

Nutrition and Obesity – Childhood Obesity

Jennifer McCord Anderson, Katherine Cosulich, Saeed Elojeimy, Juan Faja-Fernandez, Linnea Freeman, Shola Gates, Catherine Ling, Kathryn Willoughby, Matthew Yousefzadeh
Advisors: Dr. Scotty Buff, Laura Cousineau, Dr. Valerie West

Medical University of South Carolina Presidential Scholars Program 2007-2008

Introduction

The purpose of this study is to understand childhood obesity, ways to prevent this disease and improve health. Fraser Elementary, where the Junior Doctors of Health Program began, is located in downtown Charleston, SC, and served as our community-based model for the study.

Childhood Obesity Overview

Prevalence:

- The childhood obesity rate has tripled in the last 30 years.
- In 2006, 16% of the nation's youth were labeled clinically obese.
- SC was ranked 7th in the 2004 HHS study on youth obesity.

Prevention

Prevention Needs

- Advocacy for physical education programs
- Collaboration between nutrition, behavioral health, physical therapy, and exercise physiology professions for treatment
- Efforts are needed to ensure adequate health coverage for prevention and treatment services

Barriers to Prevention

Lack of:

- Resources
- Faculty
- Interprofessional Collaboration
- Funding/Reimbursement



Professional Recommendations

- Pediatric referral centers need to develop specialized programs for treatment, prevention and research.
- Universal health care coverage and reimbursement for preventive services and obesity/weight loss treatment.
- Transdisciplinary health education regarding behavioral risks for obesity and health-promoting therapeutic lifestyle counseling.
- Revise Medicaid and Medicare regulations to provide incentives and goals for nutrition and obesity counseling.

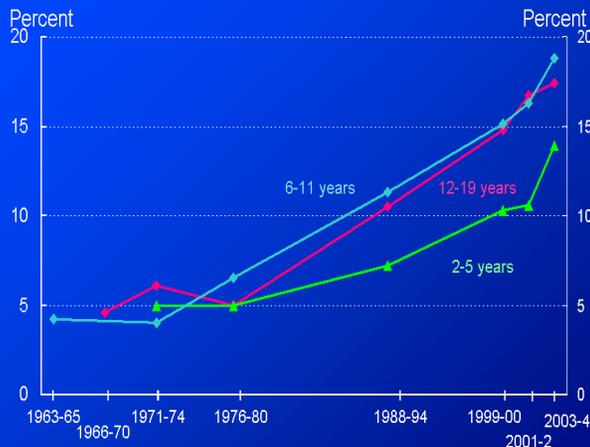
A Multifaceted Approach

Individual Effort	Parents promoting the importance of healthy eating to children at a young age.
Provider Effort	Increase diagnosis of childhood obesity: Rate of diagnosis is low compared to number of children that meet the criteria
Payer Effort	Provide coverage for nutrition counseling and obesity interventions.
Community and Policymaker Effort	Reduce the cost of healthy food choices in schools and raise taxes on unhealthy snack items. Implement school-based interventions.

Modifiable Risk Factors:

- Diet
- Inactivity
- Psychological factors
- Family social factors

Trends in Child and Adolescent Overweight



Note: Overweight is defined as BMI \geq gender- and weight-specific 95th percentile from the 2000 CDC Growth Charts.
Source: National Health Examination Surveys II (ages 6-11) and III (ages 12-17), National Health and Nutrition Examination Surveys I, II, III and 1999-2004, NCHS, CDC.

<http://www.cdc.gov>

Conclusions

- Based upon our research, school-based programs are the most successful way to combat childhood obesity. Teacher, families, and health professionals play an integral part in this intervention.
- Develop tools to assess the progress of the intervention and then enact changes to strengthen the school-based program
- A critical lesson learned during the project was that it is imperative to develop a good working relationship with the community you are studying. This is not an overnight process and takes constant work to maintain this vital bond.