Measuring the School Nutrition and Physical Activity (SNPA) Environment: A Case for Assessing School Resources and Readiness for Changing the Context to Address Child Obesity

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The goal of the GROW Healthy Kids and Communities project is to prevent obesity in rural children.

BACKGROUND

Elementary schools are key sites for delivering nutrition and physical activity education and promoting healthy behaviors. Most school-based programs model outcomes at the level of the individual and evaluate impacts at the level of changes in students’ knowledge, abilities, and behaviors. A public health approach to promoting healthy habits focuses efforts on changing the context of the behavioral environment to make healthy options the default choice.

GROW Healthy Kids and Communities

OBESITY PREVENTION STUDY FRAMEWORK

Risk Factors

- School Nutrition and Physical Activity (SNPA)
- Policy Environment
- Situational Environment
- Physical Environment

SNPA Pilot and Study Implementation

A descriptive case study approach at the school level was employed to pilot (n=5) and implement (n=6) the SNPA. The SNPA demonstrated good inter-rater reliability when used by trained evaluators, sensitivity when assessing school resources and practice conditions, and efficacy for identifying environmental characteristics needing improvement.

Research Design

Schools are nested within study communities (n=6) in three Oregon Counties. One elementary school that met the criteria for enrollment (>50% of student body eligible for free or reduced meals) was the focal school for each school-based baseline data collection. Within each County, schools were randomized to either control or intervention conditions.

METHODS

Baseline Prevalence of Overweight and Obesity Among K-6 Grade Students by Sex (n = 2688)

All Schools (n=6), Prevalence of Obese, by Grade and Sex

CONCLUSIONS

Rural Children

Overweight and obesity prevalences among rural 6-6 grade students and follows a statistically significant upward trend beginning around grade 3.

Rural Schools

Generally exhibit fair to good environmental practices, meeting less than half of criteria, and have opportunities to improve the school nutrition and physical activity environments to support weight healthy behaviors.

Current and planned efforts to improve environmental practices are not focused or evidence-based, and available resources are inadequate.

Next Steps...

- Schools receive a report outlining areas of strength and opportunities for improvement, along with scored resource guide that provides evidence-informed strategies and resources to help school achieve obesity prevention best practice standards.
- Assessments and reports can be leveraged to secure grant funding to improve contexts, prioritize improvements in prioritized Areas of Interest, and evaluate changes resulting from environmental efforts.

Research supported by the USDA Food and Nutrition Service, under the 2011-19100-30620 project, “GROW Healthy Kids and Communities: A Community- and School-Based Framework for Addressing Childhood Obesity in Rural Children.”