

Prevalence and Determinants of Polycystic Ovary Syndrome in Women Seeking Infertility Treatment: A Cross-Sectional Study

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Introduction

PCOS affects 5–20% of reproductive-aged women globally, is the leading cause of anovulatory infertility[1]. Obesity exacerbates PCOS by disrupting the HPO axis, worsening hormonal imbalances, and reducing oocyte quality, further impairing fertility[2]. This study examines the prevalence of PCOS and its association with demographic and lifestyle factors among women seeking infertility treatment.

Objective

This study aims to determine the prevalence of PCOS in women seeking infertility treatment and identify associated demographic and lifestyle factors that contribute to PCOS in this population.

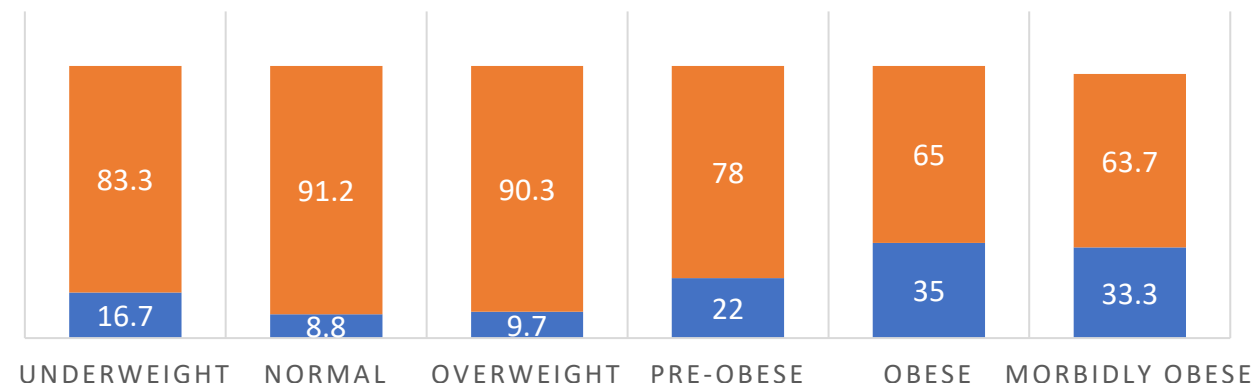
Materials and Methods

Study conducted at LTMGH's Fertility Clinic, involved interviews, clinical examinations, and data collection on medical history, lifestyle, BMI, physical findings, and hormonal profiles. Of 400 women screened, 304 were included in the final analysis, with PCOS diagnosed using Rotterdam criteria.

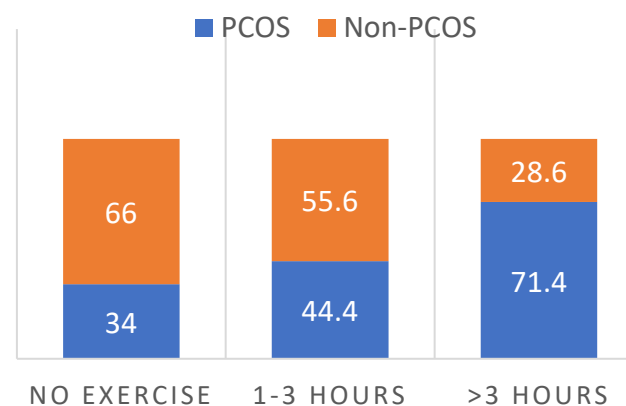
Results

The prevalence of PCOS was 29.2%, with rates increasing in line with BMI, reaching a peak in obese (35%) and morbidly obese (33%) groups, underscoring BMI as a significant risk factor. PCOS was notably more prevalent in individuals with hirsutism (66%) compared to those without (24%). Additionally, acne was more common in women with PCOS (62%) than those without (32%). Moderate exercise (1–3 hours/week) was associated with lower PCOS prevalence, while higher exercise levels (>3 hours/week) showed a modest increase in prevalence.

Prevalence of PCOS in Various BMI Categories



PCOS & Physical Activity



Conclusion

PCOS prevalence was 29.2% in women seeking fertility treatment. Higher BMI, acne and hirsutism were key determinants, while moderate exercise linked to lower prevalence. Exercise >3 hours/week showed higher prevalence, possibly due to information bias. Further research is needed to better understand these determinants.

References

1. Teede HJ, Misso ML, Costello MF, et al. International evidence-based guideline for PCOS. Hum Reprod. 2018;33(9):1602-18.
2. Fauser BC, Tarlatzis BC, Rebar RW, et al. Consensus on women's health aspects of PCOS. Fertil Steril. 2012;97(1):28-38.