PREVALENCE OF METABOLIC SYNDROME AMONG FILIPINO ADULTS AGED 20 YEARS AND OVER

CELESTE C. TANCHOCO, ARSENIA J. CRUZ, CHARMAINE A. DUANTE AND AUGUSTO D. LITONJUA, MD

This study sought to determine the prevalence of metabolic syndrome, using data collected from 4,541 adults aged 20 years and over, covered in the Fifth National Nutrition Survey conducted in 1998. The metabolic variables analyzed were: total cholesterol, low-density lipoprotein cholesterol (LDL-c), high density lipoprotein cholesterol (HDL-c), triglycerides and fasting blood glucose. Measurements of obesity such as body mass index (BMI), waist-to-hip ratio (WHR) and waist circumference (WC) as well as blood pressure were taken.

Comparison of the mean metabolic characteristics between male and female adults in the non-obese, total obese and the android obese, revealed significant differences in almost all variables except for the HDL-c. Non-significant differences were observed between males and females in the non-obese group in terms of the BMI and glucose levels, and in the android group, in terms of cholesterol. In all three groups, the biggest difference was observed in the mean triglycerides, where males had significantly higher mean values than the females.

Among adults with >125 mg/dL fasting blood sugar (FBS), higher rates of hypertension, higher WHR, higher cholesterol, high triglycerides, high HDL-c, low HDL-c, were noted among the overweight and obese than among those with normal BMI. The proportion of subjects with co-morbid factors increased with increasing levels of FBS, except for cholesterol, where no pattern was established. The highest prevalence of hyperglycemia was found in both males (35.8%) and females (14.5%) with the following combined characteristics: high BMI, high WHR and high WC. Males with co-existing high BMI, high WHR, and high WC were observed to have the highest prevalence rate of hypertension (66.5%). Among females, the highest prevalence rate of hypertension (37.9%) was seen among those with high FBS. The proportion of subjects with hypertension generally increased with age irrespective of the BMI status. The prevalence rate of metabolic syndrome is 0.28%, based on the number of individuals with high FBS, are hypertensive, are android obese, with BMI of >25.0 and with high WC. Males had almost twice the metabolic syndrome than females.

Considering that metabolic syndrome, with its co-morbidity factors, is prevalent among Filipino adults, aged 20 years and over, it is recommended that health programs geared towards minimizing the morbidity risk factors be properly developed, promoted and fully implemented.