META-ANALYSIS THE EFFECT OF OBESITY ON POLYCYSTIC OVARY SYNDROME IN WOMEN OF REPRODUCTIVE AGE

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ABSTRACT

Background: Considering that insulin resistance is a major contributor to the pathogenesis of the polycystic ovary syndrome (PCOS), obesity exacerbates hormonal and clinical features of PCOS, and women with PCOS appear at higher risk of obesity. This study aimed to explore the effect of obesity on polycystic ovary syndrome in women of reproductive age.

Subjects and Method: A systematic review and meta-analysis was conducted by collecting articles from Google Scholar, PubMed, BMJ, ScienceDirect, SpringerLink, and Sage databases. The articles were filtered using PICO model, including: (1) Population= women of reproductive age, (2) Intervention= obesity, (3) Comparison= normal body weight, and (4) Outcome= PCOS. The inclusion criteria were full text, cross sectional or cohort studies, and reported adjusted odds ratio (aOR). The articles were collected using PRISMA diagram and the qualitative synthesis was assessed using Review Manager (RevMan 5.3).

Results: 4 studies were selected for qualitative synthesis using meta-analysis. This study showed that obesity in women of reproductive age increased the risk of PCOS 1.21 times than those with normal body weight (aOR= 1.21; 95% CI= 1.00 to 1.48; p= 0.050).

Conclusion: obesity in women of reproductive age increased the risk of PCOS 1.21 times than those with normal body weight.

Keywords: obesity, polycystic ovary syndrome, women of reproductive age

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