



Diagnosis and Management of Polycystic Ovary Syndrome by Physicians from the Middle East and Africa

Stephen L. Atkin¹

¹Royal College of Surgeons in Ireland Bahrain, Adliya, Kingdom of Bahrain

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Address for correspondence Stephen L. Atkin, MD, FRCP, School of Postgraduate Studies and Research, Royal College of Surgeons in Ireland Bahrain, Adliya, 15503, Kingdom of Bahrain (e-mail: satkin@rcsi-mub.com).

Polycystic ovary syndrome (PCOS) is the most common endocrine disease in women of reproductive age that may present to endocrinologists, gynecologists, dermatologists, or even the psychiatric services.¹ The economic healthcare burden is considerable and estimated at \$4.6 billion in the United States alone; however, the associated disorders of menstrual irregularity, infertility, hirsutism, obesity, and impaired quality of life have a major impact on those with PCOS, and have the potential for the development of diabetes, endometrial cancer, and cardiovascular disease.^{1,2} PCOS is a diagnosis of exclusion of other conditions such as hyperprolactinemia, congenital adrenal hyperplasia, and thyroid dysfunction before the application of the diagnostic criteria reported for the Rotterdam criteria, androgen excess society guidelines, or the National Institute of Health consensus.³

There have been several articles that have given recommendations from international evidence-based guidelines for the assessment and management of PCOS.⁴ A survey of management of PCOS by physicians from the Middle East and Africa is published in the current issue of *Journal of Diabetes and Endocrine Practice* (JDEP).⁵ The question is how does physicians within the Middle East and Africa reflect published guidelines? From the report, the overall response rate was unclear, but 190 responders in total were available for analysis.⁵ There was a bias for endocrinologists to respond, that may have affected the overall practice, that was reported. In addition, the availability of resources may have had a major effect on the practice in each of the centers that responded. Overall, it was surprising that a sizable number of the clinicians that

responded do not see more PCOS patients in a year, given how common the condition is, and it was unclear if this reflects less referral to secondary care for this condition; however, most of the referrals were for infertility and few if any were for hirsutism.

The use of categorical criteria to diagnose PCOS did not differ in the survey in comparison to European data. In the diagnosis of hyperandrogenism, calculated free testosterone, free androgen index, or calculated bioavailable testosterone should be used to assess biochemical hyperandrogenism, perhaps with the measurement of dehydroepiandrosterone sulfate (DHEAS) if the total or free testosterone is not elevated.⁴ In the survey, there was notable heterogeneity in the responses, with DHEAS and total testosterone being most commonly measured, and it was not indicated whether access to accurate testosterone measurement by tandem mass spectroscopy was available. It was also not clear whether sex hormone-binding globulin could be measured in clinical practice to determine the free androgen index.

In the management of PCOS, there is a greater emphasis now on lifestyle changes to be complemented by the use of off license medications, such as metformin and combined oral contraceptive use (COCP).⁴ In the survey, the implementation of metformin was most commonly used followed by lifestyle and, surprisingly, COCP use was third in prescribed treatment for PCOS. The reduced prescription of COCPs may have reflected that fewer gynecologists were included in the survey and that these medications may be less acceptable in some countries and practices.

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In the treatment of infertility, letrozole should be considered as first-line pharmacological treatment for ovulation induction in PCOS,⁴ but, in the survey, ovulation induction agents were the least commonly used.⁵ This probably reflects that endocrinologists are more used to using metformin and clomiphene in their clinical practice than other agents and that these are cheaper alternatives.

The overall message from this survey from the Middle East and Africa is that there are differing practices to those in the recommended guidelines that may need to be addressed with increased education, though it is unclear if those differences were due to resource limitations.

Author Contribution

Single author.

Compliance with Ethical Principles

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Conflict of Interest

None declared.

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