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Original Research Article

Polycystic ovary syndrome awareness among patients in a tertiary level teaching hospital: a questionnaire based observational study

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ABSTRACT

Background: Polycystic Ovary Syndrome (PCOS) is a prevalent endocrine disorder affecting women of reproductive age. Despite its widespread occurrence, awareness remains inconsistent. This study aims to evaluate the awareness, knowledge, and perceptions of PCOS among participants, focusing on risk factors, symptoms, diagnostic modalities, treatment approaches, and sources of information.

Methods: An observational study was conducted among women from diverse educational and occupational backgrounds. Data was collected through structured questionnaires assessing demographic details, awareness levels, knowledge of risk factors and symptoms, diagnostic approaches, treatment-seeking behaviour, and sources of information. Responses were analysed to identify trends, misconceptions, and gaps in knowledge.

Results: The study showed that 40.6% of participants were aware of PCOS, a significant portion (39.6%) reported only partial awareness. The most commonly identified symptom was irregular periods (76.8%). A majority of participants (46.4%) were unsure about seeking medical treatment, reflecting hesitancy and misinformation. Management strategies such as lifestyle changes (32.9%) and medications (29.9%) were known to participants, but awareness of surgical options was low (4.3%). Notably, 30.4% of respondents relied on family and friends as their primary source of information, raising concerns about the accuracy of their knowledge.

Conclusions: The findings highlight significant gaps in PCOS awareness, diagnosis, and management. Healthcare professionals play a crucial role in disseminating accurate information. Targeted educational interventions, enhanced healthcare communication, and community-based awareness programs are necessary to bridge knowledge gaps and promote early diagnosis and effective management of PCOS.

Keywords: Endocrine disorders, Health education, Polycystic ovary syndrome, Reproductive health

INTRODUCTION

Polycystic Ovary Syndrome (PCOS) is a common endocrine disorder affecting women of reproductive age, characterized by a range of symptoms including irregular menstrual cycles, hyperandrogenism, and polycystic ovaries.¹ It is estimated to affect 6-12% of women globally, with significant variation across different populations.² Despite its prevalence, PCOS remains

underdiagnosed, and awareness of the condition among affected women can be limited, impacting timely diagnosis and management.³

Awareness of PCOS is crucial for early intervention, which can help mitigate long-term health consequences such as infertility, type 2 diabetes, cardiovascular disease, and metabolic disorders. The 2018 International PCOS Guideline was independently evaluated as high quality and

integrated multidisciplinary and consumer perspectives from 6 continents; it is now used in 196 countries and is widely cited.^{4,5} It was based on best available, but generally very low- to low-quality, evidence. However, existing research indicates that many women are not fully informed about PCOS, its symptoms, or its potential health implications. This knowledge gap may contribute to delays in seeking medical advice and receiving proper care.⁶

This observational study aims to assess the level of awareness and understanding of PCOS among patients, exploring how factors such as age, education, and healthcare access influence knowledge about the condition. By identifying gaps in awareness, the study seeks to inform future public health initiatives and educational programs to improve early diagnosis and management of PCOS.

This study aimed to assess the awareness of PCOS among female patients attending a tertiary care teaching hospital. To identify factors (such as age, educational level, and socio-economic status) that influence awareness of PCOS. To evaluate the sources of information regarding PCOS among the study population. This study aims to assess the level of awareness regarding PCOS among women aged 15-49 attending a tertiary care hospital. The study also aimed to explore factors influencing awareness and usage, including socio-demographic characteristics, education level, and access to healthcare information.

METHODS

Study design and area

The simple questionnaire-based study will be conducted in D.Y. Patil Medical College and Hospital, Navi Mumbai for 200 patients.

Methods of collection of data

After obtaining ethical clearance from the Institutional Ethics Board the study was conducted. Voluntary anonymous participation was invited after taking a written consent from each participant.

Study period

This study conducted for 1 month (1st December 2025 to 1st January 2025).

Inclusion criteria

Female patients of reproductive age group (15-49) visiting obstetrics and gynaecology out-patient department were included.

Exclusion criteria

Faculty members, staff and students were excluded from the study.

Statistical analysis

An observational study was conducted at D. Y. Patil hospital, Nerul over a period of one month. A sample of 200 women was recruited using a systematic sampling method. Data was collected and analyzed by SPSS version 17.

RESULTS

40.6% of participants were in the age group 20-25 years (Table 1).

Table 1: Age group distribution.

Age group	Percentage of participants
15-19	16.4
20-25	40.6
26-30	26.6
>40	2.4

35.3% of participants were undergraduate students (Table 2).

Table 2: Education level distribution of the participants.

Education level	Percentage of participants
Illiterate	4.3
Secondary School	3.4
High school	33.4
Diploma	16.4
Under graduate	35.3
Post graduate	7.2

Table 3: Awareness and knowledge of PCO.

Awareness of PCOS	Percentage of participants
Aware	40.6
Not aware	19.8
Somewhat aware	39.6

A 39.6% percentage of participants lacked complete awareness about PCOS, indicating the need for increased health education (Table 3).

Table 4: Knowledge of risk factors of PCOS.

Knowledge of PCOS risk factors	Percentage of participants
Obesity	24.5
Unhealthy eating habits	50
Sedentary lifestyle	22.1
Genetics	49
Thyroid disorders	6.4
Don't know	22.5

49% participants think genetics and 50% think unhealthy eating habits to be a major risk factor to the disease (Table 4).

Participants commonly recognize certain symptoms like irregular periods (76.8%), but awareness of less noticeable signs remains low (Table 5).

Table 5: Symptoms and associated conditions.

Symptoms known to participants	Percentage of participants
Irregular periods	76.8
Tiredness	9.2
Acne	38.2
Don't know	21.3

Table 6: Diagnosis modalities.

Diagnosis modality known	Percentage of participants
Ultrasound	17.9
Blood tests	22.7
Symptoms evaluation	11.6
All of the above	17.4
Don't know	30.4

30.4% participants were unfamiliar with diagnostic methods, which may delay medical intervention, only 17.4% were aware of complete diagnostic modalities available (Table 6).

Misconceptions regarding the preventability of PCOS highlight the need for better public health messaging. As 54.1% of women seem confused (Table 7).

Table 7: Perceptions of PCOS prevention.

Do participants consider PCOS preventable?	Percentage of participants
Yes	28
No	17.9
Maybe	54.1

32.9% don't know about management and another 32.9% were aware about role of lifestyle changes (Table 8).

Table 8: Management options.

Management options known	Percentage of participants
Lifestyle changes	32.9
Medications	29.9
Surgery	4.3
Don't know	32.9

30.4% of participants rely on friends and family sources for PCOS information (Table 9).

Table 9: Sources of information of participants.

Source of PCOS information	Percentage of participants
Healthcare provider	22.7
Internet	16.9
Friends/family	30.4
Social media	26.1
Books	3.9

49.3% participants feel that available information on PCOS is inadequate or misleading as majority still find gaps in their knowledge (Table 10).

Table 10: Satisfaction with information available.

Satisfaction with information quality	Percentage of participants
Satisfied	31.4
Somewhat	49.3
Dissatisfied	19.3

DISCUSSION

Overview of findings

This study highlights significant gaps in awareness, knowledge, and management of Polycystic Ovary Syndrome (PCOS) among participants. Despite the widespread prevalence of PCOS, misconceptions about its causes, symptoms, and treatment remain prominent. The findings emphasize the need for better public health initiatives and medical outreach to address these gaps. Polycystic ovarian morphology is seen on ultrasound in approximately 22% of women. Polycystic Ovarian Syndrome (PCOS) is a common and perplexing endocrine disorder of women in their reproductive years, with a prevalence of up to 10%.^{7,8} Clinical expression of the syndrome varies but commonly includes menstrual cycle disturbance, hyperandrogenism, insulin resistance and obesity.⁹

Awareness and knowledge of PCOS

The results indicate that while 40.6% of participants were aware of PCOS, a significant proportion (39.6%) only had partial awareness, and 19.8% had no awareness at all. This underscores the importance of educational initiatives to improve understanding of the condition. Additionally, many participants incorrectly assumed that PCOS is primarily caused by genetics (49%) and unhealthy eating habits (50%), while only 6.4% identified thyroid disorders as a contributing factor. Such misconceptions highlight the need for clearer, evidence-based health education. Similarly, in a study by Sydora et al, they found that a PCOS diagnosis occurred on average 4.3 years following awareness of first symptoms and required consultation with more than one primary care provider for 57% of respondents.¹⁰ Half (53%) of respondents reported not

receiving a referral to specialists for follow-up care and 70% were not informed about long-term health morbidity such as diabetes or cardiovascular disease.

Symptoms and associated conditions

Irregular periods (76.8%) were the most commonly recognized symptom, while symptoms such as tiredness (9.2%) and acne (38.2%) were less acknowledged. Moreover, only 39.8% of participants associated PCOS with diabetes, even though PCOS has a well-established link to insulin resistance. These findings suggest that many women may not fully recognize or understand the broad health implications of PCOS, potentially leading to delayed diagnosis and management.

Diagnosis and treatment-seeking behaviour

The study reveals a concerning lack of knowledge regarding diagnostic modalities. Only 17.4% of participants were aware of all diagnostic methods (ultrasound, blood tests, and symptom evaluation), while 30.4% did not know any available diagnostic options. Furthermore, treatment-seeking behaviour was mixed, with 46.4% expressing uncertainty about seeking medical intervention. This uncertainty could be attributed to a combination of misinformation, social stigma, and lack of access to healthcare services.

Management and prevention perceptions

A considerable proportion (54.1%) of participants were unsure whether PCOS could be prevented, reflecting a need for better health education on lifestyle modifications and early intervention strategies. Knowledge of management options was also varied 32.9% recognized lifestyle changes as a viable option, while only 4.3% were aware of surgical interventions. This lack of awareness about available treatments may contribute to lower adherence to management strategies and poorer health outcomes. PCOS is also a major unrecognized cardiovascular disease (CVD) risk factor because of the increased prevalence of subclinical atherosclerosis, type 2 diabetes, dyslipidemia and impaired glucose tolerance.^{11,12} Surgical management options such as laparoscopic ovarian drilling to improve outcomes in PCOS patients suffering from infertility were not known to many participants.¹³

Sources of information and satisfaction levels

The study found that participants relied heavily on informal sources of information, with 30.4% obtaining information from family and friends, followed by social media (26.1%). Healthcare providers were consulted by only 22.7% of participants, raising concerns about the accuracy and reliability of the information being disseminated. Furthermore, 49.3% of participants expressed only partial satisfaction with the quality of information available, indicating that current health

communication efforts are insufficient in addressing informational needs.

Implications for public health and future research

The findings from this study highlight the urgent need for targeted educational campaigns that provide accessible, evidence-based information on PCOS. Increasing public awareness through schools, workplaces, and healthcare facilities can help bridge the knowledge gap. Healthcare professionals must also play a proactive role in providing clear guidance on the condition, emphasizing prevention strategies and available treatment options. PCOS is a prevalent condition with varied presentations which significantly affects one's quality of life. Since there is no definitive treatment for PCOS the management generally aims at managing symptoms and reducing the risk of long-term complications.^{14,15}

Future research should explore interventions that can improve early diagnosis and adherence to treatment. Studies examining the effectiveness of community-based awareness programs, telehealth services, and digital health tools could offer innovative solutions for enhancing PCOS management and support.

CONCLUSION

This study underscores the critical gaps in PCOS awareness, diagnosis, and management. It highlights that many women remain unaware of the condition or have partial knowledge, which significantly affects their ability to seek timely diagnosis and appropriate treatment. The study's findings point to the urgent need for public health initiatives that focus on educating women about the broad spectrum of symptoms, potential health risks, and available diagnostic methods for PCOS. Understanding the link between PCOS and other conditions, such as insulin resistance and diabetes, is crucial for preventing long-term health consequences, including infertility and metabolic disorders. Empowering women with knowledge about the condition is the first step toward proactive disease management, leading to healthier, more informed communities.

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