EFFECTS OF SOCIOECONOMIC FACTORS ON OBESITY RATES IN FOUR SOUTHERN STATES AND COLORADO

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Abstract: Overweight and obesity are among the leading causes of mortality and morbidity worldwide. United States had witnessed a significant increase in the prevalence of obesity during the past three decades. Body mass index (BMI) defines people as obese when it is greater than 30 kg/m². The rising obesity trend has been shown to be associated with the higher consumptions of less nutritious food and reduction in physical activity. According to the Center for Disease Control and prevention, the state of Mississippi has the highest rates of obesity in the nation (33.4 %, in 2010). In the present study, the associations between the increase in BMI and socioeconomic factors, such as the income level, percent of people below poverty, unemployment rates and the rates of persons receiving food stamps benefits in the states of Mississippi, Alabama, Louisiana, Tennessee and Colorado have been studied. Data from Behavioral Risk Factor Surveillance System, US Department of Agriculture and US Department of Labor/ Bureau of Labor were obtained and analyzed from 1995-2008. Results from this study showed a strong association between obesity and the tested socio economic variables ($R^2 = 0.767$). Increasing percent of people below poverty, the percent of people receiving food stamps, rates of unemployment, and income level contribute towards the higher rates of obesity by 43.8 %, 42.7%, 10.3 % and 1.8 % respectively. The highest rates of obesity were found in Mississippi (26.5 ± 4.13 %) followed by Alabama (25.18 ± 4.41%), while Colorado had the lowest rates of obesity (15.4 ± 2.63 %). African American showed the highest obesity rates in all states with the highest rates in Mississippi (35.5 ± 5.08 %). This study shows a significant effect of consumption of low quality food due to economic factors on higher BMI. To maintain a healthy weight, a balance between energy intake and burning of calories should be balanced. The large racial/ethnic differences in the prevalence of overweight and obesity suggests that appropriate approaches are needed in promoting healthful eating in fighting the obesity epidemic.

Key words: Obesity, BMI, poverty, unemployment, food stamps

Acknowledgement: The project described was supported by Grant Number G12RR013459 from the National Center of Research Resources.