Generating Rural Options for Weight (GROW) Healthy Kids and Communities-Year 4 Outcomes and Impacts

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

AIMS OVERVIEW

Aim 1: Western Region Level

Research Design

The study evaluated an existing community case (level) study and used mixed-method design (descriptive/quantitative).

Aim 2: Community Level

Research Design

Six rural (population < 10,000) communities in three Oregon counties were selected to measure program conditions.

Aim 2: School Level

Research Design

The SNAP-fit elementary school in each rural community serves as the focal point for school-level assessments and interventions.

School Assessments

Data collected annually at all participating schools include environmental scans using the School Physical Activity and Nutrition

- Environment Tool (SPATT-ET), BMI surveillance, and PA surveillance.
- All assessments are conducted by GROW teams in partnership with community stakeholders to ensure sustainability of programs when the grant ends.
- PA data are collected at the school level with each child wearing a PA device for at least 5 days.
- Children classified as "normal" or "at risk" using the age- and sex-specific BMI and BMI percentile cutoffs from CDC growth charts.
- There are no significant trends across time, rates are comparable to national data.

Aim 2: Family Level

Research Design

Families were recruited through participating schools. Family-level strategies included informational messaging through newsletters and family focused enrichment activities and events.

- All families with elementary-age children (ages 5-11, N=2,200 children) attending GROW schools were eligible to participate.
- Participants were recruited via packets delivered from the school to the home.
- Recruitment materials included a study description, the steps necessary to enroll, informed consent documents, survey instruments, and a parent and child packet.
- Families enrolled by returning the forms or by completing the documents online.
- Approximately 36% of those families that received packets consented to participate in the GROW Family survey between 2012 and 2016.

- Child level data and all study information were collected annually.

Conclusions

- To date, family level data have been finalized in two separate sub-studies.
- Study 1: We examined the relationship of Family engagement in each family and practices as measured by the family’s nutritional and Physical activity (screening instrument) and BMI changes.
- In this sample of 386 children (aged 5-11, BMI percentile between 70% and obese) there were overweight or obese families at risk for food insecurity (5%).
- BMI values were associated with BMI percentile.
- In measuring the relationship between BMI and FST, we identified an interaction between diet and obesity for two-dimensional and three-dimensional models.
- Specifically, among children eligible for BMI thresholds, there was a positive association between food insecurity and BMI z score (p<0.05).

- Study 2: We examined the relationship between family dollars and readiness to change dietary and physical activity practices in the family. Results of Change Readiness (CR) and for food insecurity (2012). The HEAL MAPPSTM tool identified 5/6; N=2,200 children).

Findings

School assessments are performed annually to determine the impact of interventions. The tool is a 6-grade social and emotional learning (SEL) tool. Results from the tool are analyzed in aggregate on a school level.

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