## Effect of Life Style Modification Implemented Program Among Infertile Women with Poly Cystic Ovary Syndrome on Obesity and Menstrual Regulation

## Abstract

**Background:** Obesity raises the risk of sub-fecundity and infertility, which is mostly attributed to hypothalamic- pituitary-ovarian (HPO) axis dysfunction, low oocyte quality, and reduced endometrial receptivity. Another side effect of obesity is infertility, which is manifested by irregular menstrual cycles, lower spontaneous and aided pregnancy rates, and higher miscarriage rates. The risk of normal-gonadotrophic anovulation is increased by the distribution of body fat in the center and general obesity. Aim: evaluate the effect of life style modification implemented program among infertile women with poly cystic ovary syndrome on obesity and menstrual regulation. Subjects and Methods: A purposive sample of 116 women with polycystic ovary syndrome, overweight, and obesity, was selected. Results: It shows that 58.6% of the study and control groups had a 3–5-day duration of the menstrual cycle before the intervention, compared to 86.2% and 55.2% after the intervention. Also, 98.3% and 94.8% of the study group and control groups had irregular menstrual cycles before the intervention, compared to 60.3% of the study group having regular menstrual cycles and 51.7% of the control group having irregular menstrual cycles after the intervention. A significant association between the ovulatory function and physical activity level in the study group of infertile overweight and obese women with polycystic ovary. Conclusion and Recommendations: Life style modification implemented program positively affect menstrual cycle regularity and normal body mass index for infertile overweight and obese women. Disseminate results of the study to health care centers

*Keywords:* life style modification; poly cystic ovary syndrome; obesity; menstrual regulation