International Journal of Zoology and Applied Biosciences ISSN: 2455-9571
Volume 11, Issue 4, pp: 56-63, 2026
https://doi.org/10.55126/ijzab.2026.v11.i04.008 http://www.ijzab.com

Research Article

KNOWLEDGE, ATTITUDE AND PRACTICES REGARDING PCOS/PCOD AND ITS IMPACT ON QUALITY OF LIFE AMONG WOMEN OF REPRODUCTIVE AGE

[1*]Kota Pavan Kumar, [2*]Ambati Vamsi Krishna, [3*]Kommaraju Sree Vijaya Bharathy, [4]Mounika Paradeshi, [5]Tamirisa Dvijendra, [6]Rachakonda Vishnu Priya, [7]Suryadevara Vidyadhara, [8]Gindi Sumalatha, [9]Adusumalli Chakravarthy

[1]Harmoni Analyticals Pvt. Ltd., IDA Jeedimetla, Hyderabad, Telangana, India.
[2*]Department of Analytical Chemistry, Harmoni Analyticals Pvt. Ltd., IDA Jeedimetla, Hyderabad, Telangana, India.
[3*]Bachelor of Dental Surgery, Sibar Dental College and Hospital, Takkellapadu, Guntur, Andhra Pradesh, India.
[4]Department of Pharmacology and Toxicology, Wright state University, Dayton, USA.
[5]Medical Technologist-I, LabCorp, Dublin, USA.
[6]Department of Health Information Technology, University of Maryland, Baltimore County, USA.
[7,9]Chebrolu Hanumaiah Institute of Pharmaceutical Sciences, Chowdavaram, Guntur, Andhra Pradesh, India.
[8]Vikas Institute of Pharmaceutical Sciences, Rajahmundry, Andhra Pradesh, India.

Article History: Received 5th April 2026; Accepted 12th June 2026; Published 1st July 2026

ABSTRACT

Polycystic Ovary Syndrome (PCOS) is a common endocrine disorder affecting women of reproductive age and is associated with significant metabolic and psychosocial complications. The present study aimed to evaluate the knowledge, attitudes, and practices (KAP) related to PCOS among women aged 13-45 years and to assess its impact on their quality of life. A cross-sectional descriptive survey was conducted among 210 women using a pre-validated online questionnaire distributed through social media platforms. The questionnaire included 15 close-ended questions addressing awareness, perceptions, lifestyle practices, and psychological impact. Data were analysed using Microsoft Excel and SPSS, and results were expressed as frequencies and percentages. The findings revealed that 93% of participants were aware of PCOS, with social media (49%) and peers (27%) serving as the primary sources of information, while only 14% obtained information from healthcare professionals. Awareness of symptoms such as irregular menstruation (84%), acne or hair fall (69%), and weight gain (58%) was satisfactory; however, only 43% were aware of long-term metabolic complications. Although positive attitudes toward lifestyle modification (80%) and seeking medical consultation (89%) were observed, only 36% of participants reported engaging in regular physical activity. Furthermore, 66% of respondents experienced reduced self-confidence, and 72% reported stress or anxiety. Major barriers to seeking medical care included lack of awareness (42%) and fear of social stigma (27%). In conclusion, despite high levels of awareness and positive attitudes, the adoption of healthy lifestyle practices remains inadequate. PCOS continues to negatively impact reproductive, metabolic, psychological, and social well-being. Therefore, integrated strategies involving health education, clinical management, community awareness, and multidisciplinary counselling are essential to promote early diagnosis, effective management, and improved quality of life.

Keywords: Polycystic Ovary Syndrome, Knowledge Attitude Practice, Women of Reproductive Age, Lifestyle.

INTRODUCTION

Polycystic Ovary Syndrome (PCOS), also recognized as hyperandrogenic anovulation (HA) or Stein Leventhal syndrome, is among the most prevalent endocrine disorders affecting women of reproductive age globally (Choudhury & Rajeswari, 2022). It is characterized by a hormonal imbalance marked by excessive androgens (male

*Corresponding Author: Ambati Vamsi Krishna, Research Associate & Analyst, Department of Analytical Chemistry, Harmoni Analyticals Pvt. Ltd., IDA Jeedimetla, Hyderabad, Telangana, India. Email: ambativamsi82@gmail.com.

hormones), irregular menstrual cycles, and the presence of multiple cysts on the ovaries. In this condition, one or both ovaries exhibit an increased volume often greater than 10 mL, along with the development of multiple small cysts measuring between 2 to 9 mm, which represent immature ovarian follicles that fail to regularly mature and release eggs (ovulate) (Jena *et al.,* 2021). Globally, PCOS affects approximately 1.55 million women of reproductive age, contributing to an estimated 0.43 million disability-adjusted life years (DALYs). The incidence has gradually increased over time, with an age-standardized rate of about 82.44 cases per 100,000 women in 2017, marking a 1.45% rise since 2007 (Ovalle & Azziz, 2002). Despite this high prevalence affecting nearly 1 in 5 women in some population's awareness remains inconsistent, and many women harbour misconceptions about the syndrome, leading to delays in diagnosis and management (Chahar *et al.,* 2023) (Sharma *et al*., 2021). The exact cause of PCOS is not fully understood but involves a complex interplay of genetic and environmental factors. Key contributors include insulin resistance, which leads to elevated insulin levels that stimulate excess androgen production; chronic low-grade inflammation; hereditary predisposition; and hormonal imbalances disrupting normal ovulation (Andrade *et al*., 2020). Insulin resistance, in particular, links PCOS to metabolic complications like obesity, type 2 diabetes, and cardiovascular diseases (Ligocka *et al*., 2024). These metabolic alterations, combined with reproductive dysfunction, predispose women to further health risks and psychosocial challenges (Janasti *et al.,* 2025).

Clinically, PCOS manifests through a spectrum of symptoms, including oligomenorrhea or amenorrhea (infrequent or absent periods), hirsutism (excessive facial and body hair), acne, alopecia (hair thinning or loss), weight gain, and infertility. The presence of multiple small ovarian cysts can be confirmed via ultrasound. Additionally, many women with PCOS experience psychological distress, such as depression, anxiety, and body image issues, contributing to a diminished quality of life (Cai *et al.,* 2023). Beyond its reproductive implications, PCOS has significant systemic effects. Women with PCOS are at heightened risk for obesity and insulin resistance, conditions that exacerbate the syndrome and increase the likelihood of developing chronic illnesses like diabetes and heart disease (Azziz *et al.,* 2009). The syndrome's impact extends to emotional and social well-being, with affected women often facing stigma, decreased self-esteem, and challenges in sexual and reproductive health (Bozdag *et al.,* 2016).

Addressing PCOS requires a comprehensive understanding and approach. Despite its prevalence and impact, low awareness and misconceptions hinder timely diagnosis and effective management. Increased education and research into PCOS's multifaceted nature are essential to improve health outcomes, reduce the associated burden, and enhance the overall quality of life for women affected by this syndrome (Sirmans & Pate, 2013) (Sheehan, 2004). Several diagnostic frameworks have been proposed for identifying polycystic ovary syndrome, with the Rotterdam criteria (2003) being the most widely accepted and commonly used (Spritzer, *et al*., 2014). According to this system, a diagnosis of PCOS is established when any two of the following three features are present: irregular or absent menstrual cycles (oligo- or anovulation), elevated androgen levels (clinical or biochemical), and polycystic ovarian morphology on ultrasound. These criteria provide the broadest definition of PCOS and allow for the identification of different phenotypic variants of the disorder (Lujan *et al*., 2008).

The National Institutes of Health (NIH) criteria (1990), in contrast, adopt a stricter definition, requiring the presence of both irregular menstrual cycles and hyperandrogenism for diagnosis (Fauser, 2004). This approach focuses more on the core metabolic and reproductive abnormalities of the syndrome. The Androgen Excess PCOS (AE-PCOS) Society criteria (2006) place hyperandrogenism as a mandatory feature, combined with evidence of ovarian dysfunction either irregular menstruation or polycystic ovarian morphology on ultrasound (Zawadzki, 1992). This model highlights the central role of androgen excess in the pathophysiology of PCOS and narrows the diagnosis to women exhibiting overt hormonal imbalance (Azziz *et al*., 2006). The present study aims to assess the knowledge, attitude, and practices related to polycystic ovary syndrome (PCOS) and to evaluate its impact on the quality of life among women of reproductive age. It seeks to understand the level of awareness and understanding of PCOS among women aged 13-45 years and to explore their attitudes toward lifestyle modification and medical consultation for its management. The study further aims to identify the existing health practices adopted by women in relation to the prevention and control of PCOS and to determine the perceived emotional and social impact of the condition on their daily lives (Franks, 2006).

MATERIALS AND METHODS

Study Design

This study was designed as a cross-sectional, descriptive survey aimed at assessing the knowledge, attitude, and practices regarding polycystic ovary syndrome (PCOS) and its impact on quality of life among women of reproductive age (Goudas & Dumesic, 1997).

Study Population

The study population comprised women of reproductive age ranging from 13 to 45 years. Participants were selected through convenient sampling, and data were collected from individuals who voluntarily responded to the online survey distributed via social media platforms**.**

Inclusion Criteria

The inclusion criteria for this study comprised women aged between 13 and 45 years who voluntarily consented to participate. Participants were required to have the ability to read and understand English in order to complete the online

questionnaire accurately. Additionally, only respondents who submitted fully completed responses through Google Forms were considered eligible for inclusion in the final analysis.

Exclusion Criteria

The exclusion criteria included women below 13 years or above 45 years of age. Individuals who did not provide informed consent or submitted incomplete questionnaires were also excluded from the study. Participants with known endocrine disorders other than Polycystic Ovary Syndrome (such as thyroid dysfunction or Cushing's syndrome) were not considered eligible. Additionally, duplicate or invalid responses were identified and removed from the final analysis to ensure data accuracy and reliability.

Sample Size

The sample consisted of 210 women of reproductive age (13-45 years) who completed the questionnaire in full. Responses were collected through online distribution channels, and incomplete or duplicate submissions were excluded from analysis.

Study Tool

Data were collected using a structured, self-administered questionnaire developed through Google Forms. The questionnaire consisted of 15 close-ended questions designed to assess participants' knowledge, attitude, and practices (KAP) regarding polycystic ovary syndrome (PCOS) and its impact on quality of life. The questions were framed in simple English to ensure clarity and ease of understanding.

Data Collection Procedure

The data were collected through an online survey using a pre-validated Google Form questionnaire. The form link was distributed via social media platforms such as WhatsApp, Instagram, and email to reach women of reproductive age between 13 and 45 years. Participants were informed about the study's purpose and confidentiality before responding. Data collection was carried out over a period of two weeks, and only complete responses were included in the final analysis. The collected data were automatically compiled in Google Sheets for statistical analysis.

Statistical Analysis

The collected data were entered into Microsoft Excel and analysed using SPSS (Version 30.0). Descriptive statistics including frequencies, percentages, mean, and standard deviation were calculated. A p-value < 0.05 was considered statistically significant where applicable.

Ethical Consideration

This study was conducted in accordance with ethical research principles involving human participants. Participation was entirely voluntary. The Google Form clearly stated the purpose of the study, assured anonymity, and confirmed that no personal or identifiable information would be collected. Respondents were free to withdraw at any point without any consequences. The data collected were used solely for academic and research purposes, maintaining strict confidentiality and privacy of participants.

RESULTS AND DISCUSSION

A total of 210 women of reproductive age (13-45 years) completed the online questionnaire. Most respondents were college students (83 %), followed by employed women (11 %) and homemakers (6 %). The mean age was 22.3 ± 3.0 years, representing a predominantly young, educated, urban population. Nearly 93 % of participants had heard about polycystic ovary syndrome/disease (PCOS/PCOD). The principal sources of information were social media (49 %) and friends or family (27 %), whereas only (14 %) learned from health professionals. Awareness of symptoms was high for irregular periods (84 %), acne or hair fall (69 %), and weight gain (58 %), but only (43 %) recognized that PCOS could predispose women to metabolic disorders such as diabetes or cardiovascular disease. Overall, the data indicates partial but incomplete knowledge regarding long-term consequences. A majority (80 %) believed that healthy lifestyle habits balanced diet, regular exercise, and stress management are essential for prevention and control. Nearly nine in ten (89 %) felt medical consultation is required for menstrual irregularities or suspected PCOS. However, (45 %) reported discomfort discussing menstrual or hormonal problems, suggesting persistent cultural stigma and embarrassment around reproductive topics. Only (36 %) reported exercising or doing yoga at least three to four times per week, while (49 %) did so occasionally. Among those diagnosed with PCOS (28 %, n = 59), (61 %) followed doctor-prescribed treatment or diet modification and (39 %) relied on home remedies or irregular self-care. This reflects a gap between awareness and sustained behavior changes. Two-thirds (66 %) stated that PCOS-related manifestations acne, hair fall, weight changes, or menstrual irregularities affected their self-confidence and routine activities. Seventy-two percent reported stress or anxiety linked to hormonal issues. The most common barriers to seeking medical help were lack of awareness (42 %), fear of judgment (27 %), and financial limitations (13 %).

The majority recommended balanced diet (85 %), regular exercise (79 %), and reduction of junk food and stress (54 %) as preventive strategies. In summary, the respondents showed high awareness and positive attitudes, but sub-optimal implementation of healthy practices, reflecting the well-known knowledge practice gap (Bai *et al*., 2024). This cross-sectional survey assessed knowledge, attitudes, and practices regarding PCOS among 210 women of reproductive age and examined perceived quality-of-life effects. The findings depict an educated, socially aware population that understands the basics of PCOS yet struggles to translate this understanding into consistent health-promoting behaviour. The very high awareness (93 %) aligns with trends in urban India, where social-media exposure has popularised the term *PCOS*. However, the

dominance of informal channels friends and digital media imply that much of this information may lack medical accuracy. Only one in seven participants learned about PCOS from a healthcare provider, highlighting missed opportunities during routine gynaecological or dental visits for professional counselling.

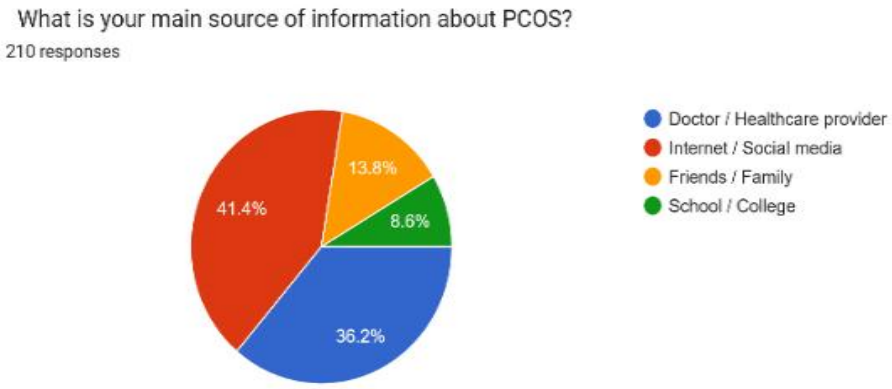

Figure 1. Distribution of participants based on their primary source of information about PCOS

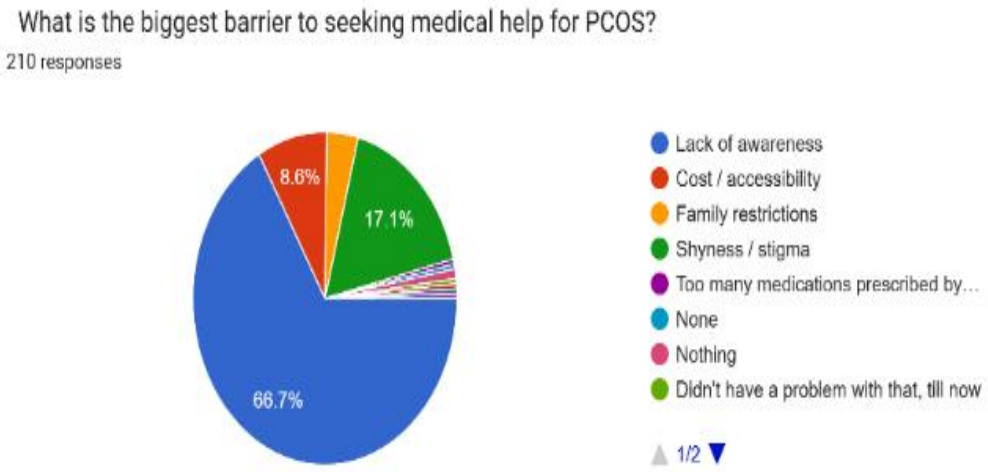

Figure 2. Distribution of the biggest barriers preventing participants from seeking medical help for PCOS.

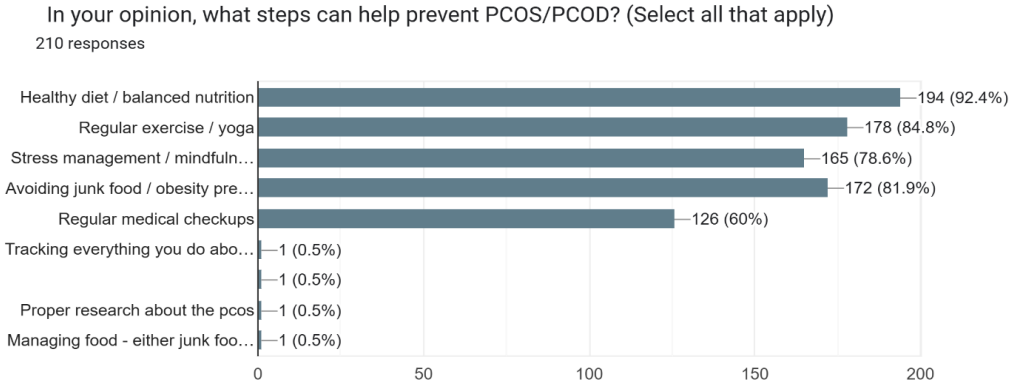

Figure 3. Distribution of participant responses regarding steps to prevent PCOS/PCOD.

Symptom recognition was strong for menstrual irregularities and cosmetic issues but limited for metabolic complications. This mirrors national data indicating that young women perceive PCOS primarily as a fertility or cosmetic concern. Limited understanding of insulin resistance and cardiovascular risk undermines preventive action and delays screening for metabolic syndrome (Farid & Kandarakis, 2009). The attitude findings were encouraging: most participants valued medical consultation and lifestyle management. Yet the 45 % discomfort rate in discussing menstrual issues confirms that socio-cultural taboos still restrict open conversation. Silence surrounding menstruation and fertility perpetuates misconceptions, hinders early diagnosis, and may worsen psychological distress (Christ & Cedars, 2023). Practice scores remained modest. While 85 % advocated lifestyle change in principle, only one-third exercised regularly. The gap likely reflects both practical and motivational barriers academic workload, lack of structured guidance, and uncertainty about effective routines. Behavioural-science models suggest that awareness must be followed by *self-efficacy* and environmental reinforcement before genuine behaviour change occurs (Singh *et al.,* 2023).

About 28 % had a confirmed PCOS diagnosis, consistent with Indian prevalence estimates (20-25 %). Treatment adherence among these women was partial; 61 % followed prescriptions, whereas 39 % preferred home remedies or intermittent care. This underscores the need for patient-centred communication explaining that PCOS is a chronic metabolic-reproductive disorder, not a transient cosmetic inconvenience (Teede *et al.,* 2018). The psychological burden identified loss of confidence in two-thirds and anxiety in over 70 % is consistent with global findings linking PCOS to depression, anxiety, and body-image concerns. Hyperandrogenism and visible manifestations such as hirsutism, acne, and obesity often generate emotional distress, especially in young adults navigating societal beauty expectations. These factors collectively diminish self-esteem and quality of life, sometimes even in the absence of severe physical symptoms (Dokras *et al*., 2017). Integrating mental-health services within PCOS clinics or college health centres could mitigate this burden. Simple interventions support groups, stress-management workshops, and counselling can help women cope with the psychosocial aspects of the disorder while improving adherence to lifestyle goals (Escobar-Morreale, 2018).

The major barriers to seeking medical help lack of awareness and fear of judgment reflect deep-rooted stigma around female reproductive health. Cultural notions of modesty and privacy often discourage young women from consulting male physicians or discussing menstrual issues with family members (Gibson-Helm *et al*., 2017). Community-based education that includes parents, educators, and peers can normalise such discussions. Inclusion of reproductive-endocrine topics in school curricula would further demystify PCOS and promote earlier recognition (Singh *et al*., 2023). Financial concerns, though less frequently cited, remain relevant in lower-income households where diagnostic tests and long-term medications pose economic strain. Policy initiatives should integrate PCOS screening within public reproductive-health programmes and consider subsidising essential investigations such as ultrasound and hormone profiles (Cooney & Dokras, 2018). The current results are comparable to those of Jena *et al*. (2021), who found moderate awareness but inadequate practices among Indian adolescents, and Ligocka *et al*. (2024), who observed reduced quality-of-life scores among PCOS patients. The high level of awareness in the present study contrasts with rural surveys reporting <40 % awareness, emphasising the urban-rural divide in health literacy. Nevertheless, both settings share the common problem of translating knowledge into consistent practice (Lim *et al.,* 2019). The psychological findings also echo those of Spritzer (2014) and Ligocka (2024), who noted that emotional distress often exceeds physical symptoms in determining perceived well-being. Thus, holistic management must extend beyond endocrinological correction to include mental-health support (Barry *et al.,*

2011).

To bridge the knowledge practice gap, multipronged interventions are recommended: Structured Education: Incorporate menstrual and endocrine health modules in secondary and higher education, with emphasis on self-monitoring of menstrual cycles and early medical consultation. Digital Health Literacy: Partner with social-media influencers to promote evidence-based information vetted by clinicians, countering myths about "quick fixes" or fad diets. Clinical Screening: Encourage routine menstrual and metabolic screening during annual physical or dental check-ups, as these visits often represent women's first contact with health professionals. Behavioural Support: Establish college-based fitness clubs and peer-mentoring systems to sustain motivation for physical activity. Psychological Care: Integrate counselling services into reproductive-health clinics (Moran *et al.,* 2013). A key strength of this study is its sizeable sample (n = 210) and inclusion of varied educational backgrounds within a narrow age range, providing a focused snapshot of young women's perceptions. Online, anonymous data collection likely encouraged honest responses about sensitive topics. Limitations include self-selection bias (participants comfortable with English and internet access), reliance on self-reported data, and the cross-sectional design, which precludes causal inference. Future research employing mixed methods could elucidate underlying motivations and test interventions over time.

Further studies should focus on comparing urban and rural cohorts to quantify disparities in awareness, knowledge, and health-seeking behaviours related to Polycystic Ovary Syndrome (PCOS). Such comparative analyses would help identify gaps in access to information and healthcare services across different demographic settings. Additionally, longitudinal research is needed to evaluate the long-term impact of structured lifestyle-education programmes on hormonal regulation, metabolic outcomes, and psychological well-being, particularly in relation to anxiety, depression, and quality of life. Future investigations should also explore the influence of family involvement and peer support systems in sustaining positive behavioural changes, as social reinforcement may significantly enhance adherence to dietary modifications, physical activity, and treatment regimens. Moreover, there is a need to examine emerging therapeutic approaches and digital health technologies, including mobile health applications and telemedicine platforms, that offer personalised lifestyle guidance and continuous monitoring, thereby improving self-management and overall clinical outcomes in individuals with PCOS (Kakoly *et al.,* 2018).

CONCLUSION

This study highlights that although awareness and positive attitudes toward Polycystic Ovary Syndrome (PCOS) are relatively high among women aged 13-45 years, significant gaps persist in translating knowledge into sustained lifestyle practices. While (93%) of participants had heard about PCOS and demonstrated satisfactory recognition of common symptoms such as irregular menstruation (84%), acne or hair fall (69%), and weight gain (58%), only (43%) were aware of its long-term metabolic complications. Despite favorable attitudes toward lifestyle modification (80%) and medical consultation (89%), adherence to regular physical activity was reported by only (36%) of respondents, indicating a clear disconnect between awareness and behavioural implementation. Moreover, the considerable psychological burden evidenced by reduced self-confidence in (66%) of participants and stress or anxiety in (72%) underscores the multidimensional impact of PCOS on reproductive, metabolic, and mental health. The findings emphasize the urgent need for structured, evidence-based health education strategies that extend beyond general awareness to include metabolic risk prevention and mental health support. Given that only 14% of participants received information from healthcare professionals, strengthening the role of clinicians in patient education is imperative. Community-level interventions to address stigma and fear of social judgment (reported by 27%) are equally important. A coordinated, multidisciplinary approach integrating early screening, continuous lifestyle counselling, and psychosocial support is essential to improve long-term disease management and quality of life. Empowering women through informed self-management and accessible healthcare systems remains fundamental to mitigating the long-term consequences associated with PCOS.

ACKNOWLEDGMENT

The authors express their sincere gratitude to the Chebrolu Hanumaiah Institute of Pharmaceutical Sciences, Guntur, Andhra Pradesh, India & Sibar Dental College and Hospital, Takkellapadu, Guntur, Andhra Pradesh, India for their continuous support, encouragement, and provision of necessary research facilities throughout the preparation of this paper. The authors also extend heartfelt thanks to the faculty members and colleagues of both institutes for their valuable suggestions, guidance, and motivation during the study. Access to scientific resources and literature databases greatly contributed to the successful completion of this work.

CONFLICT OF INTERESTS

The authors declare no conflict of interest

ETHICS APPROVAL

Not applicable

FUNDING

This study received no specific funding from public, commercial, or not-for-profit funding agencies.

AI TOOL DECLARATION

The authors declares that no AI and related tools are used to write the scientific content of this manuscript.

DATA AVAILABILITY

Data will be available on request

REFERENCES

Choudhury, A. A., & Rajeswari, V. D. (2022). Polycystic ovary syndrome (PCOS) increases the risk of subsequent gestational diabetes mellitus (GDM): A novel therapeutic perspective. *Life Sciences, 310*, 121069.

Jena, S. K., Mishra, L., Naik, S. S., & Khan, S. (2021). Awareness and opinion about polycystic ovarian syndrome (PCOS) among young women: A developing country perspective. *International Journal of Adolescent Medicine and Health, 33*(3), 123-126.

Ovalle, F., & Azziz, R. (2002). Insulin resistance, polycystic ovary syndrome, and type 2 diabetes mellitus. *Fertility and Sterility, 77*(6), 1095-1105.

Chahar, K., Sharma, Y., Kumar, M., Kumari, L., Mishra, L., Patel, P., et al. (2023). A recapitulation of the polycystic ovarian disorder in adult women and the risk of disease associated with the polycystic ovarian disorder. *Health Sciences Review, 8*, 100110.

Sharma, P., Bilkhiwal, N., Chaturvedi, P., Kumar, S., & Khetarpal, P. (2021). Potential environmental toxicant exposure, metabolizing gene variants and risk of PCOS: A systematic review. *Reproductive Toxicology, 103*, 124-132.

Andrade, C., Menon, V., Ameen, S., & Praharaj, S. K. (2020). Designing and conducting knowledge, attitude, and practice surveys in psychiatry: Practical guidance. *Indian Journal of Psychological Medicine, 42*(5), 478-481.

Ligocka, N., Chmaj-Wierzchowska, K., Wszołek, K., Wilczak, M., & Tomczyk, K. (2024). Quality of life of women with polycystic ovary syndrome. *Medicina, 60*(2), 294.

Janasti, L., Utami, Y., Putri, N. R., & Ramadhanintyas, K. N. (2025). Pengaruh konsumsi makanan cepat saji (junk food) terhadap PCOS pada wanita usia subur: Tinjauan literatur. *Colostrum Mother Journal, 2*(1), 50-59.

Cai, M., Ni, Z., Yuan, Z., Yu, J., Zhang, D., Yao, R., et al. (2023). Past and present: A bibliometric study on polycystic ovary syndrome. *Journal of Ovarian Research, 16*(1), 42.

Azziz, R., Carmina, E., Dewailly, D., Diamanti-Kandarakis, E., Escobar-Morreale, H. F., Futterweit, W., et al. (2009). The Androgen Excess and PCOS Society criteria for the polycystic ovary syndrome: The complete task force report. *Fertility and Sterility, 91*(2), 456-488.

Bozdag, G., Mumusoglu, S., Zengin, D., Karabulut, E., & Yildiz, B. O. (2016). The prevalence and phenotypic features of polycystic ovary syndrome: A systematic review and meta-analysis. *Human Reproduction, 31*(12), 2841-2855.

Sirmans, S. M., & Pate, K. A. (2013). Epidemiology, diagnosis, and management of polycystic ovary syndrome. *Clinical Epidemiology, 5*, 1-13.

Sheehan, M. T. (2004). Polycystic ovarian syndrome: Diagnosis and management. *Clinical Medicine & Research, 2*(1), 13-27.

Spritzer, P. M. (2014). Polycystic ovary syndrome: Reviewing diagnosis and management of metabolic disturbances. *Arquivos Brasileiros de Endocrinologia & Metabologia, 58*(2), 182-187.

Lujan, M. E., Chizen, D. R., & Pierson, R. A. (2008). Diagnostic criteria for polycystic ovary syndrome: Pitfalls and controversies. *Journal of Obstetrics and Gynaecology Canada, 30*(8), 671-679.

Fauser, B. C. J. M. (2004). Revised 2003 consensus on diagnostic criteria and long-term health risks related to polycystic ovary syndrome. *Fertility and Sterility, 81*(1), 19-25.

Zawadzki, J. K. (1992). Diagnostic criteria for polycystic ovary syndrome: Toward a rational approach. In A. Dunaif, J. R. Givens, F. P. Haseltine, & G. R. Merriam (Eds.), *Polycystic ovary syndrome: Current issues in endocrinology and metabolism* (pp. 377-384). Boston, MA: Blackwell Scientific.

Azziz, R., Carmina, E., Dewailly, D., Diamanti-Kandarakis, E., Escobar-Morreale, H. F., Futterweit, W., et al. (2006). Criteria for defining polycystic ovary syndrome as a predominantly hyperandrogenic syndrome: An Androgen Excess Society guideline. *Journal of Clinical Endocrinology & Metabolism, 91*(11), 4237-4245.

Franks, S. (2006). Diagnosis of polycystic ovarian syndrome: In defense of the Rotterdam criteria. *Journal of Clinical Endocrinology & Metabolism, 91*(3), 786-789.

Goudas, V. T., & Dumesic, D. A. (1997). Polycystic ovary syndrome. *Endocrinology and Metabolism Clinics of North America, 26*(4), 893-912.

Bai, H., Ding, H., & Wang, M. (2024). Polycystic ovary syndrome (PCOS): Symptoms, causes, and treatment. *Clinical and Experimental Obstetrics & Gynecology, 51*(5), 126.

Farid, N. R., & Kandarakis, E. D. (2009). *Diagnosis and management of polycystic ovary syndrome*. New York, NY: Springer.

Christ, J. P., & Cedars, M. I. (2023). Current guidelines for diagnosing PCOS. *Diagnostics, 13*(6), 1113.

Singh, S., Pal, N., Shubham, S., Sarma, D. K., Verma, V., Marotta, F., et al. (2023). Polycystic ovary syndrome: Etiology, current management, and future therapeutics. *Journal of Clinical Medicine, 12*(4), 1454.

Teede, H. J., Misso, M. L., Costello, M. F., Dokras, A., Laven, J., Moran, L., et al. (2018). Recommendations from the international evidence-based guideline for the

assessment and management of polycystic ovary syndrome. *Human Reproduction, 33*(9), 1602-1618.

Dokras, A., Saini, S., Gibson-Helm, M., Schulkin, J., Cooney, L., & Teede, H. (2017). Gaps in knowledge among physicians regarding diagnostic criteria and management of PCOS. *Journal of Clinical Endocrinology & Metabolism, 102*(11), 4100-4106.

Escobar-Morreale, H. F. (2018). Polycystic ovary syndrome: Definition, aetiology, diagnosis and treatment. *Nature Reviews Endocrinology, 14*(5), 270-284.

Cooney, L. G., & Dokras, A. (2018). Beyond fertility: Polycystic ovary syndrome and long-term health. *Fertility and Sterility, 110*(5), 794-809.

Gibson-Helm, M., Teede, H., Dunaif, A., & Dokras, A. (2017). Delayed diagnosis and a lack of information associated with dissatisfaction in women with PCOS. *Journal of Clinical Endocrinology & Metabolism, 102*(2), 604-612.

Lim, S. S., Kakoly, N. S., Tan, J. W. J., Fitzgerald, G., Bahri Khomami, M., Joham, A. E., et al. (2019). Metabolic syndrome in polycystic ovary syndrome: A systematic review and meta-analysis. *Obesity Reviews, 20*(2), 339-352.

Barry, J. A., Kuczmierczyk, A. R., & Hardiman, P. J. (2011). Anxiety and depression in women with polycystic ovary syndrome: A systematic review and meta-analysis. *Human Reproduction, 26*(9), 2442-2451.

Moran, L. J., Ko, H., Misso, M., Marsh, K., Noakes, M., Talbot, M., et al. (2013). Dietary composition in the treatment of polycystic ovary syndrome: A systematic review. *Human Reproduction Update, 19*(3), 268-285.

Kakoly, N. S., Khomami, M. B., Joham, A. E., Cooray, S. D., Misso, M. L., Norman, R. J., et al. (2018). Ethnicity, obesity and the prevalence of impaired glucose tolerance and type 2 diabetes in PCOS: A systematic review and meta-analysis. *Human Reproduction Update, 24*(4), 455-467.