DO METABOLIC RISKS OF PCOS DIFFER BASED ON THE HEALTH SEEKING CARE FACILITIES OF GENERAL GYNAECOLOGY VS. SUBFERTILITY?

Murugathas V1*, Balendrarajah K1, Vijayakumar G1, Arasaratnam V1, Muhunthan K2

Introduction and Objectives:

Understanding the distribution of metabolic risk factors among women with Polycystic Ovary Syndrome (PCOS) under different clinical settings is vital to explore the links with risks of reproductive health, and overall well-being and to inform tailored interventions and enhance healthcare strategies for women with PCOS. Aim of this study was to assess the metabolic risk factors among women with PCOS attending different Clinics at Teaching Hospital, Jaffna.

Methods:

This descriptive cross-sectional study used a convenient sampling method. Women diagnosed with PCOS (n=125) during the visit to Gynaecology (Gyn) and Subfertility (SF) Clinics were recruited. Lipid profile, fasting blood sugar (FBS), anthropometric measurements and blood pressures (BP) were measured. Body Mass Index (BMI), Waist Hip Ratio (WHR), Waist Height Ratio (WHtR) & Visceral Adiposity Index (VAI) were calculated. Data analysis was carried out.

Results:

Study sample included women from Gyn clinics (n=35) and SF clinics (n=90) with the mean ages of $26.83(\pm6.61)$ and $29.87(\pm5.93)$ years respectively. Their BMI [$25.34(\pm4.22)$ & $28.68(\pm5.93)$ kg/m2, t=-3.34, p<0.001]; Waist Circumference [$80.20(\pm9.07)$ & $86.80(\pm15.31)$ cm, t=-2.97, p=0.004]; WHR [$0.88(\pm0.11)$, 0.88(±0.06), t=0.165, p=0.870)], WHtR [$0.51(\pm0.06)$, 0.57(±0.08), t=-3.80, p<0.001] and VAI [$1.96(\pm1.29)$, 1.99(±1.21), t=-0.123, p<0.920] showed significant differences. Whereas TC [$5.32(\pm1.11)$, 5.06(±0.80)mmol/L, t=1.446, p=0.151], TG [$1.16(\pm0.51)$, 1.11(±0.52)mmol/L, t=0.475, p=637], HDL[$1.20(\pm0.34)$, 1.11(±0.24)mmol/L, t=1.739, p=0.085], LDL[$3.60(\pm1.02)$, $3.45(\pm0.77)$ mmol/L, t=0.858, p=0.393], FBS [$5.17(\pm0.80)$, $5.06(\pm1.45$ mmol/L), t=-3.80, p=0.576] and Systolic BP [$113.11(\pm12.35)$, 116.99(±10.33 mmHg), t=-1.646, p=0.106], Diastolic BP [$76.00(\pm7.85)$, $75.79(\pm6.92)$ mmHg, t=0.139, p=0.890] showed no significant differences respectively.

Conclusions:

The magnitude of the metabolic risks in PCOS were in parallel with increasing age, suggesting the lifestyle modifications to be instituted from adolescence period.

¹ Department of Biochemistry, Faculty of Medicine, University of Jaffna, Sri Lanka

² Department of Obstetrics and Gynaecology, Faculty of Medicine, University of Jaffna, Sri Lanka