Obesity in relation to lifestyle behaviors and chronic conditions among adults: 2005-2010 Texas Behavioral Risk Factor Surveillance System

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Background

Obesity is an increasingly common and a serious health challenge in Texas. From 11th place in 2005, Texas has moved to the 6th highest in 2010 in prevalence of obesity among adults in the U.S. Obesity is a major risk factor for development and progression of hypertension and diabetes and coronary heart disease, stroke, dyslipidemia, osteoarthritis and certain cancers. Obesity-related costs for Texas businesses were $9.5 billion in 2009.

Objective

To examine the prevalence of obesity among Texans in relation to lifestyle behaviors and chronic conditions from 2005 to 2010 using Texas Behavioral Risk Factor Surveillance System (BRFSS).

Methods

Texas BRFSS data were analyzed from 2005 to 2010. Prevalence of obesity was examined by demographics, risk behaviors and comorbidities. Data on physical activity, fruits and vegetables (F&V) and sugar-sweetened beverage (SSB) consumption, hypertension and high blood cholesterol were available in limited number of years. Survey means procedure was run using SAS 9.2 software.

Results

In 2010, the prevalence of obesity in Texas was 31.7%, significantly higher than the national average 28.9%. Within Texas, higher prevalence of obesity was observed in Public Health Regions 4/5 North (33.5%) and 11 (35.1%).

- Prevalence of obesity increased significantly from 27% in 2005 to 31.7% in 2010 among adults in Texas. From 2005 to 2010, the obesity prevalence increased 7.3% among Hispanics and African-Americans and 3.4% among Whites.

- Prevalence of obesity among inactive adults increased from 33.6% in 2005 to 41.4% in 2009 and it increased from 26.9% in 2005 to 30.8% in 2009 among adults who ate less than 5 servings of fruits and vegetables.

- Sugar-Sweetened Beverages (SSBs) provide few nutrients yet they are the largest source of added sugar and calories in the U.S. diet.

- In 2010, obesity was significantly higher among adults who drank SSB two or more times a day (35.9%) than adults who drank none (29.7%).

- Among adults with diabetes, obesity prevalence increased from 32.3% (in 2005) to 42% (in 2010).

- Among adults with CVD, obesity prevalence increased from 32.3% (in 2005) to 42% (in 2010).

- African-American adults (48.5%) reported a significantly higher prevalence of viewing 4 or more hours of any type of screen outside of work time than either Whites (33.1%) or Hispanics (19.8%).

- In the U.S., television viewing is the third most time-consuming activity (after sleep and work) and the leading contributor to sedentary behavior.

Conclusion

Obesity is consistently increasing and a critical public health issue in Texas. Disparities in obesity prevalence are observed among race/ethnicity subgroups and geographic region. The prevalence of obesity is highest among adult Texans who are inactive, drink two or more SSB per day and have 4 or more hours of screen time outside of work. Obesity coexists with chronic conditions and is highly associated with diabetes, hypertension and cardiovascular diseases.

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