A Data Summary of a Community-Based Participatory Research Project
Targeted Toward the Prevention of Adolescent Obesity

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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 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)
- Intervention community focus group with youth, parents and teachers
- Questionnaire developed to capture current youth health behaviors, determinants of those behaviors (perceptions, barriers, facilitators and motivators), and youth perceptions related to engagement and empowerment
- Tri-state community leader focus groups

Data Summary
Food Environment: NEMS
- Limited availability of affordable, quality, and healthful food in community grocery and convenience stores
- No significant differences among control and intervention communities

Physical Activity Environment: PARA, ANC
- Most common PA features among all communities were play equipment and basketball courts
- Rural communities lack sufficient features to promote PA
- Among all communities, stop signs and sidewalks were present in 69.0% and 78.5% of assessed street segments respectively, to promote neighborhood safety for walking/cycling
- No significant differences among control and intervention communities

Youth Health Knowledge, Behaviors, Determinants of behavior and Empowerment Perceptions:
Youth focus groups
- "Healthy eating” = fruits and vegetables, vitamins, water, milk, smaller serving sizes, dining at home
- Food choice determinants: familiarity, texture, authenticity, variety, cost and convenience
- Hunger related to skipping meals
- Perceived facilitators of healthy eating: participation in sports (coach influence), eating at home (choices made by family members)
- Perceived barriers to healthy eating: many options of good-tasting and cheap foods
- Perceived facilitators of PA: good weather, playing sports is enjoyable, socializing with friends
- Perceived barriers of PA: lack of time, being tired or feeling weak, watching TV, playing sedentary video games, lack of motivation

Questionnaire
- 59.9% reported fruits and vegetables were always available at their home and at school
- 51.4% reported eating fruit at least one time/day
- 29.6% reported eating other vegetables (excludes potatoes, beans and lettuce salads) at least one time/day
- 31.7% reported drinking sugar sweetened beverages at least one time/day
- 26.8% spend at least 60 minutes on physical activity 5 days a week
- 56.4% moderately to strongly agree they could make a difference in their community

Data Summary (cont.)
School Policy Changes: Community leader focus group
- School food and nutrition changes
  - Delayed school day start time by 10 minutes to allow more time for youth to eat breakfast
  - Initiated snack programs
    - “Grab and Go”: provides healthy snacks in between morning classes
    - After school snack for students involved in extra curricular activities
  - School lunch period extended from 20 minutes to 45 minutes
  - School physical activity changes
    - Initiated walking programs
    - Before school, students able to play or walk in gym
    - School track opened for community use by partnering with police officers to ensure safety
- Physical activity integration into school day
  - Periodically integrating three, 30-minute sessions (90 minutes total) educating students on physical activity or healthful eating
  - Integrated 20 minutes, weekly period of physical activity and nutrition activities

Conclusion
- Youth inspired activities influence program ideas
- Program outcomes driving positive school policy changes related to food and PA environments
- Cross analyses of food and PA environments with youth health behaviors and perceptions allows for examination of the relationship between physical surroundings and factors influencing behaviors
- Planned post assessment data needed to evaluate intervention impact on outcomes

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