

Physical Activity and Early Education Weight Management in a Low-Income Setting: Program-Based Assessment

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The Problem: The prevalence of obesity is growing in young children. In the U.S., of children between the ages of 2 and 5, 21.2% were overweight or obese (1) and according to the Connecticut Commission on Children, 26% of children in Connecticut are overweight or obese. In youth, overweight and obesity are defined as having a body mass index (BMI) over the 85th and 95th percentile, respectively, for age and height (2). Unfortunately, being obese early in life predicts obesity into adulthood (3) and puts a child at risk for a developing a myriad of serious lifestyle-related diseases in the future (4).

In Connecticut, 26% of children are overweight or obese

Community Renewal Team: Community Renewal Team, Inc. (CRT) is a large non-profit organization in Connecticut with a number of programs aimed at helping Connecticut's low and middle-income populations. One example of CRT's many programs is the network of 20 Early Childhood Centers (ECEs) that utilize Head Start programming (5). Currently CRT serves over 1,400 children (6). Head Start ECEs offer comprehensive early childhood development programs and generally serve children breakfast, lunch and snacks. In 2009, CRT-ECEs were proud to introduce low-fat dairy products and whole grains to their menus (6).



Project Goal: Decrease the prevalence of childhood obesity in CRT's ECE programs

Project Objective: Assess the need for a physical activity program for the children enrolled in CRT-ECE program, through both quantitative and qualitative methods

Figure 1. Instrument Question Topics

Staff Interview Topics

- Physical activity venues at CRT-ECE
- Physical activity programs at CRT-ECE
- Existing physical activity resources at CRT-ECE
- Additional needed physical activity resources at CRT-ECE
- Barriers to physical activity in general
- Barriers to physical activity in the classroom at CRT-ECE

Parent Focus Group Topics

- Physical activities you would like your child to do at CRT-ECE
- Physical activities your child enjoys
- How can CRT-ECE help your child be active

Parent Questionnaire

- Attitudes about your child's weight
- Your child's overweight status
- Attitudes about your child's physical activity level
- Perception of your child's activity level
- Attitudes about your child's diet

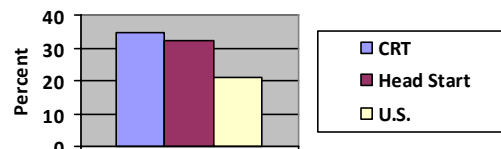
Methods: The team worked with CRT staff to analyze CRT-collected data to determine the prevalence of overweight and obesity among CRT-ECE children. In consultation with CRT staff, the team created several instruments to assess parental attitudes and ideas about their child's lifestyle. The team also created interview questions to assess current CRT practices and staff attitudes toward physical activity in and out of the classroom. Question topics for each of the instruments are shown in Figure 1. Questions were approved by Yale's IRB.

Key Findings: The results from the quantitative analysis showed that the prevalence of overweight and obesity in CRT-ECE children was 34.5%. National Head Start averages are around 32% (7) and general national averages for young children is around 21.2% (see Figure 2) (1). Therefore, CRT overweight and obesity prevalence appears to be much higher than national averages and a bit higher than national Head

Start averages. Results from the interviews, questionnaires, and focus groups are not available at this time.

Limitations: CRT has a significant amount of data on the ECE children. However, the format of the data set is not yet conducive to analyses other than cross-sectional prevalence of obesity and overweight. In addition, the topics for monthly parent meetings were determined far in advance, so parent focus groups and questionnaires could not be implemented until after the semester was over. Due to time constraints, the staff interviews were also not able to be conducted. However, the team was able to create the assessment tools for CRT to use at a future date.

Figure 2. Average Prevalence of Overweight and Obesity of Young Children



Next Steps: At this time, parent focus groups will be conducted on May 12 and 13, 2010 at two CRT ECE locations. The parent questionnaires were distributed on May 11, 2010 and data collection is currently underway. Staff interviews are planned for August 2010 during CRT ECE Professional Development Week.

Once all three arms of the qualitative analysis have been completed and data has been analyzed, CRT will be able to examine the quantitative and qualitative results to determine the need for a physical activity program. This program may or may not include the addition of a physical activity teacher to the CRT-ECE staff. CRT's Quality Assurance Department is focused on performing operations research aimed at improving capacity for outcome analysis and ensuring evidence-based actions at CRT. Ultimately, the results of this informal needs assessment and of future analyses will help CRT to better design their programs to keep the children they serve active and healthy.

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Resources:

CRT website: <http://www.crtct.org>

Acknowledgements

The Team would like to thank Community Renewal Team, Krista Heybruck-Santiago MPH, Ashley Debenian, Melinda Irwin PhD MPH, Karen Dorsey MD PhD, Debbie Humphries PhD MPH, and Laena Orkin MPH