TORC-Vision

To be a Center of Excellence focused on improving health and quality of life in the Commonwealth and the Nation by reducing obesity and its consequences.
TORC-Objectives

1. To conduct obesity research that spans the translational spectrum from basic science to implementation science.

2. To train new investigators in translational obesity research methods.

3. To support clinical and community organizations in implementing and sustaining effective and broad reaching obesity-related programs, policies, and practices.
Harmonized patient-reported data elements in the electronic health record: supporting meaningful use by primary care action on health behaviors and key psychosocial factors

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Smart Choices for Healthy Families: A Pilot Study for the Treatment of Childhood Obesity in Low-Income Families

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School Wellness Policies: Effects of Using Standard Templates

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Background: Public school policies related to physical activity and nutrition recently have become the focal point for policymakers to evaluate the effect of regulations on the childhood obesity epidemic. Wellness policies are important to the health of students and their families. The purpose of this study was to develop and pilot two school wellness policies: a snack policy and a physical activity policy.

Research Article

Weight Gain Prevention for College Freshmen: Comparing Two Social Cognitive Theory-Based Interventions with and without Explicit Self-Regulation Training

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The college transition represents a critical period for maintaining a healthy weight, yet intervention participation and retention represent significant challenges. The objective of this investigation was to evaluate the preliminary efficacy and acceptability of two interventions to prevent freshman weight gain. One intervention provided opportunities to improve outcome expectations and self-efficacy within a social cognitive theory framework (SCT), while the other targeted the same variables but focused on explicit training in self-regulation skills (SCTSR). Methods: Freshmen (n = 45) aged 18 to 19 years were randomized to a 14-week intervention, SCL or SCTSR; both included online modules and in-class meetings. Of the 45 students randomized, 5 withdrew before the classes began and 39 completed pre- and posttesting. Primary outcomes included body weight/composition, health behaviors, and program acceptability. Analyses included independent t-test, repeated measures ANOVA, and bivariate correlation analyses. Results: Body weight increased over the 14-week period, but there was no group difference. Percent body fat increased in SCTSR but not SCL (mean difference: SCTSR, 1.63 ± 0.57%; SCL, 0.25 ± 0.45%; P = 0.01). Class attendance was 100% (SCTSR) and 98% (SCL); SCTSR students (>80%) remarked that the online training required "too much time." Conclusions: The intervention was well received, although there were no improvements in weight outcomes.

Using National Data to Estimate Average Cost Effectiveness of EFNEP Outcomes by State/Territory

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Who participates in internet-based worksite weight loss programs?

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Background: The reach and representativeness are seldom examined in worksite weight loss studies. This paper describes and illustrates a method for directly assessing the reach and representativeness of a internet-based worksite weight loss program.

Methods: A brief health survey (BHS) was administered, between January 2008 and November 2009, to employ at 19 worksites in Southwest Virginia. The BHS included demographic, behavioral, and health questions. All employees were blinded to the existence of a future weight loss program until the completion of the BHS.

Results: The BHS has a participation rate of 66 percent and the subsequent weight loss program has a participation rate of 30 percent. Employees with higher income households, with higher education levels and health literacy proficiency were significantly more likely to participate in the program (p < 0.01).

Conclusions: Worksite weight loss programs should include targeted marketing strategies to engage employees with lower income, education, and health literacy.
Engaging the Dan River Region to Reduce Obesity

Application of the Comprehensive Participatory Planning and Evaluation Process

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Despite ongoing recommendations to engage health-disparate populations in the initiation and execution of community-based research, few studies report on the process of community engagement. The action-oriented Comprehensive Participatory Planning and Evaluation (CPPE) process is designed to guide community health planning and evaluation. This article describes how the CPPE process was utilized within a community-based participatory research initiative aimed at addressing obesity in the health-disparate Dan River Region. Encouraging community engagement in formulating research agendas and promoting ownership of health solutions will be key to improving obesity risk factors among Dan River Region residents and similar vulnerable communities. **Keywords:** community-based participatory research, health status disparities, obesity, process assessment

Does availability of physical activity and food outlets differ by race and income? Findings from an enumeration study in a health disparate region

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**Abstract**

**Background:** Low-income, ethnic/racial minorities and rural populations are at increased risk for obesity and related chronic health conditions when compared to white, urban and higher-socio-economic status (SES) peers. Recent systematic reviews highlight the influence of the built environment on obesity, yet very few of these studies consider rural areas or populations. Utilizing a CBPR process, this study advances community-driven causal models to address obesity by exploring the difference in resources for physical activity and food outlets by block group race and income in a small regional city that anchors a rural health disparate region. To guide this inquiry we hypothesized that lower income and racially diverse block groups would have fewer food outlets, including fewer grocery stores and fewer physical activity outlets. We further hypothesized that walkability, as defined by a computed walkability index, would be lower in the lower income block groups.

**Methods:** Using census data and GIS, base maps of the region were created and block groups categorized by income and race. All food outlets and physical activity resources were enumerated and geocoded and a walkability index computed. Analyses included one-way MANOVA and spatial autocorrelation.

**Results:** In total, 49 stores, 160 restaurants and 79 physical activity outlets were enumerated. There were no differences in the number of outlets by block group income or race. Further, spatial analyses suggest that the distribution of outlets is dispersed across all block groups.

**Conclusions:** Under the larger CBPR process, this enumeration study advances the causal models set forth by the community members to address obesity by providing an overview of the food and physical activity environment in this region. This data reflects the food and physical activity resources available to residents in the region and will aid many of the community-academic partners as they pursue intervention strategies targeting obesity.

**Keywords:** Built environment, Health disparities, Community-based participatory research, Spatial autocorrelation
Resources

• Developing Research-Practice Partnerships.
  • Center faculty have expertise in developing and sustaining research-practice partnerships in community and clinical settings.
  • Current federally funded projects address the development, testing, and integration of childhood obesity treatment strategies into a healthcare center and public health department as well as the implementation of weight management strategies within primary care offices.
Resources

- Choosing the Appropriate Research Design and Evaluation.
  - Center faculty use the RE-AIM framework across community and clinical projects as a model to help plan and evaluate the public health impact of different strategies (see www.re-aim.org).
  - Implicit within our approach is the inclusion of cost data and a focus on pragmatic approaches to weight control, physical activity, and healthful eating.
  - We implement innovative and novel research design alternatives to randomized controlled trials.
  - Current federally funded projects include mixed methods designs, multiple wave case studies, preference designs, and interrupted time series designs.