

Association between Anthropometric Measurements and Fatigue, Stress, Anxiety, and Depression among Female Collegiate Students with Polycystic Ovarian Disease: A Cross-Sectional Study

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ABSTRACT

Introduction: Polycystic ovarian disease is among the most prevalent hormonal illnesses in young collegiate females. Aside from menstrual and reproductive problems, it is associated with weight gain, insulin resistance, and mental illness. Fatigue, stress, anxiety, and depression are common among women with polycystic ovarian disease, affecting their daily activity and academic performance. Anthropometric indicators, including body mass index, waist-hip ratio, and waist-to-height ratio, are easy but informative measures with which to examine the relationship between body composition and physical and psychological well-being.

Aim: This study examines the relationship between anthropometric measurements and fatigue, stress, anxiety, and depression in young collegiate females diagnosed with polycystic ovarian disease.

Materials and Methods: A cross-sectional correlational study will be carried out among 40 female students aged 18-25 years, who

were clinically diagnosed with polycystic ovarian disease for more than one year. The participants will be chosen by convenience sampling. Anthropometric data will be obtained in conjunction with validated questionnaires-the Fatigue Severity Scale (FSS) and Depression, Anxiety, and Stress Scale (DASS-21). Students with illnesses like thyroid conditions/diabetes or on drugs that influence their weight or cognition will be excluded.

Results: We expect that a higher BMI and central adiposity will correlate positively with increased fatigue, stress, anxiety, and depression scores.

Conclusion: By linking body composition with psychological well-being, this study aims to understand how polycystic ovarian disease affects young collegiate females, to promote early lifestyle changes and mental health support designed for this vulnerable group.

Keywords: Anthropometry, Body mass index, Waist-hip ratio

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