Metabolic syndrome among adults in Sri Lanka-urbanization snd sedentary lifestyles driving the epidemic

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Abstract :

Background: Metabolic syndrome has been defined as an entity with clustering of cardiovascular risk factors. There was no countrywide data on metabolic syndrome for Sri Lanka. We aimed to determine the prevalence of metabolic syndrome among adults in Sri Lanka.

Methodology: We recruited a nationally representative sample of 4532 adults (above 18 years) in seven out of nine provinces in Sri Lanka by a random cluster sampling technique. Data collection was carried out using a pre-tested questionnaire. Metabolic syndrome and central obesity was diagnosed according to the International Diabetes Federation criteria.

Results: Mean age 46 years (+/- 15) and males 40%. The overall incidence of metabolic syndrome was 18.7% (17.6-19.8); females 23.6% (22.0-22.2) males 11.1% (9.7-12.6) ; P< 0.001. The metabolic syn9rome was higher among the urban (28.7%; 25.2-31.4) compared to rural (17.1%; 15.9-18.3) and plantation (5.9%; 2.7- 9.1) populations. There was a negative correlation between the physical activity and metabolic syndrome (r =-0.14; p< 0.001). The metabolic syndrome was 27.7% (23.8-31.6),24.2% (21.9-26.5) and 14.3% (13.0- 15.6) among the groups with insufficient, moderate and highest levels of physical activity (p<0. .001). The individual components of metabolic syndrome among males and females were central obesit/'31% vs. 60% (p<0. 001); dysglycaemia 31% vs. 30% (p=0.7); low HDL-C37% vs.65% (p 0.001); elevated triglycerides 27% vs. 20% (p=0.1); elevated blood pressure 48% vs. 43% (p=0.2).

Conclusions: About one in five adults is affected with the metabolic syndrome in Sri Lanka. It is highest among the least active and urban populations. The prevalence is higher among females.