows for the measurement of closeness and intimacy in close relationships like spouses, partners, or friends. In the present study, the internal consistency of MSIS was .92.

Warwick-Edinburgh Mental Well-Being Scale (WEMWBS). It was developed in an attempt to measure positive mental health (Tennant et al., 2007). It consists of 14 positively worded items that allow capturing a wide conception of well-being, including affective-emotional, cognitive-evaluative aspects of well-being and psychological functioning. In the present study, the calculated internal consistency for the WEMWBS was $\alpha=.92$.

The Polycystic Ovarian Syndrome Quality of Life Scale (Williams et al., 2018). It was used to screen female participants for health-related quality of life and physical and psychological manifestations of the disease. The scale consists of 35 items. In the current study, the PCOSQOL calculated reliability was also excellent which is $\alpha=.95$. Subscales reliabilities in the present study were also excellent; Impact of PCOS scale $\alpha=.92$, infertility scale $\alpha=.95$, hirsutism scale $\alpha=.94$, and mood scale $\alpha=.83$.

Procedure

Females who visited healthcare clinics or hospitals were assessed in the present study. Personal contacts were also used to find PCOS women. Only those females who were diagnosed with PCOS by gynecologists were recruited. PCOS women who visited clinics with their husbands were debriefed about the purpose of the study. After the debriefing consent form was taken from the couples. PCOSQOL scale was administered to PCOS women to assess health-related quality of life. Later, data was collected from the partners of selected PCOS women on marital quality, intimacy, and emotional well-being scales. Fearing the ongoing COVID situation in the country many hospitals didn't allow for data collection. Out of $N=76$ couples, 15 couples provided data through Google forms. In total, 55 couples were recruited from Gujranwala, 13 from Islamabad, and 8 from Lahore. After the collection of data, data was entered and results were analyzed using IBM SPSS (Statistical Package for the Social Sciences) version 21.

Results

Pearson Product Moment Correlation analysis was carried out to test the relationship between emotional intimacy and social intimacy with emotional well-being in partners of PCOS women. Results showed that there was a significant positive relationship between emotional intimacy ($r=.59^{**}$) and social intimacy ($r=.72^{**}$) with emotional well-being i.e. partners that experience higher emotional intimacy in their relationship will have higher emotional well-being and vice versa. Similarly, higher social intimacy is associated with higher emotional well-being. The correlational analysis also found a significant positive relationship between HRQOL in PCOS women and emotional intimacy ($r=.41^{**}$), social intimacy ($r=.56^{**}$), and emotional well-being ($r=.54^{**}$) of their partners. It showed that Health-related Quality of Life in Polycystic Ovarian Syndrome women had a direct association with the emotional intimacy, social intimacy, and emotional well-being of their partners.

Table 1*Correlation between HRQOL, Emotional, and Social Intimacy, and Emotional Well-Being (N=76)*

Variables	1	2	3	4	5	6	7	8
1. HRQOL		.91**	.76**	.56**	.75**	.41**	.56**	.54**
2. Impact of PCOS			.55**	.35**	.77**	.28*	.54**	.47**
3. Infertility				.25*	.37**	.37**	.42**	.45**
4. Hirsutism					.24*	.42**	.31**	.29*
5. Mood						.18	.37**	.39**
6. Emotional Intimacy							.60**	.59**
7. Social Intimacy								.72**
8. Emotional Well-Being								

Note. * $p < .05$, ** $p < .01$; HRQOL= Health related quality of life

Hierarchical regression analysis found the predictive role of emotional intimacy and social intimacy in the emotional well-being of partners of PCOS women. The results revealed that emotional intimacy and social intimacy as significant predictors of emotional well-being.

Table 2*Multiple Regression Analysis Prediction of Emotional Well-being by HRQOL, Emotional Intimacy, and Social Intimacy (N=76)*

Predictors	B	95% CI for B		SE	β	R^2	ΔR^2
		LL	UL				
Step 1						.19	.39
Constant	37.24***	22.33	52.16	7.48			
Duration of Marriage	.13	-.31	.58	.23	.08		
Type of Marriage	2.82	-2.3	7.94	2.57	1.10		
Children	1.86	2.35	6.06	2.11	.11		
Family System	-.39	-5.68	4.89	2.65	-.02		
Step 2						.77	.56***
Constant	-1.01	-14.19	12.17	6.60	—		
HRQOL	.05	-.01	.10	.03	.17		
Emotional Intimacy	.31*	.01	.59	.15	.21*		
Social Intimacy	.23***	.13	.34	.05	.50***		

Note. HRQOL= Health-related Quality of Life; CI = confidence interval; LL = lower limit; UL = upper limit; * $p < .05$, ** $p < .01$, *** $p < .001$

The above table showed that in the first step covariates of the duration of the marriage, type of marriage, children, and family system were added. In the second step HRQOL, emotional intimacy, and social intimacy were added in described sequential order. Step 1 displays model 1 of hierarchical regression analysis. It demonstrates the variance in outcome variables i.e., emotional well-being by interaction effect of the duration of the marriage, type of marriage, children, and family system. These covariates only explain 39% of the variance in emotional well-being. Step 2 demonstrates model 2 of hierarchical regression analysis. Model 2 is statistically significant ($\Delta R^2 = .56$, $F(3, 68) = 31.57$, $p = .000$) and explains 56% of the unique variance in the outcome variable. The overall model significance is $R^2 = .77$, ($F(7, 68) = 14.48$, $p = .000$).

The coefficients of emotional intimacy ($\beta=.21, p=.04$) and social intimacy ($\beta=.50, p=.000$) are significant which revealed a positive relationship between emotional intimacy, social intimacy, and emotional well-being. It means higher the emotional and social intimacy in PCOS women partners higher will be their emotional well-being.

Discussion

The present study found a positive relationship between HRQOL in polycystic ovarian syndrome women and emotional intimacy and social intimacy and the emotional well-being of their partners. Eriksson et al. (2019) recent qualitative research from the field of psychology explored the experiences of the partners who live with and provide informal care to their partners. The analysis of 16 Swedish partners' interviews provided four themes; management of everyday life challenges, managing life by using own capacities and seeking social support, appreciating good things in life, and challenges in adapting to recurrent changes and uncertain future. They have explored that providing informal care to their spouses and facing challenges in everyday life presented physical and psychological costs to them as they have very limited personal time for themselves. In these circumstances, they try to seek support from their informal social circle than formal care providers. In our study, we found that HRQOL in PCOS women significantly affects the emotional intimacy and social intimacy in their partners which decreases with a decrease in health-related quality of life in PCOS women which greatly affects the emotional well-being of their partners.

Pereira et al. (2012) study on dyadic adjustment, quality of life, and psychological morbidity in chronically ill psoriasis patients and their spouses found that the relationship between family coping, psychological morbidity, body image, dyadic adjustment, and quality of life. They gathered data on family coping, psychological morbidity, body image, dyadic adjustment, and quality of life from psoriasis patients and families coping with psychological morbidity, and dyadic adjustment from their partners. They found positive associations between dyadic adjustment, psychological morbidity, and family coping in patients and their partners were found. They also found that lower HRQOL in patients is related to higher levels of depressive and anxious symptoms in their partners. It showed that HRQOL had an impact on the emotional well-being of their partners, which we also found in our study. These findings from the past are in line with our current findings in PCOS women and their partners.

Our current research also found emotional intimacy and social intimacy as significant predictors of emotional well-being in PCOS women partners. A recent study by (Czyżowska et al., 2020) explored the significance of intimate relationships for the emotional well-being of young adults. They gathered data from 23 to 37 years old men (214) and women (217). They aimed to explore how being in a relationship, intimacy levels, and the quality of intimate relationships affect an individual's sense of well-being. They confirmed the proposed relationship presented and found that being in an intimate relationship and the quality of the relationship is directly related to an individual's emotional well-being/eudaimonic well-being for men and women. In our study, we also found that emotional intimacy and social intimacy are positive predictors of emotional well-being in partners of PCOS women.

Married individuals experience relationship difficulties when one partner is diagnosed with chronic illness. Palmer et al. (1984) research on coping strategies in married individuals in response to chronic illness found that coping responses varies in couples who have fixed roles as compare to those inflexible roles. Those who were in fixed roles or new in relationships and were not certain about their roles have more difficulty in treatment adherence and disease management. In comparison, those who were flexible in their role performance adhere more easily to the new treatment regime. Differences in the perception of disease status by the patient himself/ herself and his/her partner and lack of affective involvement were major contributors to misunderstanding and feelings of abandonment in married couples.

In a collectivistic culture like Pakistan, although the family structure and gender roles scenarios are changing with recent advancement in technology that is bringing radical change in society, still couples have fixed roles when it comes to household and responsibilities. When one of the spouse in these types of couples contract chronic illness they failed to meet the demands of that particular illness. Although couples are getting aware of PCOS disease but changing their roles in response to disease management that requires not only adherence but a lifestyles change in the lives of women, many fail.

Moreover, the emotional toll of this disease on the psychological well-being of women often worsens the situation. Mood swings, depression, anxiety, body image issues, sexual dissatisfaction in PCOS can greatly undermine their quality of life. This reduced quality of life in PCOS women can significantly impact their family members and their partners are not immune to it. As couples are treated as a unit, so PCOS women HRQOL can greatly destabilize their relationship with their partners. Marital quality, emotional intimacy, and social intimacy can be reduced and it can greatly impact the emotional well-being of their partners. Thus chronic illness act as a crisis for such couples who failed to meet the demands of the disease due to their poor coping skills and personal resources.

Conclusion

It is concluded that like other chronic illnesses polycystic ovarian syndrome in women had emotional consequences for their partners. Although PCOS doesn't require formal or informal caregiving from their partner psychological manifestations of the disease put women at risk of poor health-related quality of life which greatly undermines the quality of their relationship. Poor HRQOL in PCOS women is directly associated with emotional intimacy, social intimacy, and the emotional well-being of their partners.

Limitations

- The study didn't add any control against which findings of the study can be compared and validated as the control group provides a baseline.
- No indigenous scales were available for measuring the proposed variables in the present study. All scales used were in the English language and were validated in the western context.
- The sample size was small as data was collected from only 76 couples. Many health care centers didn't allow data collection due to ongoing COVID restrictions in the country.

Recommendations

- In future studies, it is recommended to use qualitative or mixed-method approaches. It is not only important for in-depth analysis and understanding, but qualitative studies are useful in generating useful indigenous knowledge that can further be used in developing screening tools and interventions for this population.

- It is also recommended to use Actor-Partner Interdependence Model for collecting data from both husbands and wives. It will elaborate actor effects and partner effects of the proposed variables for each spouse. It will be useful in understanding the cross-over effect of PCOS for both partners.

Practical Implication

PCOS women are often treated for their biological abnormalities and physical manifestations of the disease but the emotional toll of this disease on the mental health and psychological well-being of their family and spouses are rarely discussed in healthcare settings in Pakistan. The present research also intended to raise awareness about the psychological well-being of such couples and to design and create couple-based interventions for PCOS women and their partners. It can help in understanding problems associated with management and adherence in PCOS women. It also highlights the impact of these types of metabolic chronic illnesses on the family members and their spouses. Although many patients tried to seek support from their immediate informal social network a sense of support from formal care units can bring a long-lasting change in the lives of sufferers of this mysterious disease.

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Conflict of Interest. There is no conflict of interest among corresponding authors or with any other person or organization regarding the research purpose and its findings.

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Availability of the Data and Material. Research data and materials can be accessed from respective authors for research purposes only.

Ethical Approval and Consent to Participation. The research was carried out according to the approved protocol by the Board of Advance Studies Research (BASAR) of the University of Management and Technology (UMT), Lahore. American Psychological Association (APA) code of conduct and ethical principles of confidentiality of data, the privacy of participants, right to withdrawal, informed consent, and debriefing were ensured while conducting the study. Informed consent was taken from participants. Assessment measures were used after the relevant authors' permission.

Competing Interest. Corresponding authors declare no competing interest.

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