

Polycystic Ovary Syndrome: Impact of Lifestyle Modifications Among Overweight and Obese Infertile Women

Abstract

Background: Polycystic ovarian syndrome is one of the most common reasons contributing to female an ovulatory infertility. Due to its detrimental effects on menstruation, ovulation, pregnancy rates, and live birth rates, obesity which affects almost half of women with PCOS worsens infertility.

Aim of the study was to evaluate the effect of Lifestyle modification intervention among infertile overweight and obese women with polycystic ovary syndrome.

Subjects and Methods: Design: A quasi-experimental design was utilized in conducting the study. **Settings:** The study was conducted at gynecological and infertility outpatient clinics and inpatients and Specialized medical center for the treatment of infertility and delayed childbearing at Beni-Suef University Hospital.

Tools: A structured interview questionnaire, Lifestyle and habits characteristics, the Block Adult Physical Activity (PA) Screener and Follow-up card.

Results: It revealed that 72.4%% and 82% of the study group had poor and mild physical activity before the intervention, compared to 29.3% and 26% after intervention, respectively. 70.7% of the studied women were obese and had BMI ≥ 30.0 before intervention, compared to 34.5% after intervention. Additionally, 25.8%, 12.1%, and 30% of the study group had moderate acne, in stage III alopecia, and severe hirsutism before the intervention, compared to 12.1%, 3.4%, and 11.0% after intervention, respectively. Significant associations between hyper-androgenic features and lifestyle habits was found ($p < 0.001$). Moreover, 36.2% had positive pregnancy test after intervention. A highly statistically significant differences between dietary and physical activity habits after the intervention ($p < 0.001$) was found.

Conclusion: There were improvement in menstrual cycle irregularities, BMI, waist circumference, symptoms suggesting hyper-androgenic and improvements in fertility and ovulation after six months of the lifestyle modification intervention.

Recommendations: Lifestyle modifications in the form of diet and exercise should be placed as the first-line treatment for PCOS symptoms able to address clinical and metabolic characteristics

Keywords: infertility, obesity, lifestyle modification