

## Demographic Variations Influence Obesity in a Semi-urban Cohort of Tamil Nadu, South India

S.Shajithanoop<sup>1</sup>, Tamilselvi Periyasamy<sup>2</sup> and M.V. Usha Rani<sup>1</sup>

<sup>1</sup>*Department of Environmental Sciences, Bharathiar University, Coimbatore 641 046, Tamil Nadu, India*

<sup>2</sup>*Obesity Clinic, Kovai Medical Centre and Hospital, Coimbatore 641 014, Tamil Nadu, India*

**KEYWORDS** Age Groups. Dietary Pattern. Edible Oils. Metabolic Syndrome

**ABSTRACT** This case control study identified certain definite factors influencing obesity and dyslipidemia in semi-urban subjects aged between 20 and 44 years of age. Obese cases ( $n=177$ ) and controls ( $n=166$ ) were recruited by random sampling method and categorised into three age groups. The mean BMI, WHR and TGL were highest in obese subjects aged between 37 to 44 years. The mean TC levels (181.43 mg/dl) and mean TGL levels (180.29 mg/dl) were higher in vegetarians than in non-vegetarians. Further, the mean TGL levels (183.86 mg/dl) were highest in subjects who used hydrogenated vegetable oil as a cooking medium. TGL was derived as the most significant variable for dyslipidemia in the study cohort ( $r^2=0.838$ ), with WHR, alcoholism, smoking, TC, LDL, HDL, FBG, and LDL/HDL ratio as predictor variables.