PREVALENCE OF OBESITY AND ASSOCIATED CO-MORBID CONDITIONS IN A POPULATION-BASED SAMPLE OF PRIMARILY URBAN MEXICAN AMERICANS

Objective: To estimate the prevalence and risk factors of obesity in a sample of primarily urban Mexican Americans (the fastest growing segment of the US population), and to examine the association between obesity and co-morbid conditions.

Methods: Subjects were participants from a cross-sectional, population-based prevalence study. Data were collected on 6038 non-institutionalized self-identified Latinos of primarily Mexican American ancestry age ≥40 years from six census tracts in Los Angeles County, California. Obesity was defined having a body mass index ≥30.0 kg/m².

Results: The overall prevalence of obesity was 50% (females 54% vs males 43%, P<.0001). Stepwise logistic regression analyses revealed that obesity was positively associated with being a former smoker (OR 1.5, P=.0009), being unemployed (OR 1.5, P<.0001), and with female sex (OR 1.3, P=.02). Obesity was negatively associated with being single or divorced (OR 0.8, P=.014), being a current smoker (OR 0.6, P<.0001), and with age ≥70 years (OR 0.4, P<.0001). After adjusting for sex and age, obesity was significantly associated with the following systemic co-morbidities: hypertension, heart failure, arthritis, diabetes, angina, back pain, and asthma (P<.01).

Conclusion: Because of the high prevalence of obesity and its associated systemic co-morbidities, an evaluation of current intervention programs is needed to determine the most effective approach to help decrease the prevalence of obesity and the risk of associated co-morbidities in this the fastest growing segment of the US population. (Ethn Dis. 2006;16:362–369)

Key Words: Body Mass Index, Mexican American Latinos, Obesity, Waist Circumference

INTRODUCTION

Obesity, relative to normal weight, is associated with medical conditions such as type 2 diabetes mellitus, gall-bladder disease, coronary heart disease, high blood pressure, osteoarthritis, and certain types of cancer. In addition, obesity increases the risk of death from any cause for both men and women. The healthcare costs related to obesity have been estimated for several countries: in the United States the direct costs of obesity are higher (7% of the total US healthcare cost) than other countries in the developed world, including France and Australia (2%) and the Netherlands (4%). Recently, Sturm et al compared the dollar costs for inpatient and ambulatory care in persons with obesity to those individuals who smoke and drink and to aging adults. They reported that obesity was associated with a 36% increase in both inpatient and outpatient spending and with a 77% increase in medications, compared with a 21% increase in inpatient and outpatient spending and a 28% increase in medications for current smokers. Sturm et al also reported a stronger association between obesity and chronic medical conditions (such as diabetes, cancer, or heart disease) than between smoking and these same conditions.

When stratified by ethnicity, prevalence in Mexican Americans was higher (34%) than that seen in non-Hispanic Whites (28.7%) (NHANES 1999–2000).

Data from the National Health and Nutrition Examination Survey (NHANES 1999–2000), a nationally represented sample of the United States population, revealed that the prevalence of obesity among adults continues to increase dramatically, with higher prevalence among Mexican Americans compared to non-Hispanic Whites. The age-adjusted prevalence of obesity in adults age ≥20 in the United States increased overall from 23% (NHANES III, 1988–1994) to 31% (NHANES 1999–2000). When stratified by ethnicity, prevalence in Mexican Americans was higher (34%) than that seen in non-Hispanic Whites (28.7%) (NHANES 1999–2000). This continuing increase in obesity has not only become a major public health issue but also a challenge facing health professionals.

As an ancillary study of the Los Angeles Latino Eye Study (LALES), a population-based prevalence study of general health and eye disease among primarily noninstitutionalized adult Mexican Americans age ≥40 years living in the city of La Puente, in Los Angeles County, we examined the prevalence of obesity, associated risk

From the Departments of Preventive Medicine and Ophthalmology (RV) and the Statistical Consultation and Research Center, Department of Preventive Medicine (MT, SA), Keck School of Medicine, University of Southern California, Los Angeles, California.

* See Appendix for members of the LALES Group.