

Treating Polycystic Ovary Syndrome in Iraqi Women to Improve Quality of Life (Acne, Hirsutism, and Infertility)

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Abstract: Background PCOS is a hormonal disorder that affects many women of reproductive age. Larger ovaries in little cysts surrounding the periphery are that set it apart. PCOS may significantly impair a woman's quality of life because of both physical and psychological effects.

Aim

Our article's goal is to assess the overall health and quality of life of women having polycystic ovary syndrome.

Methods

Eighty Iraqi women between the ages of 25 and 45 who were gathered from different hospitals in Iraq participated in the cross-sectional study. Over the course of six months, the Iraqi patients' results were documented. Throughout the follow-up period, the intensity of symptoms was evaluated, and our study also evaluated the Iraqi patients' quality of life.

Results

Our study included results from all 80 women with PCOS. We found that women with ≥ 35 years had 56.25% observed in this study, BMI was 24.6 ± 6.1 kg/m², the most clinical symptoms had irregular periods with 65%, acne with 55%, and hirsutism with 75%, where 38.75% of women got bothersome symptom. In assessing quality of life after treatment, physical functioning was 87.62 ± 8.01 , bodily pain was 83.16 ± 5.46 , and physical role was 76.04 ± 9.13 .

Conclusion

Women having PCOS who went to different hospitals in Iraq had a much poorer HRQoL.

Keywords: Polycystic ovary syndrome, Acne, Hirsutism, insulin resistance, and Polycystic Ovary Syndrome Questionnaire (PCOSQ) quality of life.

Introduction

Polycystic Ovary Syndrome (PCOS) is the most frequent gynecoenocrine disorder in women of reproductive age and also presents multiple short- and long-term complications [1,2,3,4]. It is one of the most common causes of hyperandrogenism and anovulation (which translates into hirsutism, acne, menstrual disorders, and infertility); it increases the risk of developing metabolic syndrome, type 2

diabetes mellitus, and cardiovascular disease. The prevalence varies from 4 to 29%, according to different authors. [5,6,7]

Especially for clinicians who treat patients with PCOS, it is the fact that the signs and symptoms typically associated with the pathology can lead to a significant reduction in health-related quality of life (HRQoL), causing behavioral alterations as well as an emotional impact and on the sexual satisfaction of the woman. [8,9,10]

Generic instruments such as the Short Questionnaire (SF-36) and the questionnaire by the World Health Organization to assess the quality of life (WHOQoL) have been used in women with PCOS [11,12,13]. However, given the broad spectrum of the disease, they may not be sensitive enough to detect a particular PCOS interest [14,15]. For example, something as common in this pathology as weight control and fertility cannot be identified with WHOQoL because it does not have specific items for it. [16,17]

Given this background, a PCOS health-related quality of life questionnaire (PCOSQ) was developed in the United States, which has been validated in several English-speaking countries such as the United Kingdom and Canada and has even been translated into Persian, adapted to Brazilian women, and also to the Chinese population. [18,19,20,21,22]

Methods

Between July 2023 and February 2024, cross-sectional research was carried out in the Department for Obstetrics and Gynecology at different hospitals in Iraq on women with PCOS who were between the ages of 25 and 45. Women who had endocrine abnormalities (congenital adrenal hyperplasia, androgen-secreting tumors within the 6 months prior to the trial), were pregnant or breastfeeding, had undergone oncological therapy, had genitourinary prolapse, or were among aged of 25 and 45 were excluded.

We collected demographic data of female patients with PCOS, including age, body mass index, including height, and weight, as well as women with anovulatory PCOS, ovulatory PCOS, infertility problems, socioeconomic status, and employment of patients.

The Polycystic Ovary Syndrome Questionnaire (PCOSQ) is a tool used to assess the quality of life and symptoms experienced by individuals with Polycystic Ovary Syndrome (PCOS). It includes questions related to different aspects of PCOS, such as emotions, body hair, menstrual problems, infertility concerns, and weight, which categorize into bothersome, moderately bothersome, very bothersome, and little bothersome.

To protect the health of female patients, all women received a variety of medications, including hormonal contraceptives, metformin, nutrition, and physical exercise, as well as therapy for PCOS. The criteria of melancholy, depression, acceptance by others, and self-assessment for the quality of life, which was categorized as very good, good, poor, and very poor, were used in this study to perform a self-assessment in the quality of life in women with PCOS.

The SF-36 general questionnaire, which is used to evaluate individuals' physical and mental health, consists of twelve items. The questionnaire generates eight scales: mental health, role emotional, vitality, role physical, physical functionality, role physical, pain in the body, and general health. Higher HRQoL levels are indicated by higher scores. Every score on the basic scale was converted to a number between 0 and 100.

RESULTS TABLE 1. DEMOGRAPHIC CHARACTERISTICS OF PATIENTS.

| ITEMS | CHARACTERISTICS | N = 80 | % |
|----------------------------------|-----------------------------|-------------|--------|
| Age | < 35 | 35 | 43.75% |
| | ≥ 35 | 45 | 56.25% |
| | | | |
| Body mass index | Height {m} | 1.63 ± 0.03 | |
| | Weight {kg} | 64.2 ± 10.5 | |
| | BMI {kg/m ² } | 24.6 ± 6.1 | |
| Smoking status | Yes | 23 | 28.75% |
| | No | 57 | 71.25% |
| | | | |
| PCOS | Women with anovulatory PCOS | 60 | 75% |
| | Women with ovulatory PCOS | 20 | 25% |
| | | | |
| Infertility problems | Yes | 17 | 21.25% |
| | No | 63 | 78.75% |
| | | | |
| Marital status | Married | 53 | 66.25% |
| | Others | 27 | 33.75% |
| | | | |
| Socio-economic conditions | Very good | 28 | 35% |
| | Good | 40 | 50% |
| | Sufficient | 10 | 12.5% |
| | Poor | 2 | 2.5% |
| | | | |
| Employment status | Employed | 54 | 67.5% |
| | Unemployed | 26 | 32.5% |
| | | | |

TABLE 2. IDENTIFY THE MAIN INDICATORS AND TREATMENTS USED OF POLYCYSTIC OVARY SYNDROME.

| | Parameters | N = 80 | % |
|-----------------------------|------------------------------------|--------|--------|
| Clinical symptoms | Irregular periods | 52 | 65% |
| | Heavy bleeding during menstruation | 8 | 10% |
| | Difficulty getting pregnant | 32 | 40% |
| | Acne | 44 | 55% |
| | Hirsutism | 60 | 75% |
| | Weight gain | 40 | 50% |
| | Hair loss on the scalp | 12 | 15% |
| | | | |
| Severity of symptoms | Bothersome | 31 | 38.75% |
| | Moderately bothersome | 24 | 30% |
| | Very bothersome | 16 | 20% |
| | Little bothersome | 8 | 10% |
| | nondisruptive | 1 | 1.25% |
| | | | |
| Treatment undertaken | Yes | 80 | 100% |
| | No | 0 | 0% |
| | | | |

| | | | |
|------------------------|--|----|--------|
| Hormonal contraception | | 24 | 30% |
| Metformin | | 40 | 50% |
| Diet | | 44 | 55% |
| Physical activity | | 41 | 51.25% |

TABLE 3. ENROLLSELF-ASSESSMENT OF QUALITY – OF LIFE AT WOMEN WITH PCOS.

| Items | N = 80 | % |
|------------------------------------|--------|--------|
| Existence of sadness | | |
| Yes | 60 | 75% |
| No | 20 | 25% |
| Depression | | |
| Yes | 24 | 30% |
| No | 56 | 70% |
| Acceptance of the way they look | | |
| Yes | 28 | 35% |
| No | 52 | 65% |
| Self-esteem | | |
| Yes | 55 | 68.75% |
| No | 25 | 31.25% |
| Self-assessment of quality of life | | |
| Very good | 11 | 13.75% |
| Good | 60 | 75% |
| Poor | 6 | 7.5% |
| Very bad | 3 | 3.75% |

TABLE 4. ASSESSMENT OF GENERAL HEALTH OF WOMEN WITH PCOS IN DIFFERENT FIELDS OF LIFE.

| Items | Scores, all women with PCOS |
|----------------------|-----------------------------|
| Physical Functioning | 87.62 ± 8.01 |
| Role Physical | 76.04 ± 9.13 |
| Bodily Pain | 83.16 ± 5.46 |
| General Health | 71.18 ± 9.86 |
| Vitality | 58.32 ± 18.27 |
| Social Functioning | 74.56 ± 16.92 |
| Role Emotional | 69.80 ± 16.77 |
| Mental Health | 62.13 ± 15.86 |

TABLE 5. UNIVARIATE ANALYSIS OF FEMALE PATIENTS WITH POLYCYSTIC OVARY SYNDROME.

| Items | OR | CI % 95 |
|--------------------------|------|-------------|
| Insulin resistance | 2.01 | 1.12 ± 3.80 |
| Obesity | 2.96 | 1.75 – 5.12 |
| Smoking | 2.53 | 1.51 – 4.23 |
| Menstrual irregularities | 2.63 | 1.56 – 4.27 |
| Mental health issues | 2.35 | 1.20 – 4.55 |
| Infertility problems | 2.05 | 1.25 – 3.42 |
| Cardiovascular disease | 1.80 | 1.15 – 3.14 |
| Role Physical | 3.25 | 1.84 – 6.24 |
| Bodily Pain | 1.77 | 1.04 – 3.50 |

Discussion

The most common endocrine condition affecting women in their reproductive years is PCOS. Abnormalities of hormone, metabolic, lipids, and carbohydrate metabolism are among the many clinical signs linked to PCOS [23,24,25,26]. Together, these conditions greatly affect the quality of life for impacted women [27]. Every PCOS patient must get customized therapy due to the wide range of medical symptoms and the corresponding dependence on the occurrence of several other conditions. [28, 29, 30]

According to several research, 79% of the women polled reported feeling depressed about the illness [31,32]. Furthermore, 26% in the women reported having despair, and 75% said they had little control over their PCOS [33]. In addition, only 40.5% of the women that responded to the study accepted their physical appearance, and 67.5% acknowledged that having PCOS had caused them to have low self-esteem. Women with PCOS have a number of health issues that show themselves in different areas of their lives to differing degrees. Weight increase (75%), hirsutism (50%), acne (55%), and irregular periods (65%) are the main signs of PCOS. [34]

Other studies found that hirsutism (68.7%) and irregular menstrual cycles (71.8%) were the most prevalent issues among women with PCOS. An American study found that hirsutism, which affects around 70% of women and usually compromises their sense of femininity, is commonly reported by women with PCOS [35]. A German study found that the longer PCOS has been present, the lower the general standard of life is for women with the disorder. Among other things, this impacts their physical, social, and environmental well-being. [36]

Conclusion

Many women with PCOS find their symptoms to be unpleasant, even though most of them believe their standard of life was good or particularly good. Women who have a worse quality of life were more likely to be depressed, feel powerless to manage PCOS, be unhappy with their physical appearance, as well as discover that the condition impacts their way of life.

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