

Longwood University

Digital Commons @ Longwood University

Fall Showcase for Research and Creative Inquiry

Office of Student Research

Fall 11-15-2021

The Influence of Parental Obesity on Children and Adolescents

Seth Seward

Kaylee Eckert

Follow this and additional works at: https://digitalcommons.longwood.edu/rci_fall



Part of the [Nursing Commons](#)

Recommended Citation

Seward, Seth and Eckert, Kaylee, "The Influence of Parental Obesity on Children and Adolescents" (2021). *Fall Showcase for Research and Creative Inquiry*. 131.
https://digitalcommons.longwood.edu/rci_fall/131

This Poster is brought to you for free and open access by the Office of Student Research at Digital Commons @ Longwood University. It has been accepted for inclusion in Fall Showcase for Research and Creative Inquiry by an authorized administrator of Digital Commons @ Longwood University. For more information, please contact hamiltonma@longwood.edu, alwinehd@longwood.edu.



LONGWOOD
UNIVERSITY



The Influence of Parental Obesity on Children and Adolescents

Kaylee Eckert & Seth Seward

NURS 360 - Introduction to Research & Evidence Based-Practice

PICO Question

During the ages of 2 to 18, are children and adolescents who have obese parents at an increased risk for obesity and related health diseases compared with children and adolescents without obese parents?

Population: children ages 2 to 18 years old

Intervention: parents with obesity

Comparison: parents with obesity (BMI >30.0) vs. parents with a healthy weight (BMI <25.0)

Outcome: increased risk for obesity and related health diseases

Abstract

- Obesity in America is an epidemic
- 42.4% of adults having a BMI over 30.0
- Goal of decreasing childhood and adolescent obesity from 17.8% to 15.5% (U. S. Department of Health and Human Services, 2020)
- Obesity is directly related to a higher risk of developing many chronic medical and psychological diseases
- We discovered that parental obesity is the leading indicator of obesity in children and adolescents, with nearly 89% of offspring being overweight or obese
- Additional common factors are low socioeconomic status, minimal education, difficult access to fresh food, and being African American or Latino American
- School systems that utilize free and reduced lunches, offer at least 5 fruit and vegetable options a day, and have nutrition and exercise classes see a significant reduction in the rates of childhood and adolescent obesity

Introduction

- Body Mass Index (kg/m²) of >25.0 is overweight and >30.0 is obese
- By 2016, 17.8% of children and adolescents were obese (U.S. Department of Health & Human Resources, 2020)
- Children's personal eating patterns, which are learned from parents/caregivers, account for 18% of the reason for childhood obesity (Demir, 2017)
- "Family-based-therapy" (Boutelle, 2021) can help parents and children adjust their negative eating and exercise habits
- Low-socioeconomic status is associated with an unhealthy diet due to the high price of fresh fruit and vegetables as well as lack of ability to access a grocery store with these food options (Venturelli et al., 2018)
- We aim to identify the relationship between parental obesity with childhood obesity and offer an interdisciplinary solution to decrease the rate of child and adolescent obesity in America

Methods

- Peer-reviewed journal articles from the Longwood Greenwood Library database
- Reliable and accurate statistics from official U.S. government websites
- Correlational type studies through rigorous experiments and surveys
- Critical appraisal for each journal article to assess credibility, trustworthiness, and reliability

Evaluation & Analysis

- Between the ages of 2-18 years old, “88.8% of children/adolescents with overweight parents and 67.0% of children/adolescents with obese parents were overweight or obese,” (Bahreynian et al., 2017, pp. 113)
- Girls are 3.46 times more likely to be obese than boys (Bahreynian et al., 2017, pp. 113)
- Parental obesity is the most significant risk factor for childhood and adolescent obesity
- Obesity can lead to sleep apnea, hyperlipidemia, kidney disease, asthma, hypertension, infertility, coronary artery disease, diabetes, depression, and anxiety

Discussion & Conclusion

- Childhood obesity is positively correlated to parental obesity a majority of the time
- Parental obesity is the first indicator of the potential of obesity in children and adolescents
- School systems may have a larger impact on changing the unhealthy eating and exercise habits of children because students have a high amount of trust in their teachers
- 5-a-Day-Power-Plus program, Children's Health, Activity, and Nutrition program, and Planet Health
- Supportive and involved parents are necessary to combat and decrease childhood obesity

Implications for the Future

- **Healthy People 2030: Combating childhood obesity methods**
 - Programs seek to increase the number of fresh fruits and vegetables offered in school meals
 - Schools offer nutritional exercise lessons with worksheets and activities for home
- **Massachusetts Prevention Strategy - Planet Health**
- **Future Research: Conducted to serve as a follow-up review for the children in school systems that offer these prevention programs**
 - Follow students from the start of school, kindergarten or first grade, all the way to high school graduation
 - Purpose: Allow for children's weight to be monitored for 12 - 13 consecutive years
 - The review would naturally include demographics and socioeconomic factors of the entire family

References

- Boutelle, K. N., Strong, D., Liang, J., Rhee, K. E., Rock, C. L., Wilfley, D., Epstein, L., & Crow, S. J. (2021). Comparative costs of a parent-only and parent and child treatment for children with overweight or obesity. *Obesity (Silver Spring, Md.)*, 29(2), 388–392. <https://doi.org/10.1002/oby.23069>
- Demir, D. & Bektas, M. (2017). The effect of childrens' eating behaviors and parental feeding style on childhood obesity. *Elsevier: Eating Behaviors*, 26(2017), 137-142. <https://doi.org/10.1016/j.eatbeh.2017.03.004>
- Harding, M.M., Kwong, J., Roberts, D., Hagler, D., & Reinisch, C. (2020). Lewis's Medical-Surgical nursing: Assessment and management of clinical problems (11th Ed.). St. Louis, MO: *Mosby/Elsevier*.
- Mihrshahi, S., & Baur, L. A. (2018). What exposures in early life are risk factors for obesity? *Journal of Paediatrics and Child Health*. <https://doi.org/10.1111/jpc.14195>.
- Reinehr, T. Long-term effects of adolescent obesity: time to act. *Nat Rev Endocrinol* 14, 183–188 (2018). <https://doi.org/10.1038/nrendo.2017.147>
- U.S. Department of Health and Human Services. (2020). *Healthy people 2030: Overweight and obesity*. Offices of Disease Prevention and Health Promotion. Retrieved from <https://health.gov/healthypeople/objectives-and-data/browse-objectives/overweight-and-obesity/reduce-proportion-children-and-adolescents-obesity-nws-04>
- Venturelli, F., Ferrari, F., Broccoli, S., Bonvicini, L., Mancuso, P., Bargellini, A., & Giorgi Rossi, P. (2019). The effect of public health/pediatric obesity interventions on socioeconomic inequalities in childhood obesity: a scoping review. *Obesity Reviews: An Official Journal of the International Association for the Study of Obesity*, 20(12), 1720–1739. <https://doi.org/10.1111/obr.12931>
- World Health Organization, (2016). Consideration of the evidence on childhood obesity for the Commission on Ending Childhood Obesity: report of the ad hoc working group on science and evidence for ending childhood obesity. Geneva, Switzerland. *World Health Organization*. pp. 93-104. ISBN 978 92 4 156533 2.