



Full length article

Prevalence of metabolic syndrome among elderly Mexicans



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ABSTRACT

Background: One of the most prevalent chronic diseases among elderly population is the Metabolic Syndrome (MetS). The aim of this study was to assess the prevalence of MetS and associated factors among Mexican elderly people.

Subjects: Cross-sectional survey carried out in Mexico (2007). A random sample (n = 516) of the elderly population (≥65 years; 277 female, 239 male) was interviewed. Anthropometric and analytical measurements, and a general questionnaire incorporating questions related to socio-demographic and life-style factors were used. MetS definition AHA/NHLBI/IDF was applied.

Results: The prevalence of MetS in the elderly (≥65 years) was of 72.9% (75.7% men; 70.4% women). Participants with values above MetS cut-off points were 92.4% (hypertension), 77.8% (hypertriglyceridemia), 77.1% (low HDL-cholesterol), 71.1% (hyperglycaemia), and 65.4% (central obesity). People with MetS showed higher values of anthropometric and biochemical variables than those without MetS, except for the height, cholesterol and creatinine. Mid-high education level (9–12 years), no smokers and former smokers, and Central-Western inhabitants of Mexico were associated with MetS components. BMI status was the main determinant of MetS prevalence and MetS components.

Conclusion: The reported prevalence of MetS among the elderly Mexican population was higher than those previously obtained in the geographical area, showing a major public health problem in Mexican elders.

1. Introduction

Elderly population is growing worldwide faster than other population segment; currently, one in ten persons is ≥60 year old, and by 2050 there will be one in three persons (UN Population Fund, 2011). The highest percentage of elderly people is found in the developed countries, but elderly population is also growing fast in developing countries. A wide knowledge of the aging demography will give a broad overview of matters related to elderly (i.e.: chronic degenerative and emotional illnesses, disabilities, and social problems), allowing to develop actions enough to provide adequate health care and quality of life in this life stage.

One of the most prevalent chronic diseases among elderly

population is the Metabolic Syndrome (MetS), which has become a challenge in public health due to its relationship with diabetes mellitus type 2 and cardiovascular diseases, the most prevalent diseases in Mexico (Grover, Malhotra, Chakrabarti, & Kulhara, 2012). MetS prevalence usually ranges between 1.6% and 15%, and can increase up to 50% when BMI ≥35; however, in elderly people MetS can reach 43% (Pard et al., 2003). MetS may be due to genetic predisposition (González et al., 1999; Stern et al., 1991), overeating and a sedentary lifestyle (Low, Chin & Deurenberg-Yap, 2009; WHO, 2000) as well as sex, age, geographic location, educational level (Loucks, Rehkopf, Thurston, & Kawachi, 2007).

In Mexico, ≥65 year old people are currently 14% of the whole population (Miera-Camino, 2009). The Mexican Institute of Social

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