



# Clinical Digest

ONLINE EDITION

## WEIGHT MANAGEMENT

### Quality-of-Life Consequences of Obesity

We often know the fairly obvious ultimate toll obesity takes on the body, as the prevalence of obesity and obesity-attributable deaths has been examined—but what about measuring the long-term effect on quality of life? There are limited data that provide information on obesity's resultant burden of disease.

Using health-related quality-of-life data, researchers from The City College of New York and Columbia University, both in New York, New York, examined trends in the burden of obesity by estimating the obesity-related quality-adjusted life years (QALYs) lost to morbidity and premature death among U.S. adults. They also examined the differences by gender, race/ethnicity, and state.

The data were obtained from the 1993–2008 Behavioral Risk Factor Surveillance System (BRFSS), which had a total sample size of 3,590,540 adults (all of whom were aged 18 years and older from each of the 50 states and the District of Columbia). In the BRFSS, participants reported

the number of days in the past 30 days when their physical health was not good, when their mental health was not good, and when their activity was limited as a result of physical or mental conditions. Participants' responses were converted to EQ-5D scores to calculate QALYs.

The researchers found that from 1993 to 2008, the prevalence of obesity among U.S. adults changed from 14.1% to 26.7%—an 89.9% increase. Over this same 16-year period, QALYs lost due to obesity more than doubled. Overall, obesity-related QALYs lost per person increased approximately 127% (0.0204 QALYs lost per person in 1993; 0.0464 lost per person in 2008).

Increases were seen in every ethnic subgroup and in both genders. However, when compared with white adults, black adults had a much higher prevalence of obesity and lost more QALYs to obesity. Of the subgroups, black women lost the most QALYs (about 31% higher than those lost in black men and about 50% higher than those lost in both white women and white men).

Among white men, more than 70% of total obesity-related QALYs lost were due to mortality—the loss due

to mortality increased nearly twice as fast as did the loss due to morbidity. Among white women, more than 50% of total QALYs lost were due to morbidity—the loss due to morbidity increased much faster than did the loss due to mortality over the 16-year period. The trend in QALYs lost due to mortality and morbidity in black women was similar to the trend among white women. The researchers found a different trend among black men: QALYs lost due to morbidity remained relatively unchanged (the lowest number among the 4 demographic subgroups during the study period) yet black men had the largest percentage (more than 70%) of total obesity-related QALYs lost due to mortality.

The researchers also found a strong positive relationship between the proportion of each state's population reporting no leisure-time physical activity and obesity-related QALYs lost in each state—for every percentage of a state's adult population reporting no leisure-time physical activity, an additional 0.0011 QALY was lost per state population. ●

Source: *Am J Prev Med.* 2010;39(3):220–227.  
doi: 10.1016/j.amepre.2010.03.026.