



## Commentary

## Probable discrepancy in the prevalence of polycystic ovarian syndrome (PCOS)

## ARTICLE INFO

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## Main text

Polycystic Ovarian Syndrome (PCOS) is a very common disorder among women of reproductive age. Different diagnostic criteria suggest prevalence in a range of 6–20% [1–3]. Though it affects such a vast female population, the disorder is underrepresented in research. The symptoms of PCOS distort the traditional images of femininity and womanhood and interfere with the self-esteem and body image of the patients. Moreover, in many parts of the world, the discussion around reproductive health issues is still considered taboo. It is no wonder that there is very little awareness about PCOS among such masses.

Of the many barriers to effective treatment of the patients, one is delayed diagnosis. Many studies have discussed probable factors causing this delay. Here we want to point out two of them. The first being the lack of awareness about the symptoms and triggers of PCOS among patients. It widely affects women with PCOS in the developing world. The low level of awareness about PCOS (<4%) in developing countries is alarming [4,5]. Already struggling with decreased access to quality healthcare, there is little emphasis on treating the symptoms caused by PCOS in low-income countries. The topic of reproductive health for unmarried women is stigmatized in many societies especially in the underdeveloped world. No awareness coupled with a discouraging society leads to undiagnosed cases. Thus, the data available about the prevalence of PCOS might need a thorough revision in countries where there is less than 50% awareness about PCOS among women. Without awareness, patients don't seek medical help and such cases usually go unaccounted for.

Secondly, putting the patients on birth-control pills to contain the symptoms is a common strategy to regulate hormones when treating patients with PCOS. In many parts of the world, women start taking birth control pills for contraception and continue for many years. This practice can mask the symptoms of PCOS. In clinical settings, a pattern of diagnosis of PCOS after coming off the birth control can be observed. However, there is no significant study conducted about this association. If the association between the use of birth control pills and delayed diagnosis of PCOS is established, this data must also be considered as it might be responsible for a discrepancy between the reported cases and

the actual cases of PCOS. There is a need for more research to establish this link.

Moreover, multiple studies are discussing the geographical distribution of PCOS. But one thing that is overlooked is unequal access to birth control in developed and underdeveloped worlds [6]. The original burden of disease might be much larger in the countries with higher birth control usage. Early diagnosis by raising awareness, improving techniques, and denouncing the stigmas associated with the symptoms of PCOS can help in the effective treatment of the patients.

## Informed consent

Not required as no human subject was involved.

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## Ethical approval

Not applicable.

## Author contribution

HJ presented the idea. HJ, ZF and MJ conceptualized it. HJ and ZF wrote the commentary. MJ reviewed the commentary.

## Guarantor

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## Declaration of competing interest

None.

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## References

- [1] B.O. Yildiz, G. Bozdog, Z. Yapici, I. Esinler, H. Yarali, Prevalence, phenotype and cardiometabolic risk of polycystic ovary syndrome under different diagnostic criteria, *Hum. Reprod.* 27 (10) (2012) 3067–3073, <https://doi.org/10.1093/humrep/des232>.
- [2] H.J. Teede, A.E. Joham, E. Paul, et al., Longitudinal weight gain in women identified with polycystic ovary syndrome: results of an observational study in young women, *Obesity* 21 (8) (2013) 1526–1532, <https://doi.org/10.1002/oby.20213>.
- [3] W.A. March, V.M. Moore, K.J. Willson, D.I. Phillips, R.J. Norman, M.J. Davies, The prevalence of polycystic ovary syndrome in a community sample assessed under contrasting diagnostic criteria, *Hum. Reprod.* 25 (2) (2010) 544–551, <https://doi.org/10.1093/humrep/dep399>.
- [4] S.K. Jena, L. Mishra, S.S. Naik, S. Khan, Awareness and opinion about polycystic ovarian syndrome (PCOS) among young women: a developing country perspective, *Int. J. Adolesc. Med. Health* 33 (3) (2020) 123–126, <https://doi.org/10.1515/ijamh-2018-0166>. Published 2020 Jun 8.
- [5] P. Sharma, M. Kaur, S. Kumar, P. Khetarpal, A cross-sectional study on prevalence of menstrual problems, lifestyle, mental health, and PCOS awareness among rural and urban population of Punjab, India [published online ahead of print, 2021 Aug 27], *J. Psychosom. Obstet. Gynaecol.* (2021) 1–10, <https://doi.org/10.1080/0167482X.2021.1965983>.
- [6] United Nations, Department of economic and social affairs, population division (2019), *Contraceptive Use by Method* (2019). Data Booklet (ST/ESA/SER.A/435), [https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2020/Jan/un\\_2019\\_contraceptiveusebymethod\\_databooklet.pdf](https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2020/Jan/un_2019_contraceptiveusebymethod_databooklet.pdf). (Accessed 14 June 2022).

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