

Diagnosis and management of polycystic ovary syndrome (PCOS)

Perspectives of clinicians in Singapore

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Background

PCOS is a common endocrine disorder estimated to affect 4–21% of women, depending on the diagnostic criteria used.¹ Clinical manifestations of the syndrome are varied, and multiple parameters are needed for its diagnosis.^{2,3} This complicates the diagnosis of PCOS and may cause patient dissatisfaction arising from delayed diagnosis, conflicting management regimes and differing views on prognosis.^{2,4,5}

The situation is further complicated by a variety of definitions that doctors use to diagnose PCOS.

Methods

An online survey was disseminated to 208 clinicians from O&G, endocrinology and family medicine in Singapore. The questionnaire was adapted from a questionnaire previously used to survey clinicians in North America ⁶ It was further modified by content experts in the fields of reproductive endocrinology, benign gynaecology and family medicine to contextualise the survey.

Statistical analysis was performed with SPSS Statistics software version 27.0 (IBM Corp, Armonk, US). Descriptive statistics were reported as count and percentage responses, and groups were compared using chi-square tests. Binary logistic regression models were performed. Odds ratios and 95% confidence intervals were presented.

Results

A total of 208 responses were received. Data from 160 participants who completed at least 78% of the survey, including all essential questions pertinent to the study were included.

Diagnostic criteria and availability of standardised protocol at workplace

Almost all from gynaecology (97.3%) and endocrinology (96.2%) specialties reported that they followed diagnostic criteria, as compared to those from general practice and family medicine. Among the 4 diagnostic criteria, Rotterdam 2003 was the most commonly utilised (66.3%). Significantly more gynaecologists (62.2%) reported having a standardised protocol at their workplace as compared to clinicians from family medicine (31.5%), endocrinology (19.2%) and general practice (11.6%).

Recognition of PCOS clinical features

60.5% of respondents could not identify the correct clinical features, of whom a significant majority (80%) of them do not follow a diagnostic criterion and/or lack a standardised workplace protocol.

Diagnostic modalities

55 (34.3%) respondents chose modalities from all 4 diagnostic categories (clinical and biochemical hyperandrogenism, menstrual disturbances, ultrasound) to diagnose PCOS. However, of these 55 respondents, 33 (60%) respondents chose modalities from the 4 diagnostic categories along with incorrect modalities. Of the 4 diagnostic categories, biochemical hyperandrogenism (50.6%) was the most common category that was not used by respondents for the diagnosis of PCOS. 71.3% of respondents chose at least 1 incorrect modality to diagnose PCOS, with fertility problems (58.8%) being the most selected incorrect modality.

PCOS Complications

Overall, insulin resistance/type 2 diabetes mellitus (95.6%) and fertility problems (96.8%) were best recognised as complications of PCOS by the clinicians. On the other hand, psychological complications of PCOS eg. depression (40.5%) and anxiety (29.7%) were less appreciated.

Perspectives from clinicians

A majority of respondents (81.9%) expressed that provision of standardised educational materials for clinicians will benefit them in caring for patients with PCOS. Ensuring patients’ compliance to lifestyle modifications (30.3%) and diagnosing PCOS using the correct criteria (24.5%) were the 2 most selected challenges.

Discussion

Our findings highlight the knowledge gap present in identifying the correct clinical features of PCOS, and discrepancies in the diagnostic criteria used.

We found that most clinicians followed the Rotterdam 2003 criteria and others the latest ESHRE 2018 guidelines to diagnose PCOS. This is in line with studies performed in Europe and North America that showed most clinicians still used the Rotterdam criteria.^{6,9} Due to its comprehensive evidence-based diagnostic and management approaches, including its recommendation of “PCOS model care”, the ESHRE 2018 PCOS guidelines could be recommended as the standardised criteria for diagnosing PCOS in Singapore.

Easier access to educational resources regarding PCOS and its complications would promote greater understanding of the condition, which will help with the physician’s challenges of ensuring patient compliance to lifestyle modifications and other treatment plans.² We could consider sharing e-resources with our patients, such as the “Ask PCOS” phone application created by Monash University¹⁰ that contains infographics and interactive videos by PCOS experts.

Clinical implications

As a lack of standardised protocols may contribute to greater inconsistencies in diagnosing and managing PCOS patients, this could be an area for improvement.^{6,7,8}This study calls for greater harmonisation of diagnostic processes and holistic evidence-based management of PCOS patients, through standardised workplace protocols and patient education resources.

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