

Preliminary Outcomes of a Community-Based Participatory Research Project Targeted Toward the Prevention of Adolescent Obesity

¹Tandalayo Kidd, PhD, RD, LPN, ¹Erika Lindshield, MPH, RDN, LD, ²Kendra Kattelman, PhD, RD, LN, ³Susan Zies, M.Ed, ⁴Koushik Adhikari, PhD, ⁵Nancy Muturi, PhD

¹Food, Nutrition, Dietetics and Health, College of Human Ecology, Kansas State University; ²Health and Nutritional Sciences Department, South Dakota State University; ³College of Food, Agricultural, and Environmental Sciences, The Ohio State University; ⁴Department of Food Science and Technology, University of Georgia; ⁵A.Q. Miller School of Journalism and Mass Communication, Kansas State University

Abstract

Objective: To develop a community-based program that targets overweight and obesity prevention among adolescents in limited resource, minority communities.

Description: Summary of analyzed data for a tri-state, quasi-experimental project including six communities (one control and one intervention community from each state) who are responsible for creating and implementing one nutrition and one physical activity program addressing overweight and obesity among 6-8th grade youth.

Evaluation: Mixed methods approach used in collecting community food and physical activity environmental data, student health behavior questionnaire data, intervention community focus group data and community panel transcripts.

Conclusion and Implications: Identify a potential framework for creating community-focused, sustainable and effective adolescent obesity prevention programs.

Project Objectives

- Identify behavioral and environmental factors of overweight/obesity in target population
- Increase dietary fruit and vegetable consumption
- Decrease solid fat and added sugar consumption
- Increase physical activity
- Assist communities in identifying factors that influence overweight and obesity in 6th-8th grade youth
- Assist communities in creating an environment and promote change in the environment that will prevent overweight and obesity among 6th-8th grade youth

Methods & Evaluation

- Baseline and post intervention food and physical activity (PA) environmental assessments using the Nutrition Environment Measures Survey (NEMS-Stores & NEMS-Restaurants) and Physical Activity Resource Assessment (PARA) and Active Neighborhood Checklist (ANC)
- Baseline and post intervention youth health behaviors and perceptions questionnaire
- Following presented outcomes identified by tri-state community leader focus groups, community visits with stakeholders and community committee meeting notes

Outcomes

Targeted primary outcomes	Secondary outcomes	Tertiary outcomes
Increase dietary fruit and vegetable consumption; decrease dietary solid fat consumption	Healthy snack offerings and extended school breakfast time Wellness, Ignite, Nutrition (WIN) school-based curriculum	Increased academic performance Decreased disciplinary action Reduced frequency to the nurse's office Improved cooking skills Developed presentation skills Improved reaction to constructive criticism
Increase physical activity	Walking clubs and areas created for PA opportunities	Weight loss
Decrease added sugar consumption	Use of installed water bottle filling stations	Decreased disposable bottle use
Create supportive community environment to prevent overweight/obesity	Formation of project steering committees	Increase in school-community partnerships Political acknowledgement Increase in teamwork/collaboration Positive school environment and increase in school morale Community developed sustainability evaluation tool

Post Assessment Data Plan

- Food and physical activity (PA) environmental assessments in both control and intervention communities
- Youth health behaviors questionnaire in both control and intervention communities
 - Current 6-8th graders, past 6-8th graders (now 9-11th grades)
- Ripple Effect Mapping (REM) in intervention communities only*
 - 3 main sessions: steering committee members, current 6-8th graders, adults (community members/parents/teachers) – optional: past 6-8th graders
- Policy change assessment tool to adult members of Ignite steering committees (intervention)*
 - Researcher developed tool to assess policy changes in school and after school targeting physical activity, nutrition, leadership



*post assessment only

Conclusion

- Secondary and tertiary outcomes reported via qualitative measures can potentially have a significant and lasting impact just as the targeted primary outcomes
- Post assessment data collection planned to evaluate intervention impact on targeted primary outcomes
- Planned development of a community toolkit for use in other communities with the purpose of identifying a potential framework for creating community-focused, sustainable and effective adolescent obesity prevention programs

