

Knowledge and Quality of Life of Women with Polycystic Ovary Syndrome

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Abstract

Background: Polycystic ovary syndrome is associated with hormonal disturbance and adverse cosmetic, reproductive, metabolic and psychological consequences, resulting in reduced quality of life. **Research aim:** Was to assess knowledge and quality of life of women with polycystic ovary syndrome **Research design:** A descriptive research design was utilized. **Research setting:** The current research was conducted at Obstetric and Gynecological outpatient clinic in Benha University Hospital. **Research sampling:** A purposive sample included 231 women. **Tools of data collection:** Two tools were used. **Tool (I):** A structured interviewing questionnaire to assess women's general data, menstrual, obstetrics and family history, present history of studied women about polycystic ovary syndrome and women's knowledge regarding polycystic ovary syndrome. **Tool (II):** Polycystic ovary syndrome quality of life questionnaire. **Results:** More than three quarters of studied women had poor level of knowledge and more than two thirds of studied women had low quality of life. There was a highly significant positive correlation between women's total knowledge and quality of life scores (p-value 0.001). **Conclusion:** Nearly most of the studied women had low level of knowledge regarding polycystic ovary syndrome. More than two thirds had low quality of life. **Recommendations:** Implementing integrated health education to support the women with polycystic ovary syndrome to improve the quality of life.

Keywords: Knowledge, Polycystic ovary syndrome, Quality of life.

Introduction

Polycystic ovary syndrome (PCOS) is the commonest gynecological endocrinopathy. Women with PCOS are at higher risk for some leading causes of morbidity and early mortality (Orbetzofa, 2020). PCOS is a chronic condition in which woman has an imbalance of female sex hormones. That recognized by clinical and/or biochemical signs of androgen excess, ovulatory dysfunction and polycystic ovaries (Eyupoglu et al., 2022).

The exact etiology and pathophysiology of PCOS are not comprehensively understood, but there are two fundamental disturbances in the amount of hormones

produced by the ovaries and insulin resistance. Due to genetic factors and being more common in women with family history of type II diabetes. PCOS can be caused by obesity that approximately seen in 70% of women with PCOS, environmental toxicants, stress, diet, insulin resistance, hyperandrogenism, inflammation and oxidative stress (Sadeghi et al., 2022).

Women with PCOS may be at risk for higher morbidity and mortality from the sequelae of the metabolic syndrome as insulin resistance, type II diabetes mellitus, obesity, cardiovascular disease, infertility, psychological disorder, obstructive sleep

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apnea, mood disorders and endometrial cancer (**Elbiary, 2019**).

Quality of life (QOL) defines as interaction of human needs and subjective perception of life satisfaction. Human needs include subsistence, reproduction, security affection, understanding, participation, spirituality identity and freedom (**Wulfovich et al., 2022**). The symptoms that are typically associated with PCOS have led to a significant reduction in quality of life. PCOS is associated with lower level of satisfaction with body image, which can negatively affect sexual and social wellbeing problems, psychological health problems and physical health problems (**Wulfovich et al., 2022**).

Polycystic ovary syndrome is characterized by irregular or absence of menstrual periods, also heavy periods may occur. Infertility is generally can result directly from chronic anovulation. The women may have excess body and facial hair, acne, androgenic alopecia (increased hair thinning or diffuse hair loss) and weight gain (**Baldwin, 2020**).

The first line of treatment for PCOS is successful weight reduction through lifestyle modifications to improve menstrual regulation and reproductive outcomes in women with PCOS. The optimal diet for a women with PCOS must not only encompass the short-term goals of weight management and fertility but also must take into account the long-term risk factors associated with this population, such as type II diabetes, dyslipidemia and heart disease (**Asso et al., 2022**).

The knowledge about polycystic ovary syndrome plays an important role in the management of the disease and in the prevention of complications. Lack of knowledge are considered to be the major factor leading to PCOS and associated with high prevalence of polycystic ovary

syndrome. There is a need to increase women's knowledge to avoid the major cause of fertility problems (**Aripin et al., 2022**).

Therefore, education enable women to self-manage of life long conditions and ability to make decision. The knowledge about PCOS signs and symptoms help in reducing complications and early detection. So the nurse has a critical role in PCOS screening and teaching (**Emokpae and Brown, 2021**).

Nurses are in a unique position to create awareness regarding PCOS. Informed choices and lifestyle management like weight loss and stress management are key factors in management of PCOS. Nurses should be aware of the physical and psychosocial effects of PCOS and minimize the negative impact on quality of life by providing individual and holistic care to women with PCOS (**Denga, 2021**).

In addition, nurses can provide support for women dealing with negative self- image secondary to the physical manifestation of PCOS. Through education help the women understand the syndrome and associated risk factors to prevent long-term health problems. Nurses encourage the women to have positive lifestyle changes, make referrals to local support groups to help women build the coping abilities (**Ismayilova and Yaya, 2022**).

Significance of the study:

The prevalence of PCOS is increasing rapidly worldwide and affecting approximately 2.2% to 26% of women. The high prevalence was attributed to PCOS association with obesity, sedentary lifestyle, and genetic predisposing factors (**Rassie et al., 2023**). The prevalence of PCOS in China is about 5.6% of women in reproductive age (**Chen et al., 2022**) and the prevalence of PCOS in the United States is approximately 6 million women (**Yadav et al., 2023**). In

Egypt, the prevalence of PCOS is approximately estimates ranging from 16 % to 37.5% (Al Anwar et al., 2022).

Polycystic ovary syndrome have a negative effect on quality of life that affect physiological domain as obesity and facial hair, psychological domain as dilemma, anxiety and can cause psychological morbidity, social domain including deterioration in the women's self-esteem and self-image (Eyupoglu et al., 2022).

In addition, polycystic ovary syndrome is a lifelong condition and long-term morbidity could be worsened by obesity and smoking. Therefore, women's knowledge toward polycystic ovary syndrome can affect the quality of women's life. So, this research was conducted to assess knowledge and quality of life of women with polycystic ovary syndrome.

Aim of the study

The study aimed to assess knowledge and quality of life of women with polycystic ovary syndrome.

Research questions:

- What is the level of women's knowledge regarding polycystic ovary syndrome about polycystic ovary syndrome?
- What is the level of quality of life of women with polycystic ovary syndrome?
- Is there relation between the studied women's knowledge regarding polycystic ovary syndrome and women's quality of life?

Subjects and Method

Research design

A descriptive study design was utilized to fulfill the aim of the current study.

Research setting

The research was conducted at obstetrics and gynecological outpatient clinic

in Benha University hospital. This particular setting was selected because it is the main official hospital at Benha city. The outpatient clinic is specialized in providing maternity care for all women in rural and urban areas and includes one room divided into diagnostic and examination areas. This clinic provides services of obstetrics and gynecological care, family-planning counseling and any outpatient procedures.

Research sampling

Sample type: A purposive sample.

Sample size: 231 women.

Sample technique: The total number of women who were medically diagnosed with polycystic ovary syndrome and attended to obstetrics and gynecological outpatient clinic at Benha university hospital in 2021 was 550 women **Benha University Hospital Census, (2021)**. After application of the following formula **Yamane, (1967)**, the total sample size was 231 women.

$$n = \frac{N}{1 + N(e)^2}$$

Where:

"n"= required sample size.

"N"= total women according to Benha University Hospital Statistical Centre (2021).

"e"= level of error.

Sample was selected according to the following inclusion criteria:

-Women medically diagnosed with polycystic ovary syndrome.

-At reproductive age (18-45) years old.

-Free from any other medical and psychological problems that may affect quality of life.

Tools of data collection:

Two tools were used for collecting data:

Tool (I): A structured interviewing questionnaire

This tool was designed by the researcher after reviewing the related to

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national and international literature and adapted from (Goli et al., 2021; Hassani et al., 2018; AlBattawi and Ibrahim, 2018). It was written in a simple Arabic language and consisted of four parts:

Part (1): General characteristics of the studied women included (age, residence, marital status, level of education, occupation). As well as anthropometric measurement involved weight, height and body mass index $\text{weight} / \text{height} = (\text{kg}/\text{m}^2)$ according to WHO, (2021). Which calculated classified into underweight $< 18.5 \text{ kg}/\text{m}^2$ of body mass index, normal weight $18.5 \leq 24.9 \text{ kg}/\text{m}^2$ of body mass index, pre obesity $25 \leq 29.9 \text{ kg}/\text{m}^2$ of body mass index, obesity class I $30 \leq 34.9 \text{ kg}/\text{m}^2$ of body mass index, obesity class II $35 \leq 40 \text{ kg}/\text{m}^2$ of body mass index and obesity class III $40 \text{ kg}/\text{m}^2$ or more of body mass index.

Part (2): Women's knowledge regarding polycystic ovary syndrome. It was consisted of 14 items in the form of multiple-choice questions and divided into two sections:

Section (a): General knowledge about polycystic ovary syndrome, included 7 items (meaning of polycystic ovary syndrome, causes of PCOS, symptoms of PCOS, complications of PCOS, diagnosis of PCOS, treatment of PCOS and methods of prevention of PCOS).

Section (b): Women's knowledge about measure of overcoming symptoms of polycystic ovary syndrome, it included 7 items regarding overcoming the problem of (irregular menstruation, obesity, hirsutism, acne, hair loss, depression, and low self-esteem).

Scoring system:

Each item of knowledge was given a score of (3) for complete correct answer, a score (2) for incomplete correct answer and a score (1) for don't know. Women's total

knowledge score was calculated by the addition of the total score of each items and was ranged from 14 to 42 which classified into two categories as following: Good knowledge $75 \leq 100$ % of total knowledge score ($31 \leq 42$ marks). Average knowledge $50 < 75$ % of total knowledge score ($21 < 31$ marks). And Poor knowledge < 50 % of total knowledge score ($14 < 21$ marks).

Tools II: Polycystic ovary syndrome quality of life questionnaire (PCOSQ)

The polycystic ovary syndrome quality of life questionnaire was adapted from Guyatt et al., (2004) to assess the quality of life of the women with PCOS and consisted 26 items to measure five PCOS- related to domains that included as the following:-

Domain (1): Emotional domain, it included 7 items related to (feeling depressed as a result of having PCOS, tired easily, mood changes as a result of having PCOS, low self-esteem as a result of having PCOS, frightened of getting cancer, worried about having PCOS, self-conscious as a result of having PCOS).

Domain (2): Hirsutism domain, it involved 5 items related to (growth of visible hair on chin, growth of visible hair on upper lip, growth of visible hair on face, growth of visible body hair, feeling embarrassment about excess body hair).

Domain (3): Body weight domain, it consisted of 5 items about (feeling worried about over weight, having trouble dealing with overweight, feeling frustration in trying to lose weight, feeling not sexy because of being overweight, having difficulties in maintaining at ideal weight).

Domain (4): Infertility domain, it involved 4 items related to (feeling concerned with infertility problems, feeling afraid of not being able to have children due to PCOS, feeling a lack of control over the situation

with PCOS, feeling sad because of infertility problems).

Domain (5): Irregular menstruation domain, it included 5 items about (feeling headache during menses, irregular menstrual periods, feeling of abdominal pain, feeling of menstrual cramps, late menstrual period).

Scoring system:

Each item of the questionnaire was assigned based on three-point likert scale, a score (3) denoted no problems or difficulties, (2) for a moderate problem, (1) for a severe problem. The mean of each domain provided a domain score for each woman. Then total of 5 domains indicated the total quality of life score was ranged from 26 to 78, higher score indicated better quality of life and lower score indicated low quality of life and classified according to the following: High quality of life $75 \leq 100$ % (59-78 marks). Moderate quality of life $60 < 75$ % (47-58 marks). And low quality of life ≤ 60 % (1- 46 marks).

Tools validity and reliability

Tools of data collection were reviewed by four panel expertise including three assistant professors of obstetrics and gynecological nursing at faculty of nursing, Benha University and one professor of obstetrics and gynecological medicine at faculty of medicine, Benha University to test **content** validity. Modifications were done in the light of jury valuable comments such as modify some words to give the most appropriate meaning for the phrase which were not clear. Reliability was done by Cronbach's alpha coefficient test which revealed that the internal consistency of knowledge questionnaire was (0.879) and the overall score of polycystic ovary syndrome quality of life questionnaire was (0.855); the internal consistency of domains were emotional domain was (0.778), hirsutism domain was (0.937), body weight domain was

(0.915), infertility domain was (0.836) and irregular menstruation domain was (0.792).

Ethical considerations:

Ethical aspects were considered before starting the study as the following: The study approval was obtained from Scientific Research Ethical Committee at Faculty of Nursing, Benha University before starting the study. Each woman was informed about the study aim before starting the data collection to gain confidence and trust. No harm or any physical, social or psychological risk for participants. Data included in the tools did not touch tradition, culture, religious and ethical issues. Confidentiality was ensured throughout the study process, and the women were assured that all data was used only for research purpose. Each woman was informed that participation in the study was voluntary and had freedom to withdraw from the study at any time.

Pilot study:

The pilot study was conducted on 10 % of the total sample (23 women) to test the clarity and applicability of the tools used for data collection, estimate the time needed to fill in the questionnaire, also to find out the possible obstacles and problem that face the researcher and interfere with data collection. According to the result of the pilot study, no modifications were done. So, women included in the pilot study were involved in the final sample size.

Field work:

Preparatory phase:

During this phase the researcher reviewed the national and international advanced literature, then design tools of data collection.

Implementing phase:

The study was carried out from the beginning of April, 2022 till the end of September, 2022 covering 6 months. The researcher visited the Obstetrics and

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Gynecological outpatient clinic at Benha university hospital three days per week (Sunday, Tuesday and Thursday) from 9AM to 12 PM to collect data from women until sample size was completed. The researcher interviewed the studied woman individually in appropriate separate place to maintain privacy and the confidentiality of the studied women.

-The researcher introduced herself to the studied sample and greeted with each woman. The purpose of the study was explained to the participants by the researcher and provided information about the study for gain confidence and trust of participants before starting collecting any data. Oral consent was obtained from each woman to participate in this study before starting in collecting the data.

-The researcher used tool (I) a structured interviewing questionnaire to assess women's demographic characteristics, menstrual, obstetrics and family history of studied women. As well as, present history of studied women about polycystic ovary syndrome. Also, women's knowledge regarding PCOS, this tool took 15-20 minutes.

-Researcher used tool (II) polycystic ovary syndrome quality of life questionnaire that included emotional domain, hair growth, body weight, infertility, and menstrual difficulties to assess quality of life of women with PCOS, this tool took 20-25 minutes.

-The researcher interviewed two –three women per day according to sequence of attendance in hospital registration book, the duration of each interview 30-40 minutes.

Statistical analysis

The data were coded, computed and statistically analyzed by using Statistical Package of Social Sciences (SPSS) (version 25). Data were presented as frequency and percentages (qualitative variables) and mean and standard deviation (quantitative

variables). Tests of significance were Chi-square (χ^2) and Fisher Exact Test (FET). Correlation coefficient (r) was calculated between knowledge, and quality of life scores. A statistically significant difference was considered at p -value ($P \leq 0.05$), and a highly statistically significant difference was considered at p -value ($p \leq 0.001$).

Results:

Table (1): Shows that 36.4% of the studied women were in age group $18 < 25$ years with the mean age of 28.91 ± 7.35 years. Regarding residence, about 89.6% of the studied women were living in rural areas, with about 74.0% of them were married. Regarding educational level, 43.3% of the studied women had secondary education and about 85.7% of them were housewives.

Figure (1): Illustrates that 75.3 % of the studied women have poor level of total knowledge about polycystic ovary syndrome, 22.5% of them have average knowledge and 2.2% have good knowledge.

Table (2): Clarifies that the mean score of emotional domains of quality of life for women with polycystic ovary syndrome were 11.71 ± 3.47 , the mean score of hirsutism domains were 8.26 ± 3.65 , the mean score of body weight domains were 7.66 ± 3.26 , the mean score of infertility domains were 7.24 ± 2.91 , and the mean score of irregular menstruation domains of quality of life for women with polycystic ovary syndrome were 7.15 ± 1.47 . The total mean scores of quality of life domains regarding polycystic ovary syndrome were 41.92 ± 9.23 . Moreover, the lowest quality of life domains were irregular menstruation (47.7%), body weight (51.2%) then hirsutism (55.1%) and emotional domain (55.8%). While the highest domain was infertility (60.3%).

Figure (2): Shows that the total level of quality of life of women with polycystic ovary syndrome was 70.6% of the studied women have low level quality of life, 3.9% of them have high quality of life and 25.5% had moderate quality of life.

Table (3): shows that there was positive statistically correlation between studied women knowledge and quality of life ($p < 0.001$).

Table (1): Distribution of the studied women according to general characteristics (n=231)

General characteristics	n=231	
	No.	%
Age (years)		
18 < 25	84	36.4
25 < 32	64	27.7
32 < 39	53	22.9
39 ≤ 45	30	13.0
Mean ± SD	28.91 ± 7.35	
Residence		
Rural	207	89.6
Urban	24	10.4
Marital status		
Single	37	16.0
Married	171	74.0
Divorced	8	3.5
Widow	15	6.5
Educational level		
Read and write	6	2.6
Primary education	39	16.9
Secondary education	100	43.3
University education	86	37.2
Occupation		
Housewife	198	85.7
Working	33	14.3

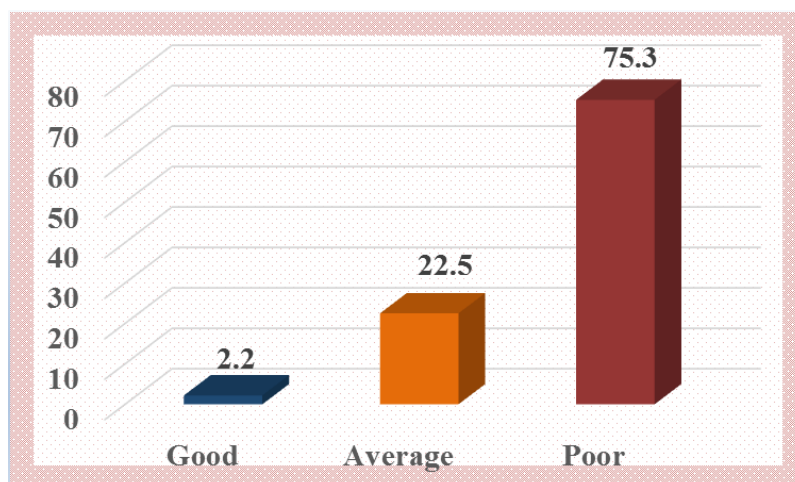


Figure (1): Distribution of the studied women according to level of total knowledge about polycystic ovary syndrome (n = 231).

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Table (2): Mean score of quality of life domains of women with polycystic ovary syndrome (n=231)

Domain	Possible score	Minimum	Maximum	Mean \pm SD	Mean %
Emotional	21	7.00	19.00	11.71 \pm 3.47	55.8%
Hirsutism	15	5.00	13.00	8.26 \pm 3.65	55.1%
Body weight	15	5.00	14.00	7.66 \pm 3.26	51.2%
Infertility	12	4.00	10.00	7.24 \pm 2.91	60.3%
Irregular menstruation	15	5.00	11.00	7.15 \pm 1.47	47.7%
Total	78	26.00	61.00	41.92 \pm 9.23	

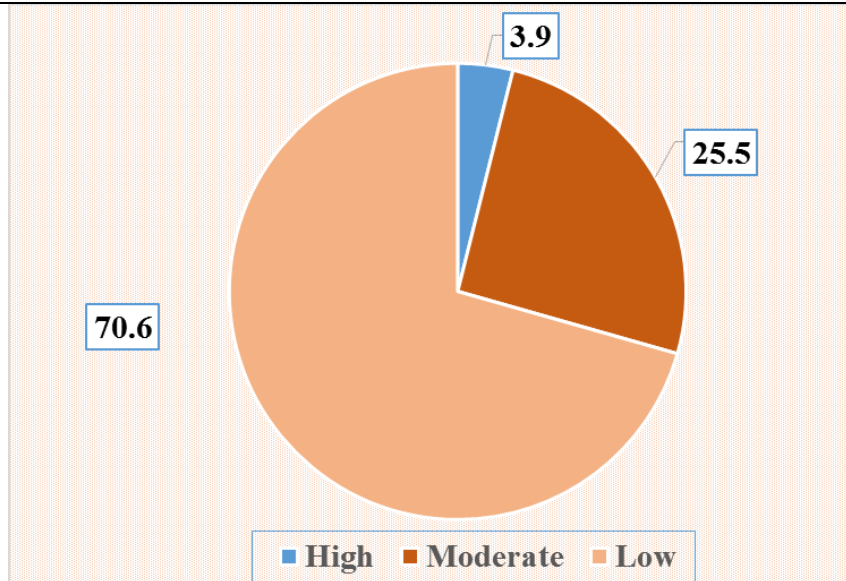


Figure (2): Distribution of the studied women according to total level of quality of life of women with polycystic ovary syndrome (n=231)

Table (3): Correlation between studied women's total knowledge and quality of life scores regarding polycystic ovary syndrome (n=231)

Variable	Total knowledge score	
	R	P value
Total quality of life score	0.731	0.000**

Discussion:

Polycystic ovary syndrome has metabolic implications including insulin resistance, dyslipidemia and abnormal glucose metabolism. Moreover, women with PCOS show a propensity for excess weight

gain which exacerbates such symptoms. Furthermore, affected women are more likely to experience moderate-to-severe depression and anxiety symptoms, low self-esteem and negative body image (Hachey et al., 2020).

Regarding characteristics of the studied women, the current study revealed that about more than one third of the studied women were in age group 18 < 25 years old with a mean age of 28.91 ± 7.35 years. This finding is nearly matched with **Ullah, (2022)** who conducted study about "Psychophysiological Impact of Polycystic Ovarian Syndrome and its Management in Pakistani Women" and indicated that more than half of the women were diagnosed at a very young age of about 15-25 years old.

Also, **Copp et al., (2022)** who conducted study about "The challenges with managing polycystic ovary syndrome: a qualitative study of women's and clinicians' experiences. Patient education and counseling" indicated that about more than half of women were diagnosed at a very young age of about 18-25 years old.

Meanwhile, These results are in disagreement with **Dey, (2021)** who studied "Quality of life of women with polycystic ovary syndrome" and noted that less than one third of the women were in age group 18-25 years old. Also, **Dybczak et al., (2022)** who studied "Anxiety and Depression in Women with Polycystic Ovary Syndrome" found that most women with PCOS from both groups were aged 26–30 years.

These results of current study illustrated that more than three quarters of the studied women were living in rural areas and less than three quarters of them were married. These results are congruent with **Alkhamis, (2021)** who studied "Polycystic Ovary Syndrome: A Local Perceptual Study" and found that more than half of participants were married and were from rural areas. These results may be due to that Benha university hospital is the main hospital in Qalyubia governorate that serves a large number of patients especially from rural areas where the

culture of the early marriage of girls is very common.

On the other hand, these results are in disagreement with **Alruwail et al., (2020)** who studied "General public awareness toward polycystic ovarian syndrome among females in Saudi Arabia" and reported that less than one third of the study participants were married and were from urban areas.

The findings of the present study showed that less than half of the studied women had secondary education and more than three quarters of them were housewives. These results are congruent with **Mahowd et al., (2020)** who studied "Sexual health of women with polycystic ovarian syndrome" who found that less than half of the studied women had secondary education and more than half of the studied women were housewives. Also, **Khan et al., (2022)** who studied "Efficacy of Metformin in Obese Versus non-Obese Women with Polycystic Ovary Syndrome (PCOS)" found that more than half of the participants had secondary education and were housewives.

On the other hand, **Jakhar et al., (2022)** who studied "Awareness of Polycystic Ovarian Syndrome among College Going Females in Gurgaon: A Cross-Sectional Study. Annals of the National Academy of Medical Sciences" reported that more than two thirds of the study participants were university graduates.

Concerning studied women's total general knowledge about polycystic ovary syndrome, these results of the current study revealed that the minority of the studied women had good knowledge, less than one quarter of the studied women had average knowledge and more than three quarters had poor knowledge about polycystic ovary syndrome. These findings may be related to lack of awareness of women about the disease

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and this may be related to low educational level of the studied women.

These results agree with **Goh et al., (2022)** who studied "Assessment of prevalence, knowledge of polycystic ovary syndrome and health-related practices among women in Klang Valley: A cross-sectional survey" and reported that more than three quarters of the studied women had poor knowledge about polycystic ovary syndrome. Additionally, **Simon et al., (2021)** who studied "Knowledge and Practice towards Weight Reduction among Women with Polycystic Ovarian Syndrome" found that more than three quarters of the women had poor knowledge about polycystic ovary syndrome.

On the other hand, These results are in contradiction with **Priya and Shwetha (2019)** who studied "Knowledge regarding Polycystic Ovarian Syndrome among Young Female Adult" and found that about more than two thirds of studied sample had moderate knowledge regarding polycystic ovary syndrome, less than one third had inadequate knowledge. That may be attributed to variations in sample type and residence.

Concerning the mean scores of quality of life domains of PCOS, these results of current study demonstrated that the lowest quality of life domains were irregular menstruation, body weight, then hirsutism and emotional domain. While the highest domain was infertility. These results agree with **Bahadori et al., (2022)** who studied "Sexuality and psychological well-being in different polycystic ovary syndrome phenotypes compared with healthy controls" and reported that higher mean domain was infertility had more problems in women with PCOS. On other hand, these results disagree with **Rao et al., (2022)** who studied "A Global Survey of Ethnic Indian Women Living with Polycystic Ovary Syndrome"

found that highest-scoring health related quality of life in women with PCOS were acne then infertility domains.

Concerning studied women's quality of life, the results of the current study demonstrated that more than two thirds of the studied women had low quality of life and the minority of the studied women had high QOL. These results answered the second research question which stated "What is the level of quality of life of women with polycystic ovary syndrome?". These results may be due to the symptoms of PCOS can lead to a significant reduction in quality of life as PCOS is associated with low level of satisfaction with body image and low self-esteem that causing low QOL.

These results are consistent with **Agrawal et al., (2022)** who studied "Impact of Hirsutism on the Quality of Life: A Cross-Sectional Pilot Study from Dermatology Life Quality Index Western India impacts on HRQOL" and reported that polycystic ovary syndrome had negative impacts on health related quality of life.

Also, **Joshi et al., (2022)** who studied "Assessment of Health-Related Quality of Life Using PCOSQ tool, its determinants and coping mechanisms used by women with Polycystic Ovarian Syndrome attending multidisciplinary Clinic in Mumbai, India" and found that health related quality of life is reduced in women with PCOS when compared with general population.

Regarding correlation between studied women's total knowledge regarding polycystic ovary syndrome and quality of life. The current study illustrated that there was a highly significant positive correlation between women's knowledge about PCOS and total quality of life scores. These results answered the third research question which stated "Is there relation between the studied

women's knowledge regarding polycystic ovary syndrome and women's quality of life?". These results agrees with **Abobaker et al., (2021)** who studied "Effect of Educational Program on Quality of Life among Women with Polycystic Ovarian Syndrome" found positive relationship between the studied sample's overall scores of quality of life and knowledge about quality of life.

Also, **El-Adham and Shehata, (2022)** found positive statistically significant correlation between knowledge regarding polycystic ovary syndrome and quality of life. These findings may be due to lack of knowledge of women about PCOS, its symptoms and measures of overcoming symptoms leading to lower quality of life.

Conclusion

Minority of the studied women had good knowledge, while more than three quarters had poor level of knowledge about polycystic ovary syndrome. More than two thirds of the studied women had low quality of life, the lowest quality of life domains were irregular menstruation and body weight. While the highest was infertility. There was a highly significant positive correlation between total knowledge and total quality of life scores. Therefore, the present study results answered the research questions and achieved the aim of the study.

Recommendations:

- Implementing health educational programs to improve women's awareness regarding polycystic ovarian syndrome.
- Designing quality of life improvement programs to fulfill healthy lifestyle for women with polycystic ovary syndrome.
- Implementing integrated health education to support the women with PCOS to improve the quality of life.

Further study need to be performed:

- Replication of the present study on large probability sample size and in different setting for generalization of results.
- Creation of a screening program for early detection of PCOS at a young age.
- Implementing an educational program about risk factors and preventive measures of polycystic ovarian syndrome among adolescent females.

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معلومات ونوعية الحياة للسيدات المصابات بمتلازمة تكيسات المبيض

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تُعرّف متلازمة تكيسات المبيض بأنها مشكلة هرمونية حيث تواجه السيدات المصابات بمتلازمة تكيسات المبيض مضاعفات خطيرة مثل مرض السكري، أمراض القلب والأوعية الدموية، سرطان بطانة الرحم على المدى الطويل وأمراض نفسية ومشاكل إنجابية، مما يؤدي إلى انخفاض نوعية الحياة. لذلك هدفت هذه الدراسة إلى تقييم معلومات ونوعية الحياة للسيدات المصابات بمتلازمة تكيسات المبيض. تم استخدام الدراسة الوصفية لتحقيق هدف الدراسة كما أجريت الدراسة في العيادات الخارجية لأمراض النساء والتوليد في مستشفى جامعة بنها. وقد تم اخذ عينة غرضية تم استخدام العينة الغرضية 231 سيدة حيث كشفت النتائج انه أقلية من السيدات كانت لديهن معلومات جيدة ، أقل من الربع كان لديهن معرفة متوسطة عن متلازمة تكيسات المبيض و أكثر من ثلاثة أرباعهن كان لديهن معلومات ضعيفة عن متلازمة تكيسات المبيض. الأقلية من السيدات الخاضعات للدراسة كانت لديهن مستوى مرتفع من نوعية الحياة ، حوالي ربعهن كان لديهن مستوى متوسط من نوعية الحياة الكلي وبينما أكثر من ثلاثة أرباعهن السيدات الخاضعات للدراسة كان لديهن مستوى منخفض من نوعية الحياة. كما كانت هناك علاقة ارتباط موجبة ذات دلالة إحصائية عالية بين معلومات السيدات الكلي و نوعية الحياة. بناءً على نتائج الدراسة الحالية، يمكن الإستنتاج أن أكثر من ثلاثة أرباع السيدات المصابات بمتلازمة تكيسات المبيض كان لديهن مستوى معلومات ضعيفة حول متلازمة تكيسات المبيض. في حيز أن أكثر من ثلثي السيدات الخاضعات للدراسة كان لديهن مستوى منخفض من نوعية الحياة الكلية. كما كانت هناك علاقة ارتباط موجبة عالية بين المعلومات الكلية ونوعية الحياة لدي السيدات المصابات بمتلازمة تكيسات المبيض ،و لذلك تم تحقيق هدف الدراسة ودعم أسئلة البحث. وأوصت الدراسة تنفيذ برنامج تعليمي وإرشادي صحي المتكامل لدعم السيدات اللاتي تعانين من متلازمة تكيسات المبيض لتحسين نوعية الحياة لديهن.