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Exploring Constructs for Scale (PCOS-HRQOL) Based on Conscious and Unconscious Experiences of Women with Polycystic Ovary Syndrome

Irum Hayat¹, Dr. Alay Ahmed², Dr. Fayyaz Ahmed Anjum³

Abstract

To explore the constructs for the development of health related quality of life scale (PCOS-HRQOL) based on conscious and unconscious experiences of women with polycystic ovarian syndrome by identifying themes and psychological needs. Less data is available in the domain of qualitative research for providing a ground work for the development of health related quality of life scale for women with polycystic ovary syndrome using projective techniques i.e. Thematic Apperception Test, Modified Hand Test and Focus Groups. A qualitative study consisting of interpretive phenomenological analysis was conducted on women recruited from public and private sector hospitals of Islamabad. It was based on transcriptions obtained from thematic analysis and focus groups in order to highlight conscious and unconscious experiences of these women. Common themes and sub-themes identified through thematic analysis of subjects using cards of Thematic Apperception Test (for unconscious experiences) and using Focus Groups (for conscious experiences). Ten themes and sub-themes projected in women included: depressive states, conflict with authority, conflict with spouse, aggression, obsessive preoccupations, economic deprivations, health anxiety, self-image, social anxiety and altruistic behavior. Nine psychological needs included need for achievement, affiliation, autonomy and independence, blame and avoidance, dominance, compliance, succorance, nurturance and altruism, approval and recognition. Clear and significant similarities are seen through projections of women on Thematic Apperception Test and focus groups. Women with age range 26-35 years are more prone towards having psychological states that affect their physical as well as psychological health related quality of life.

Keywords: Polycystic Ovary Syndrome, Qualitative study, Thematic analysis, Focus groups, Thematic Apperception Test, Infertility, Quality of life, Psychological Needs, Interpretive Phenomenological Analysis

1. Background

Polycystic ovary syndrome affects 6 to 20 % of western women and women of Pakistan causing anovulatory infertility thus leading to many clinical and psychological complications including increased risk of miscarriage, hypertension, cardiovascular diseases, menstrual irregularities, hirsutism, cystic acne, hair loss, obesity and ovarian cancer (Williams, Moore & Regehr, 2023). Infertile couples project many psychological problems such as increased stress, anxiety, depression, aggression, inferiority complexes, decreased self-esteem and marital dysfunction as compared to fertile couples (Yousefi & Ghodrati, 2020). Psychological disorders in result of PCOS include depression, anxiety, psychological distress, obsessive compulsive disorders, post-traumatic stress disorder, psychosocial problems, suicidal ideation and sexual dysfunction making the health related quality of life of such women poor (Fatemah et al, 2021). Qualitative researches regarding impact of PCOS on quality of life are rare to clinical and psychological disciplines (Lau G M et al, 2022).

Therefore the rationale of the study was to provide a solid groundwork for the development of constructs and items of scale and subsequently for research questions and statements for the measurement of physical and psychological health related quality of life for women with PCOS. No scale of PCOS was developed before and both physical and psychological effects were not explored simultaneously. It was considered viable to explore the psychological phenomenon of women with PCOS through interpretive phenomenological analysis of Thematic Apperception Test and focus groups.

1.1. Qualitative Research to PCOS

Qualitative research provides an appropriate approach to describe conscious and unconscious experiences of women with polycystic ovary syndrome. They also provide better understanding of their perceptions formed due to PCOS, insights and the identifying their psychological needs and interests. Moreover it is the best approach to study the health related quality of life of women with PCOS as it provides a rich description of local contextual consequences as well as the individual's subjective experiences about life with this chronic illness. Findings from qualitative research may help in overcoming gaps in suggesting care and therapeutic interventions in order to get informed about the future priorities and probabilities of the illness and to suggest patient-centered problem focused coping strategies for PCOS (Ee et al, 2020). Qualitative date gathered through interpretive phenomenological analysis through "Thematic Apperception Test" and

1 Corresponding Author, Ph.D Scholar, Department of Psychology, Preston University Kohat Pakistan (Islamabad Campus), Faculty of Islamabad Model College For Boys G-11/1 under the ambit of Federal Directorate of Education (FDE), Ministry of Federal Education and Professional Training (MOFEPT) Islamabad Pakistan. This article is a part of first author Irum Hayat's Ph.D thesis under the supervision of Dr Alay Ahmed and under the co-supervision of Dr Fayyaz Ahmed Anjum at Preston University Kohat (Islamabad Campus) Pakistan, irumhayat@yahoo.com

² Dean and Chairman, Department of Psychology, Preston University Kohat Main Campus Pakistan, alay.ahmed@gmail.com

³ Head of Department (Psychology), Preston University Kohat, Islamabad Campus, Pakistan, fayyaz ahmed 66@yahoo.com

"Focus Groups" is information-oriented and purpose-oriented as it is based on text reflected from the lived experiences of women with PCOS and where content is analyzed and explored depending on the aim of research to observe the phenomenon of interest (Barari & Shahabi, 2020). Qualitative methods are used to understand patient's experiences of life with illness, assess policies regarding managing PCOS, explore patient-clinician relationships and devising methods and instrumentation for processes related to PCOS affecting health related quality of life of women (Moran et al, 2021). That is why the purpose of the present study was to explore the constructs for health related quality of life scale for women with polycystic ovary syndrome based on their conscious and conscious experiences measured through qualitative research methods. Conscious experiences were explored through focus groups and unconscious experiences were explored through Thematic Apperception Test following interpretive phenomenological analysis of the subsequent subjective content and to develop a tool to measure the health related quality of life for women with PCOS.

2. Method of the Study

2.1. Research Design

A qualitative study was done to explore experiences in 21 women with diagnosed PCOS using thematic analysis and focus groups. Study was done in two stages. *In the first stage*, focus groups were conducted between years 2021-2023 in which some semi structured questions were asked to probe conscious experiences of women with PCOS. *In the second stage*, thematic analysis of the subjects was done for which 6 stimulus cards out of 30 total cards were selected: Card1, Card 4, Card 6BM, Card 8BM, Card 13MF and 18GF were selected from the set of Thematic Apperception Test. The reason behind this selection was that these cards were containing themes relevant to sexual, interpersonal conflicts and defense mechanisms. The same were assumed to be present in the sample of PCOS. Interpretive phenomenological analysis was done based on the transcriptions formed through Thematic Apperception Test and Focus Groups. Later on the data was analyzed through NVivo Software and frequencies were obtained in order to quantify the transcriptions in order to explore conscious and unconscious experiences of women that provided basis of designing constructs for the development of health related quality of life scale for women with PCOS.

These cards were selected from the TAT stories that were evoking interpersonal and intrapersonal conflicts to observe the stimulus consistency or stimulus pull which is the ability of stimulus to generate responses around situations and characters given in the picture or story.

Below is the description of six cards of TAT used in the present study (Bellak, 1986).

Card 1: A young boy is contemplating a violin which rests on the table in front of him.

This card includes themes like relationship towards parental figure, aggressive, domineering, helpful, understanding, protective, autonomy and compliance with authority, symbolic sexual responses, self-image, obsessive pre-occupations and inability.

<u>Card 4</u>: A woman is clutching the shoulders of a man whose face and body are averted as if he were trying to pull away from her.

This card includes themes like male/female relationships, infidelity, member of minority group, sexual problem, triangular jealousy, defensive element.

<u>Card 6BM</u>: A short elderly woman stands with her back to a tall young man. The latter is looking downward with a perplexed expression.

This card consisted of themes mother-son relationships, oedipal themes, conflicts related to wives and other women.

<u>Card 8BM</u>: An adolescent boy looks straight out the picture. The barrel of a rifle is visible at one side, and in the background is the dim scene of a surgical operation, like a reverie image.

This card consisted of themes aggression, ambition, dream, eliciting fear of being mutilated while passive, paternal figure seen, oedipal relationships, and severe latent hostility.

<u>Card 13MF</u>: A young man is standing with downcast head buried in his arm. Behind him is the figure of a woman lying in bed.

This card contained themes of sexual conflicts in both men and women, fears of being raped, attacked, and abused by man, projection as husband wife, economic deprivations, oral tendencies, and obsessive compulsiveness.

<u>Card 18GF</u>: A woman has her hands squeezed around the throat of another woman whom she appears to be pushing backwards across the banister of a stairway.

Themes included in this card were aggression, mother-daughter conflicts, denial

2.2. Participants

Written consent was taken from all 21 female participants. Purposive sampling was done to recruit women with PCOS from public and private sector hospitals, gynecological clinics and fertility centers of different sectors of Islamabad after seeking permission from their head of departments. The diagnosis of PCOS was set using Rotterdam Criteria (Zawadski & Dunaif, 1992) prior to inclusion in the study. Exclusion criteria were followed by excluding diagnosed women with menopause, hyperthyroidism and congenital abnormalities. The exclusion criteria were peri or postmenopausal status.

Three age groups of women with PCOS were recruited. A total of 21 subjects were recruited for the present study i.e. 16-25years, 26-35years, and 36-45years to see any difference. The said age group was selected based on the reason that the symptoms of polycystic ovary syndrome are at peak in these age ranges and there is no doubt of menopause in these age ranges. In the first age range (16-25 years) there is a possibility that the illness of PCOS may get treated in early phases. In second age range (26-35 years) the differences in experiences are prominently observed and the third age range (36-45 years) was selected in order to see how women reconcile with their illness.

2.3. Ethical Considerations

Informed consent was taken from participants for administering TAT and Focus Groups. They were allowed to withdraw anytime during the process. Care was taken not to impose any mental or physical harm. Information collected was put in front of ethical committee of the university before deriving results and conclusions. Each focus group began with participants agreeing to the confidential nature of the discussion. Pseudonyms were used in all written documents and recording the data.

3. Findings

As the aim of the study was to provide a ground work for exploring themes and needs for exploring constructs for health related quality of life scale for women with PCOS therefore to attain the objective, the study went through two stages. At first stage thematic analysis was done to identify unconscious experiences shared on 6 TAT cards. Following 10 themes, sub-themes and needs were found commonly significant in women with PCOS. These themes and sun-themes were quantified in frequencies (See Table 2).

The second stage was followed by focus groups which were conducted through semi-structured interview questions probing conscious experiences of women with PCOS which were again demonstrated in four major categories of concerns as appeared genuinely on the basis of content analysis of transcriptions (See Table 3).

The present study also highlighted certain forces and needs that were present in the sample of women with PCOS. Subjects projected the need for autonomy and independence, need for affiliation, need for achievement, need for dominance, need for approval/recognition, need for nurturance, need for compliance blame and avoidance and need for succorance (See Table 4).

Table 1: Characteristic features of participants with PCOS (N=21).

Gender	Female
Age Ranges	16-45 years
Body Mass Index	$18-43 \text{ kg/m}^2$
Reproductive Status	Pre-menopausal
Diagnosis	Meets Rotterdam criteria of diagnosis of PCOS

Table 2: Thematic analysis of women with diagnosed Polycystic Ovary Syndrome (N=21)

Themes	Sub-themes	Age Range (16-25Y)	Age Range (26-35Y)	Age Range (36-45Y)	Frequencies (%)
1.	Sadness,	5 (71%)	7 (100%)	7 (100%)	19 (90%)
Depressive states	Mood swings, Loneliness, Insomnia, Helplessness, Hopelessness, Suicidal ideations, Inability, Conflicts, Rejection, Inferiority, Emotional instability, Sexual dissatisfaction, Poor self esteem.				
2. Conflict with authority	Harsh and strict parenting, Latent hostility towards parents, Authoritative style of parents, Domineering nature of mother,	6 (86%)	7 (100%)	5 (71%)	18 (86%)

	Blame and avoidance towards authority for own failure, Parents' uncooperative attitude, Manifested mother-daughter conflicts, Identification with authority, Introjections, Lack of compliance, Siblings' rivalry.				
3. Conflict with spouse	Sexual dissatisfaction, Feelings of rejection by husband, Husband's authoritative attitude towards wife, Blaming attitude of husband, Infidelity, Jealousy feelings of wife, Projection of getting attracted to other women, Ambivalent attitude towards opposite sex, Repressed hostility towards partner, Insecurity feelings from partner.	4 (57%)	6 (86%)	5 (71%)	15 (71%)
4. Aggression	Passive aggressive patterns towards husband, Assault, Domestic violence, Fear of being mutilated/violent while passive, Husband being revengeful against wife, Badtemperedness, Latent hostility, Anxiety and impulsivity, Attacking others, Ridiculing others, Harming others.	5 (71%)	6 (86%)	3 (43%)	14 (67%)
5. Obsessive Pre- occupations	Symbolic sexual responses, Loss of sexual impulse, Being indecisive, Desire to regain approval.	4 (57%)	5 (71%)	1 (14%)	10 (48%)
6. Economic Deprivations	Inability to maintain house business, Fear of failure to run house, Inability to manage job affairs due to family affairs. Expensive medical treatments and equipments.	2 (29%)	6 (86%)	4 (57%)	12 (57%)
7.	Physical illnesses including	3 (43%)	6 (86%)	2 (29%)	11 (52%)

Health Anxiety	menstrual irregularities, abdominal pain, acne, pain during sex and diabetes 2), Symbolic content of somatoform disorders, Phobias, Schizophrenia, Post-traumatic stress disorders, Eating disorders, Narcissistic personality issues, Gender Identity issues, Gender role confusions, Dissociative content.				
8. Self-image	Poor self-esteem, Conflict between id and ego, Poor body image, Body shame, Feelings of worthlessness, Irrational thinking- patterns of women.	2 (29%)	5 (71%)	5 (71%)	12 (57%)
9. Altruistic behavior	Help seeking behavior from spouse, Help seeking behavior from parents, Help seeking from significant others, (Friends and colleagues at job).	2 (29%)	3 (43%)	5 (71%)	10 (48%)
10. Social Anxiety	Avoiding social situations (markets, public places, family events, recurrent visits to health care professionals), Fear of strangers, Fear of going in family functions, Fear of going in public places.	4 (57%)	6 (86%)	3 (43%)	13 (62%)

4. Discussions

Following constructs were evolved for health related quality of life scale (PCOS-HRQOL) through IPA based on conscious and unconscious experiences of women with PCOS using techniques of focus groups and thematic analysis. Findings of table 2 & 3 highlight significant constructs present in the sample which provide ground basis for the development of health related quality of life scale for women with PCOS.

There was a strong evidence of existence of physical and psychological health related anxiety in women with PCOS. Overall 52% women and 86% women with age ranges 26-35 years reported health anxiety due to PCOS. Common health related anxiety concerns included menstrual abnormalities and irregularities (including oligomenorrhea and amenorrhea), small rings of cysts formed in ovaries visible in abdominal and vaginal ultrasounds, abdominal pain and bloating, menstrual cramps, and pain during sexual intercourse, obesity causing weight gain, hirsutism and acne related issues, diabetes 2 and infertility. Present findings were aligned with previous findings which depicted menstrual disorder, acne and obesity in women with PCOS. Women with PCOS also have symptoms of somatoform disorder, dissociative disorders, phobias, narcissism, gender identity disorders and gender role confusions (Ebrahimi, 2020; Kanagarajan et al, 2023).

The most uttered states were the *depressive states* identified in 90% of the women with PCOS. Women with second age range 26-35 years and third age range 36-45 years identified 100% presence of depressive states. Focus groups and thematic analysis showed common sub-themes like emotional disturbance and instability, mood swings, hopelessness and

suicidal ideations were common. These findings were in line with previous studies showing women with experiences of emotional turmoil, bipolar disorders, poor self-perception and self-esteem, isolation, sleep disturbance, laziness and sadness losing all joys of the stage of adolescence in turn losing focus (Kanagarajan et al, 2023).

Table 3: Four categories of concerns expressed by women with Polycystic Ovary Syndrome in Focus Groups (N=21)

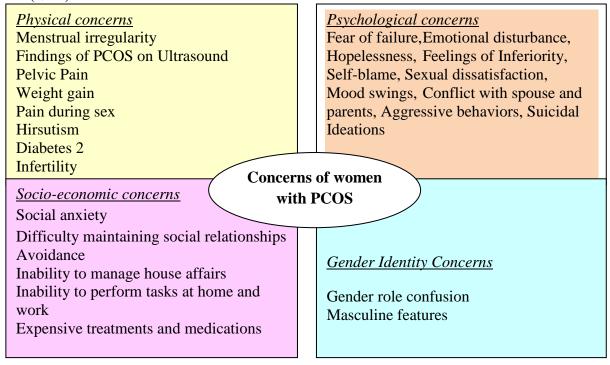


Table 4: Psychological Needs of women with Polycystic Ovary Syndrome (N=21)

Psychogenic Needs	Description	Age Range (16-25Y)	Age Range (26-35Y)	Age Range (36-45Y)	Total Frequencies (%)
1 Need for Achievement	Performance issues in academics Performance issues in occupations Ambitiousness in achieving goals Overcoming obstacles Challenging tasks	3 (43%)	4 (57%)	2 (29%)	9 (43%)
2. Need for Affiliation	Seeking company of others Making associations and bonding	2 (29%)	3 (43%)	2 (29%)	7 (33%)
3.	Making relationships Making friendships Being loyal to others Desire for	3 (43%)	5 (71%)	2 (29%)	10 (48%)

Need for Autonomy and Independence	independence Resisting others by being standing strong Gaining autonomy.				
4. Blame and Avoidance	Blaming oneself for every reason, Blaming others for their problems, Escaping or avoiding pain Avoiding blames Obeying rules.	3 (43%)	5 (71%)	4 (57%)	12 (57%)
5. Need for Nurturance and Altruism	Being helpful for family Being helpful for others Protecting people (work colleagues, family members, spouse, in-laws) Providing social support, Taking care of people (physically and financially), Protecting the helpless, Seeking sympathy of others for illness.	2 (29%)	4 (57%)	2 (29%)	8 (38%)
6. Need for Succorance	Affectionate care of family, Providing help and security, Nutrient care for family.	1 (14%)	3 (43%)	1 (14%)	5 (24%)
7. Need for Compliance	Compliance with authority (Father. Mother), Compliance with spouse, Compliance with siblings, Compliance with other family members and inlaws.	2 (29%)	5 (71%)	2 (29%)	9 (43%)
8. Need for Approval and Recognition	Gaining approval Unconsciously seeking social status	2 (29%)	3 (43%)	1 (14%)	6 (29%)

	of 'complete mother'.				
9. Dominance Needs	Domineering (spouse, father, mother, siblings, inlaws), Controlling others, Leading others.	1 (14%)	3 (43%)	5 (71%)	9 (43%)

Both thematic analysis and focus group interviews revealed that women with PCOS were reflecting *conflicting attitudes* with authority figures and spouse. 85% of women with PCOS were showing conflicts with authority (father and mother) and 71% of women with PCOS were depicting conflicts with spouse. Women having 26-35 years' ages were being affected mostly by interpersonal conflicts with authority figures and their spouses.100% women with second age range were identified having conflicts with authority and 86% women with the same age ranges showed conflicts with spouse. Present findings are consistent with the literature where the factor of sexual dissatisfaction was always vivid in these cases. Women with PCOS are negatively affected by their sexual functioning as compared to normal groups. Women with PCOS consider themselves less attractive in terms of their body images are remain unhappier throughout their sexual lives. They feel their partner to be less satisfied with them in sexual matters affecting their self-confidence and feminine identity negatively which in turn result in conflicting situations. These deviations spoil their interpersonal relationships (De D et al., 2020).

Present study indicated that 67% of women with PCOS exhibit *aggressive behaviors* in their lives. Women having 26 to 35 years of age were projecting more aggression as compared to other women having other age ranges. Women with PCOS show negative feelings such as depression, hostility and irritability with an increase in assaultive behaviors that leads to aggression. According to World Health Organization (WHO, 2023), 10-15% infertility issue is there in women with PCOS and it causes many medical, psychiatric, psychological and social problems. Women with PCOS show passive-aggressive behaviors, become isolated and limit their relationships with their friends and relatives and prefer to be alone than being in relationships. The wife's financial dependence on husband, spouse's psychological characteristics including suspicion, bad-temperedness, inability to manage anger, depression, economic instability, low levels of income, and well-being of the family are among the important factors accounting for projection of partner's aggression causing domestic violence against women (Bayrami R & Vafaee Najar, 2020).

The study revealed that 48% women with PCOS were showing *obsessive preoccupations* regarding their illnesses. 71% women with 26 to 35 years' ages were seen more obsessive. Obsessive preoccupations in women included symbolic sexual responses, loss of sexual impulse, being indecisive, repetitive desire to regain approval from partner and others. According to Brutocao et al (2018), obsessive compulsive symptomatology includes social phobias, depression, anxiety, specific phobias, panic disorders and obsessive compulsive symptoms are more common and are present in higher intensity in women with PCOS.

Present study revealed that 57% women with PCOS often find difficulties in maintaining their household affairs economically and financially. 86% women with age range 26-35 years showed theme of *economic deprivations*. These women get reluctant to manage their home affairs normally, face inability in maintaining their work related burdens and loads. Due to high family pressure they become unable to manage home business and job affairs and cannot manage expensive medical treatments. Previous literature shows that majority of the women report that their illness does not affect their employment although one participant described that the problems of hirsutism and masculine appearance make them upset while performing work roles. In this way they find difficulties in coping with stressful job situations and home affairs (Reistenberg, 2022).

According to the results women with PCOS avoid social situations, public places, markets, family functions, parties and family events and recurrent visits to health care providers. Over all 62% women were showing *social anxiety*. In age range 26-35 years, women were projecting anxiety related to social situations. Women with PCOS experience significant social anxiety, generalized anxiety and panic attacks due to physical manifestations of PCOS (Kamathenu, Velayudhan, Krishna & Nithya, 2021). Due to social stigma of having this kind of syndrome unable to become mother, they often feel frustrated about day to day stressors emotionally and physically (Lin H et al., 2021).

The present study revealed 57% women project poor *self-image*. The sub-themes included self-blame, poor self-esteem, poor body image, body shame, worthlessness, irrational thinking, and conflict between id and ego mechanisms. 71% of women with 26 to 35 years of age range experienced irrational patterns related to their body and self-images. In Pakistani culture poor body-image and shape make them more anxious and worsen their self-esteem. Negative body image leads

them towards poor self-esteem (Perla Health, 2020). Women with PCOS often have negative experiences of their body images which project them towards dissatisfied sense of appearance, loss of feminine appearance, loss of sexual attraction and self-conscious about their appearance (Vibha, Shilpa & Sobhana, 2022). Some of the differences reported in present study were related to ethical backgrounds, cultural variations, demographic and climatic changes.

Present study revealed that 48% women with PCOS show help seeking behavior from parents, spouse or significant others. 71% of women with third age range 36-45 years were more *altruistic*. Due to increase in their ages they get more altruistic and supportive as compared to women having other ranges. Emotional support is always needed by them and it is seen as important because some women feel comfortable with support given by family for dealing with their illnesses. Support from health care providers becomes essential at times because women with PCOS need someone to listen to their concerns and the support of those who can facilitate them understanding PCOS. Women getting peer support from other women with PCOS are widely recognized in some researches. Supportive education sessions seem positive to women with PCOS because they find opportunities to share their experiences (Ee et al 2020). In Pakistani culture employed women with PCOS are altruistic and offer their help and services to other women too who are in need of dealing with PCOS. Moreover, they help in contributing and participating in different welfare organizations and orphanages as they think that those people need their help so when they visit orphanages and welfare organizations and help needy and poor people as by doing this they find inner satisfaction and peace (Said et al, 2020).

Women with PCOS project certain defense mechanisms and psychological needs unconsciously that put substantial influence on their personality (Hayat, Ahmed & Anjum, 2023). Table 4 indicates a consistent concern about *need for achievement (nAch)* in women with PCOS including accomplishment of tasks related to their academics, job-related matters and getting ambitious for setting high goals in life. Overall 43% women were having needs of ambitions. It was high in women with age range 26-35 years as 57% women showed need for achievement in this age range. Women with PCOS seemed highly ambitious with respect to performance related issues in academics and occupations and getting ambitious for achieving high goals in life. Present study results are in line with the previous studies which reveal that people with a need for achievement tend to select challenging tasks (Van Assche, 2018).

Need for affiliation (nAff) was also common within the same range women. 33% women with PCOS were showing needs for affiliation. 43% women within the age range (26-35 years) showed affiliation needs where they wanted to be close and loyal to their spouses, families, peer groups, in-laws to gain their attention and affection, make companionships and social interactions in hospitals, clinics and medical centers upon having contact with them. Previous literature shows that people who rate high on affiliation needs tend to have larger social groups. 10 women of present study demonstrated the power needs including need for autonomy and dominance. They were having desires of getting independent and staying strong alone.

48% women were demonstrating the *needs of autonomy* and 71% women belonging to age range (26-35 years) were interested to find jobs to run their homes. They wanted to get independent and strong financially and were helping not only their families but also other people (within family and outside home). Regarding independency, they were resisting support of others and showing strong sense of moral, physical and financial support to family.

Need for power of dominance was present in third age range of women with PCOS as 71% women were showing the need having age range 36-45 years. They were dominating and controlling family members, in-laws, siblings and spouses through their own commands, orders and subtle persuasion. In contrast with the need of independence and autonomy, women with third age range seemed to be more dominating in their families. Their roles were more controlling and authoritative as compared to the women showing needs of independency and autonomy. Present study results were consisting with the previous studies in which it was suggested that if a woman being a foundation of the family is given rights of getting education and gets sensible, she can run her household very well not only when she is married but also when unmarried. Good husbands and educated family gives freedom and support to wife to maintain social circle and home business in a balanced way.

12% women with PCOS were *blaming and avoiding* their own selves and people for the things happening in their lives. 71% women with age range 26-35 years were blaming themselves for their illness and were also blaming their spouses and family members for their illnesses and problems. These women with PCOS also seemed to escape and avoid family pains and pressures and obeying the rules and norms of their families.

38% women projected *need for nurturance and altruism.* 57% women belonging to second age range i.e. 26-35 years wanted to help and nurture the family members physically, morally and financially, needy and helpless people and others, feeding them and keeping them away from any danger and caring health care providers for their own illnesses and social problems originating due to their illnesses. Present study results are consistent with previous study which indicates that women are more likely to have altruistic behaviors and attitudes which in turn facilitate stronger purposes in their lives (Said et al, 2020).

24% women demonstrated *need for succorance* and 43% women of 26-35 years' age range were utilizing this need to sustain their families. They were showing affectionate and nutrient care for families and other people by proving help and

security as they were satisfied by being loved, helped and forgiven by spouses and in-laws. Researchers suggest that emotional empathy is more common in women than men and that increases with increase of age in both male and females (Munawar et al, 2023).

Women 43% women with PCOS were showing *compliance with their authority figures* (spouse, parents, siblings and inlaws), family rules and norms. Higher compliance (43%) was seen in women with age range 26-35 years. In Pakistani culture the strings of power are held by males.

Need for approval or recognition was common in second age range i.e.26-35 years. These women often find themselves very incomplete but unconsciously they want to get approval and recognition of "complete mothers" in their lives. Those who live in extended families meet their needs and gain approval of being a mother. Their desire for getting approval of 'being mother' get fulfilled through the defense mechanism of sublimation.

5. Limitations

The age ranges of women with PCOS were limited between 16 to 45 years in order to keep in mind the complexity in diagnosing PCOS because only women with those ages were taken who were meeting the criteria of being reproductive and they were not in the phase of peri or postmenopausal states.

6. Conclusions

The constructs of health related quality of life scale (PCOS-HRQOL) were identified through Thematic Apperception Test and focus groups. Women with second age range 26-35 years were showing more percentages of themes identified. In Pakistani culture, most women with this age range get married and try to take fertility treatments to conceive. They suffer with more depression and anxieties along with other fears of not being able to produce child and are unable to confront the challenges of life. Physically PCOS is identified in puberty stages like within ages of 16 onwards but psychological states are more prominent in women between 26-35 years.

7. Recommendations

Combined qualitative and quantitative studies should be done for more generalizability and authenticity of results. Social support should be offered to these women for raising social awareness about this illness of PCOS. Study can be helpful in developing quantitative and qualitative instruments for the sample of women with PCOS.

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Conflict of Interest

The authors declare that they have no competing interests. The author of the article states that in connection with the publication of the presented article, she has completely avoided publishing ethics, including plagiarism, misconduct, forgery of data, or double sending and publishing. There are no commercial benefits to this, and the authors have not received any money for their work. The author also states that this work has not been previously published elsewhere and has not been submitted to another journal at the same time.

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