

Prevalence of Metabolic Syndrome in the Southern Cone of Latin America

Irazola V, Rubinstein A, Lanas F, Calandrelli M, Olivera H, Ponzo J, Poggio, R, Gutierrez L, He Jiang

Southern Cone American Center for Cardiovascular Health (CESCAS/SACECH)
Institute for Clinical Effectiveness and Health Policy (IECS), Buenos Aires, Argentina

Background and Objectives: Metabolic syndrome (MS) is characterized by a clustering of metabolic risk factors, including central obesity, glucose intolerance, hypertension, and atherogenic dyslipidemia, which contribute to type 2 diabetes (DM) and cardiovascular disease (CVD). The Southern Cone of Latin America (SCLA) is undergoing a large change in lifestyle factors with an increasing prevalence of MS, for which prevalence studies are urgently needed. We aimed to estimate the prevalence and distribution of MS in the general adult population of the SCLA.

Methods: We conducted a population-based cross-sectional study in a multistage probabilistic sample of 7,600 subjects aged 35-74 yrs old from 4 cities of the SCLA: Bariloche and Marcos Paz (Argentina), Temuco (Chile) and Canelones (Uruguay). MS was defined according to the NCEPATP III (2005), ≥ 3 of: waist circumference ≥ 102 cm for men or ≥ 88 cm for women; high triglyceride (≥ 150 mg/dl) or hypolipidemic treatment; reduced HDL-cholesterol (< 40 mg/dl for men or < 50 mg/dl women or specific treatment, and high systolic BP (≥ 130 mm Hg) or diastolic BP (≥ 85 mm Hg) or antihypertensive treatment; fasting glucose ≥ 100 mg/dl or self-reported DM.

Results: Of the adult population aged 35-74 yrs, 40.6 % (39.6% in men and 41.9% in women) had Metabolic Syndrome (Marcos Paz: 42,7%; Bariloche: 38,3%; Temuco: 44,3%; and Canelones: 38,6). The age-specific prevalence of Metabolic Syndrome was 28.2 %, 40.9%, 50.6 %, and 55.3% among persons who were 35-44, 45-54, 55-64 and 65-74 years of age, respectively.

Conclusions: We found a high prevalence of Metabolic Syndrome across the study populations in the SCLA. The prevalence of Metabolic Syndrome varied among sites and increased with age. These findings emphasize the urgent need to develop public health strategies for the prevention, detection, and treatment of metabolic syndrome, to reduce the societal burden of CVD and type 2 DM in the SCLA.

Keywords: metabolic syndrome; diabetes; cardiovascular risk factors