An Inter-professional Initiative to Decrease Childhood Obesity in a Rural Community: A Pilot Program

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Introduction

Primary prevention is the key to saving valuable health care dollars. This intervention is an example of how community partnerships can impact public health at the individual and community level.

Problem & Expected Outcomes

Approximately 17% of children in the United States are classified as obese. In the state of Kentucky, more than 20% of low-income, pre-school aged children are considered obese (CDC, Overweight and obesity data and statistics, 2013). Seventeen percent of Kentucky's high school aged children are considered obese. Kentucky ties with Alabama for the worst rates of obesity among high school aged children (CDC, Obese Youth over Time, 2013).

Obese children are almost twice as likely to be bullied as normal weight children with an odds ratio of 1.8 regardless of sex, race, or socioeconomic status (Lumeng, 2013). Obese children also have a lower self-esteem than their normal weight peers (French, Story, & Perry, 2012). In a study by Freedman, Zuguo, Srinivasan, Berenson, and Dietz (2007), 70% of the obese children were presenting with at least one risk factor for cardiovascular disease.

The expected outcome for a girl's day camp to increase self-efficacy for prevention of obesity was increased self-efficacy related to physical activity.

Sample and Methods

Sample: Elementary and early middle school girl volunteers aged 8 years to 12 years were accepted on a first come first served basis. All participants lived in a rural community in south central Kentucky. Eleven volunteers participated in the day camp.

Methods: The modified self-efficacy tool was used for this pilot study. The participants were given a pretest immediately after completing an icebreaker activity. After completing the day camp activities, the participants were asked to complete post-test.

Inter-professional Partnerships

The inter-professional partners for the intervention were a diverse, multidisciplinary group. The team consisted of a the primary investigator (PI), dietician, a Doctor of Nursing Practice (DNP), Zumba instructor, Yoga instructor, an elementary school teacher, Rockcastle Regional Hospital, and parents of participants. The Zumba instructor gave a 45 minute kids' Zumba class. The Yoga instructor led a 45 minute kids' Yoga class. The DNP taught a class on health and well-being. The dietician taught about nutrition and helped lead the girls fixing their own lunch. The art teacher assisted the girls with an art project. Rockcastle Regional Hospital provided use of a wellness center for the project. The parents of the participants provided transportation. The PI presented micro and macro schedules to the shareholders, administered pre and post project self-efficacy test to the participants, and reported findings.

Results and Conclusions

The girls had the opportunity to experience kids Zumba, yoga, nutrition class, wellness instruction, an art class, and make their own healthy lunch. The study findings revealed a significant relationship between pre and post self-efficacy scores. The post day-camp scores significantly increased indicating the day camp activities positively influenced self-efficacy.

Participating in a girls' day-camp designed to increase self-efficacy to prevent childhood obesity increases self-efficacy related to physical activity.

References

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