Nov 17th, 10:00 AM - 11:30 AM

Effectiveness of Early Interventions Strategies on Reducing Body Mass Index in Children in Greater Chicago

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Donnelly, Sarah; Dykhuizen, Jennifer; Moxley, Elizabeth; and Habtzghi, Desale, "Effectiveness of Early Interventions Strategies on Reducing Body Mass Index in Children in Greater Chicago" (2017). Grace Peterson Nursing Research Colloquium. 61. https://via.library.depaul.edu/nursing-colloquium/2017/Fall_2017/61

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Introduction & Background
In 2016, Illinois ranked 39th out of 51 states for overweight and obese children. Rates in Illinois have trended down from 2007 and 2016 with current reports cite 27% of those aged 10-17 are overweight or obese. Obesity is irrespective of age, race and educational background. Childhood obesity has been determined to be a risk factor for a myriad of chronic diseases, such as CV disease, diabetes, cancer, asthma, liver disease, joint disorders and psychiatric conditions.

Statement of Purpose
- This study evaluated the efficacy of a cost-free comprehensive child health initiative aimed at preventing childhood obesity in the greater Chicagoland region.
- The study examined the efficacy of current strategies to decrease BMI, body fat, fat mass and weight change in children.
- Demographics were analyzed to compare effectiveness of the program between counties in Illinois, age and gender.

Research Questions
1. Are the interventions by ProActive Kids effective at reducing BMI?
2. Are the interventions by ProActive Kids effective at reducing BMI in different stages of development?
3. What is the relationship between BMI in children in the ProActive Kids sample with respect to specific Illinois counties?

Methods
- A secondary data analysis using a convenience sample was performed to evaluate a quantitative program intervention aimed at reducing childhood obesity.
- The original data was obtained between 2010-2017 at 21 program sites in a metropolitan area and includes 884 youth between the ages of 8 to 14 years, in Chicago.
- The variables used: age, height, weight and body fat percentage and fat mass.

Results

Discussion & Conclusion
- Early intervention programs such as ProActive Kids provide a targeted approach to intervening to critical age ranges and their development.
- The results indicate that early intervention programs are proven effective tools towards combatting childhood obesity through reduction of BMI.
- Nurses can play a pivotal role in these interventions through designing, implementing and evaluating future programs to continue to alleviate this epidemic.
- The findings provide a framework for the future of healthcare interventions for childhood obesity.
- Further research is necessary to completely understand the profound issue of childhood obesity in the greater Chicagoland Region.

Acknowledgments
Special thanks to Nicki Klinkhammer, ProActive Kids Foundation and the DePaul Statistical Department for facilitating this project

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