ASSOCIATION BETWEEN SELECTED UNHEALTHY LIFESTYLE FACTORS, BODY MASS INDEX, AND CHRONIC HEALTH CONDITIONS AMONG INDIVIDUALS 50 YEARS OF AGE OR OLDER, BY RACE/ETHNICITY

Objective: To examine the association between selected unhealthy lifestyle factors, body mass index (BMI), and chronic conditions among individuals 50 years of age or older, by race/ethnicity.

Design: We analyzed 2001–2004 data from the Behavioral Risk Factor Surveillance System (BRFSS), a state-based system of annual random-digit-dialed telephone surveys.

Participants: Noninstitutionalized US adults aged 50 years or older with landline telephones.

Results: Of 442,167 BRFSS respondents who met our study criteria, 81.6% were non-Hispanic (NH) White, 8.4% were NH Black, 1.6% were NH Asian, 1.0% were NH American Indian, and 7.4% were Hispanic. Within each racial/ethnic group, weight status as measured by BMI was strongly associated with all five health conditions examined and particularly with diabetes, hypertension, and doctor-diagnosed arthritis. Among NH Whites and NH Blacks, those who were overweight or obese were significantly more likely than those of normal weight to have diabetes (NH Whites: adjusted odds ratio [AOR] = 1.94 and 5.25, respectively; NH Blacks: AOR = 1.87 and 3.36, respectively). Among obese NH Asians, NH American Indians, and Hispanics, the AORs for diabetes were 3.97, 4.15, and 2.67, respectively. The AORs for hypertension among those who were overweight and obese, respectively, were 1.78 and 3.47 among NH Whites; 1.65 and 2.98 among NH Blacks, 1.91 and 7.14 among NH Asians, 2.00 and 2.65 among NH American Indians, and 1.48 and 3.20 among Hispanics.

Conclusions: Our study revealed a strong association between BMI and risk for chronic health conditions among individuals 50 years of age or older in all racial/ethnic categories. It is important to use messages that are culturally appropriate when planning or conducting health promotion campaigns for selected ethnic/racial groups. In addition, careful research to document health status and healthcare needs within each major ethnic group is needed. (Ethn Dis. 2008;18:450–457)

Key Words: Health Behavior, Behavioral Risk Factor Surveillance System, Ethnic/racial Group

INTRODUCTION

Chronic diseases such as heart disease, hypertension, diabetes, and asthma are highly prevalent and are associated with an increased risk for disability among individuals of all racial/ethnic groups (albeit to varying degrees) in the United States.1–2 Racial/ethnic disparities, however, have been found in the prevalence of various risk factors for chronic diseases, including smoking, obesity, and physical inactivity.3 Studies have also shown race/ethnicity to be associated with the prevalence of unhealthful behaviors even after adjustments for covariates such as age, education, and income.4–5 The burden of chronic disease in the United States is expected to continue to increase over the next several years due to the aging of the US population, an increased life expectancy, and the obesity epidemic.6–7 For example, the number of persons living with two or more chronic conditions is projected to increase from 61 million in 2000 to 81 million in 2020 (a 33% increase).5

Moreover, minimal progress has been made in reducing existing racial/ethnic disparities in the prevalence of chronic diseases and their attendant risk factors, as well as their progression to disability, over the past decade.2,8 As a result, the elimination of racial/ethnic disparities in the prevalence of chronic diseases, in the prognoses of those affected by chronic diseases, and in access to care has assumed high priority among US health officials, as evidenced by many of the Healthy People 2010 objectives.9 In order to develop appropriately targeted health promotion and intervention activities, it is critical to examine the association between chronic conditions, modifiable lifestyle factors, and obesity by race/ethnicity. Thus, our objective in this study was to examine the association between three unhealthy lifestyle factors (smoking, alcohol consumption, and physical inactivity), body mass index (BMI), and five chronic health conditions (diabetes, asthma, hypertension, hypercholesterolemia, and arthritis), among individuals ≥50 years of age by race/ethnic group.

METHODS

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based surveillance system operated by state health departments with assistance from the Centers for Disease Control and Prevention. The BRFSS collects data on many of the behaviors and conditions that place adults (≥18 years of age) at risk for chronic disease. Trained interviewers collect data monthly using an independent probability sample of US households with telephones in which at least one adult resides. Data from all states are pooled to produce nationally