

Association between polycystic ovary syndrome and risk of attention-deficit/hyperactivity disorder in offspring: a meta-analysis

To the editor: We read with great interest a meta-analysis by Maleki et al.¹⁾ on the association between prenatal excess of androgen exposure in the offspring of mothers with polycystic ovary syndrome (PCOS) and risk of attention-deficit/hyperactivity disorder (ADHD) in them. They found that maternal PCOS increases the offspring risk of ADHD. However, we have to point out a deficiency of this study, we noted that 1 of 6 articles that were included in this study did not meet the eligibility criteria as its object was different.²⁾ Hergüner et al.²⁾ aimed to compare ADHD symptoms between women with PCOS and controls. This deficiency may introduce bias and lead to a false conclusion.

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1. Maleki A, Bashirian S, Soltanian AZ, Jenabi E, Farhadinasab A. Association between polycystic ovary syndrome and risk of attention-deficit/hyperactivity disorder in offspring: a meta-analysis. *Clin Exper Pediatr* 2021;37:716-20.
2. Hergüner S, Harmancı H, Toy H. Attention deficit-hyperactivity disorder symptoms in women with polycystic ovary syndrome. *Int J Psychiatry Med* 2015;50:317-25.

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The authors reply: We appreciate your opinion and your suggestions, and I'd like to reply to the points that you mentioned. We in this meta-analysis assessed the association between polycystic ovary syndrome (PCOS) and risk of attention-deficit/hyperactivity disorder (ADHD) in offspring compared with women without PCOS.¹⁾ Hergüner et al.²⁾ aimed to compare ADHD symptoms between women with PCOS and controls. However, Hergüner et al.²⁾ measured ADHD symptoms based on 18 items on Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) criteria for ADHD. DSM-IV is a diagnostic criteria for ADHD.^{3,4)} Therefore, the symptoms of ADHD based on DSM-IV criteria indicate the diagnosis of ADHD. On the other, there was a significant association between PCOS and risk ADHD in 5 of 6 included articles. Therefore, it cannot introduce bias and a false conclusion.

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