

Crooked Creek Community: An Analysis of Physical Activity and Weight

Elizabeth Richards, MSN, RN, CHES
Clinical Assistant Professor, Purdue University School of Nursing

Need for the Study

Obesity and physical inactivity are major health threats in today's society. An estimated 65 percent of U.S. adults aged 20 years and older are either overweight or obese (1).

Obesity is associated with an increased risk of cardiovascular disease, diabetes, hypertension, and other chronic illnesses. The Centers for Disease Control and Prevention estimated obesity-attributable health care costs at \$75 billion, of which about half was publicly financed (2).

According to the Surgeon General, less than one half of the United States population participates in physical activity that is sufficient enough to reduce health risk (1). Physical inactivity is a major contributor to health problems and requires multilevel community based efforts to help reduce the epidemic of overweight and obesity.

Methods

This descriptive study was based on data collected for a community health assessment that was conducted during the fall of 2005. The assessment included self-reported data of behaviors and resources associated with physical activity and weight. IRB approval was obtained through Indiana University Purdue University at Indianapolis's Research & Sponsored Programs department.

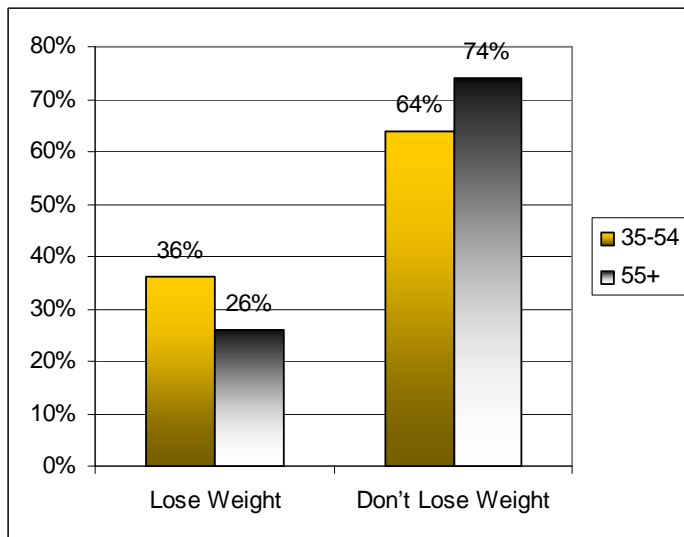
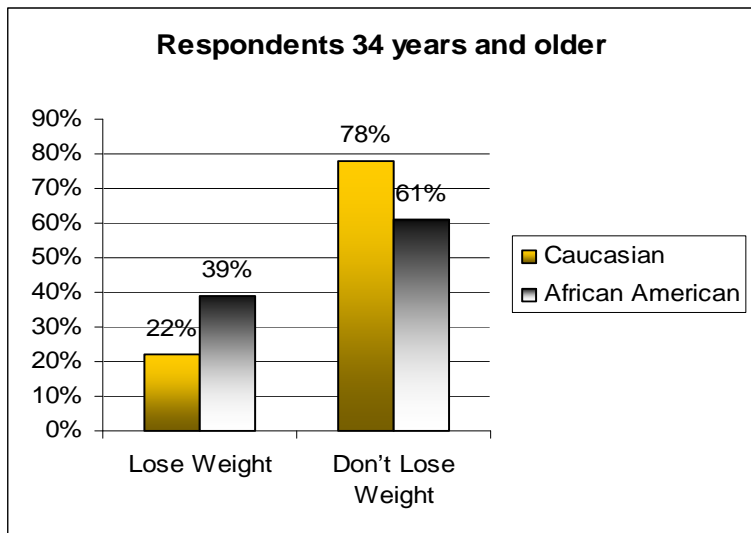
The survey consisted of 42 questions with likert-type response formats, 4 short answer questions, and 15 yes/no questions. Questions considered in this study focused on personal, organizational, and community environment factors, along with weight counseling, and exercise frequency.

Sample

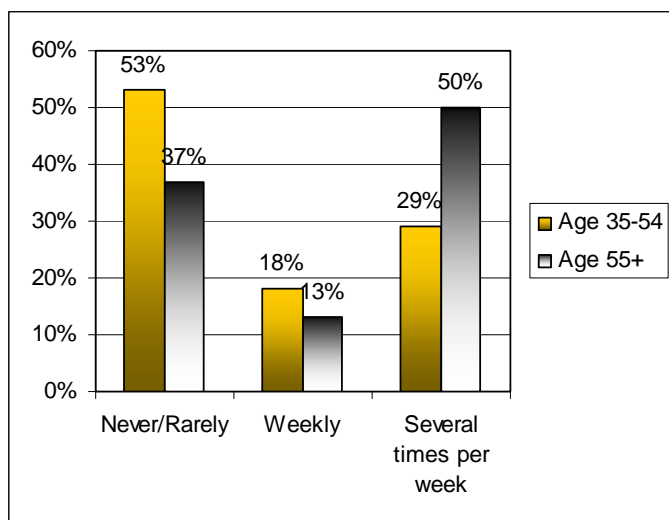
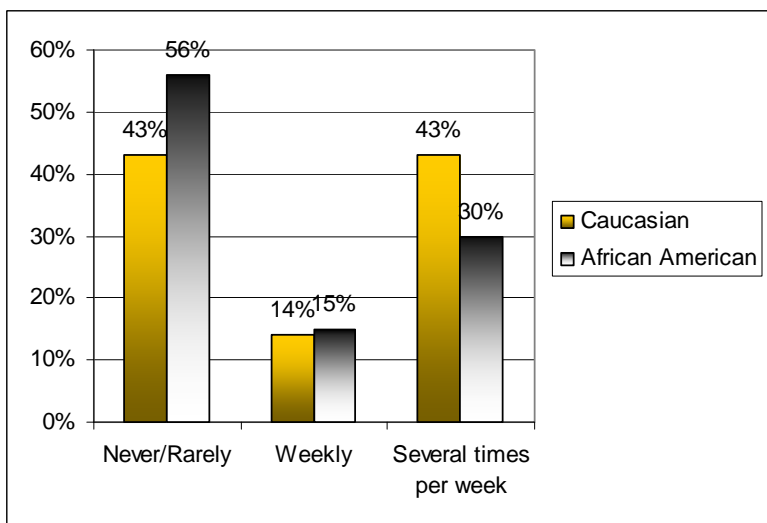
Seventy-eight percent of respondents were female. Half the sample was African American and 39% were Caucasian. Forty-one percent of the sample was between 18-34, 34% was between 35-54, and 25% was 55 and over. A majority of respondents had a lower socioeconomic status with 48% reporting a household income of less than \$20,000. Furthermore, 17% were Medicaid recipients and 15% were uninsured.

Surveys were mailed to all residents in two purposively sampled census tracts and were available at the local multi-service center. The surveys collected data regarding local community members, housing, healthcare, environment, and social services. 3,956 surveys were mailed and 293 surveys were returned total, consisting of 106 completed at the multi-service center and 187 returned in the mail.

Responses on Weight Counseling



Responses on Exercise Frequency



Discussion

We found that young African Americans were most likely to be counseled to lose weight and least likely to exercise. Also, regardless of race, those age 35-54 were the least physically active. Furthermore, those who exercised the least were most likely to report that new parks were needed. These findings inform community interventions based on an ecological framework. Interventions should include targeting at risk individuals and environmental improvements needed to encourage physical activity.

This study provides data about a community with a lower socioeconomic status. Community members are less likely to implement their own interventions such as joining a gym due to cost restraints. Therefore, it is necessary to determine what broad environmental interventions could be feasible for this community. This study described how surveying the needs and behaviors of a community can inform the development of social ecological interventions for weight reduction and physical activity promotion tailored to the specific needs of the community.

References and Acknowledgement

- 1) Center for Disease Control and Prevention. (2003). National Health and Nutrition Examination Survey. Retrieved February 26, 2007 from <http://www.cdc.gov/nchs/nhanes.htm>.
- 2) Finkelstein, E., Fiebelkorn, I., & Wang, G. (2004). State-level estimates of annual medical expenditures attributable to obesity. *Obesity Research*, 12, 18-24.

The author would like to acknowledge Dr. Mary Beth Riner, DNS, RN, Assistant Professor, Department of Environments for Health at Indiana University Purdue University at Indianapolis as the principle investigator of the data collection and Dr. Laura P. Sands, Phd, Professor Purdue University School of Nursing for her help in data analysis.