

A Study to Evaluate the Effectiveness of Planned Teaching Program on Knowledge and Practice Regarding Physical Education Rather than Use of Electronic Devices to Reduce Obesity and Related Health Problems in Children Among Parents in Selected Area of Vijayapura

Ujwala Ashokrao Kholgade

Department of Child Health Nursing

Abstract: *The aim of this study was to evaluate the effectiveness of a planned teaching program designed to enhance parents' knowledge and practices regarding physical education as an alternative to electronic devices for reducing obesity and associated health problems in children. The increasing use of electronic devices has been linked to a rise in childhood obesity, which can lead to serious health complications such as diabetes, hypertension, and mental health issues. This study was conducted in a selected area of Vijayapura, Karnataka, where parents of children aged 6 to 12 years participated in the teaching program. The intervention focused on educating parents about the importance of physical activity, its role in preventing obesity, and how to promote active lifestyles at home. Pre-test and post-test assessments were used to evaluate the effectiveness of the program, with a statistically significant improvement in knowledge and practice observed among the parents after the intervention. This study underscores the importance of educational programs for parents to tackle the growing issue of childhood obesity.*

Keywords: childhood obesity, parent awareness, physical activity habits, screen time reduction, home-based health practices

1. Introduction

Obesity in children is a growing concern globally, particularly due to the increasing sedentary lifestyle influenced by the excessive use of electronic devices. In India, the rise of childhood obesity is alarming, with studies showing that over 14% of children are overweight or obese (Mohan et al., 2019). One of the key factors contributing to this trend is the increased time spent on screens, such as watching television, playing video games, and using smartphones or tablets, which displaces physical activity (Viner et al., 2017). As physical activity plays a significant role in preventing obesity and promoting overall health, it is imperative to address the role of parents in influencing their children's activity levels.

The role of parents in shaping children's habits is crucial. Parents not only serve as role models but also control many of the environmental factors that influence children's health behaviors. Despite the importance of physical education, many parents remain unaware of its benefits in preventing obesity and improving their children's physical and mental health (Janssen & LeBlanc, 2010). This study aims to assess the effectiveness of a planned teaching program that provides parents with essential information about physical education and its role in reducing obesity and other related health problems in children.

2. Literature Review

Childhood Obesity and Its Impact

Childhood obesity is a significant public health issue that increases the risk of numerous health problems, including type 2 diabetes, hypertension, cardiovascular diseases, and

mental health issues like depression and anxiety (Biro & Wien, 2010). A study by Flegal et al. (2012) indicated that the global prevalence of overweight and obesity in children has nearly tripled over the past few decades. This trend is particularly concerning as childhood obesity often leads to obesity in adulthood, further exacerbating the risk of chronic diseases (Whitaker et al., 1997).

The Role of Physical Activity

Physical activity plays a fundamental role in combating obesity in children. According to the World Health Organization (WHO), children should engage in at least 60 minutes of moderate to vigorous physical activity each day to promote healthy growth and development (WHO, 2018). Studies have consistently shown that children who are physically active have lower rates of obesity and related health problems (Strong et al., 2005). Physical activity not only helps control weight but also improves cardiovascular fitness, muscle strength, and bone health, and has positive effects on mental well-being (Pate et al., 2006).

Electronic Devices and Obesity

Excessive screen time has been identified as a primary contributor to childhood obesity. Research by LeBlanc et al. (2015) found that children who spend more time in front of screens are more likely to have higher body mass indexes (BMI) compared to those who engage in physical activities. The use of electronic devices reduces the amount of time children spend engaging in physical activities, such as outdoor play, sports, and exercise. Furthermore, prolonged screen time is often associated with unhealthy eating habits, such as snacking on high-calorie foods, which contributes to weight gain (Crespo et al., 2001).

Volume 15 Issue 8, August 2026

Fully Refereed | Open Access | Double Blind Peer Reviewed Journal

www.ijsr.net

The Role of Parents in Influencing Children's Health Behaviors

Parents are key agents in influencing their children's lifestyle choices. Research shows that parental involvement is one of the strongest predictors of children's physical activity levels (Jago et al., 2009). Parents who model healthy behaviors, such as engaging in physical activities and limiting screen time, are more likely to have children who adopt similar habits. Moreover, providing children with opportunities for physical activity at home, such as outdoor play or sports, can significantly reduce the risk of obesity (Gorely et al., 2003).

3. Objectives and Methodology

3.1 Objectives

- 1) **Primary Objective:** To evaluate the effectiveness of a planned teaching program in improving parents' knowledge and practices regarding physical education as an alternative to electronic devices for reducing obesity and related health problems in children.
- 2) **Secondary Objective:** To assess the relationship between parents' demographic variables (age, education level, and occupation) and their knowledge and practices regarding physical activity for children.

3.2 Methodology

This study used a pre-test and post-test experimental design to evaluate the impact of the planned teaching program. The sample consisted of 120 parents of children aged 6-12 years, selected from Vijayapura, Karnataka. Parents were invited to participate in a one-day workshop designed to educate them on the importance of physical education, the risks associated with excessive screen time, and practical ways to encourage physical activity in their children.

The teaching program consisted of presentations, group discussions, and hands-on activities that provided parents with knowledge about physical education and practical tips for promoting an active lifestyle at home. Information covered in the program included:

- The physiological benefits of physical activity
- The role of physical education in preventing obesity
- Strategies for reducing screen time and increasing physical activity in children
- The importance of role modeling healthy behaviors

Data was collected using a structured questionnaire designed to assess parents' knowledge and practices regarding physical education before and after the workshop. The effectiveness of the program was measured by comparing pre-test and post-test scores using paired t-tests.

4. Results and Discussion

4.1 Results

The results showed a significant improvement in parents' knowledge and practices regarding physical education after attending the teaching program. Before the intervention, the average knowledge score was 45%, indicating limited awareness among parents about the importance of physical

education. After the program, the average score increased to 85%, demonstrating a substantial improvement.

In addition, the practice scores, which assessed the extent to which parents engaged in behaviors that supported physical activity in their children, showed similar improvements. Before the program, only 30% of parents actively engaged in encouraging their children to participate in physical activities. After the program, 70% of parents reported actively encouraging their children to engage in physical exercise.

Statistical analysis confirmed that the differences in both knowledge and practice scores were statistically significant ($p < 0.01$), indicating that the planned teaching program was effective in improving parents' knowledge and their subsequent practices.

4.2 Discussion

The significant improvement in parents' knowledge and practices suggests that educational interventions can play a crucial role in promoting healthy behaviors within the family. The findings of this study align with previous research indicating that education-based interventions can effectively increase awareness and behavior change among parents (Gorely et al., 2003). The study also supports the idea that when parents are equipped with the necessary knowledge and tools, they are more likely to take an active role in their children's health and well-being (Gorely et al., 2003).

The program's success also highlights the importance of reducing screen time in preventing childhood obesity. The positive changes in both knowledge and practice suggest that the teaching program was effective in motivating parents to take action, such as encouraging physical activity and limiting screen time.

5. Conclusion

This study concluded that a planned teaching program is an effective method for improving parents' knowledge and practices regarding physical education as a means to reduce obesity and related health issues in children. The significant improvements observed in the knowledge and practices of parents post-intervention demonstrate the value of educational programs in addressing childhood obesity. The study also emphasizes the importance of parental involvement in promoting healthy lifestyles and reducing the risks associated with excessive screen time. Future research should focus on the long-term impact of such programs and explore how sustained parental involvement can lead to lasting changes in children's physical activity levels.

References

- [1] Biro, F. M., & Wien, M. (2010). Childhood obesity and adult morbidities. *The American Journal of Clinical Nutrition*, 91(5), 1499S-1505S.
- [2] Crespo, C. J., et al. (2001). Television watching, energy intake, and obesity in U.S. children. *The Archives of Pediatrics & Adolescent Medicine*, 155(3), 360-365.

- [3] Flegal, K. M., et al. (2012). Prevalence and trends in obesity among US adults, 1999–2008. *JAMA*, 303(3), 235-241.
- [4] Gorely, T., et al. (2003). Parental influences on children's physical activity: A review. *European Journal of Public Health*, 13(3), 67-74.
- [5] Janssen, I., & LeBlanc, A. G. (2010). Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. *International Journal of Behavioral Nutrition and Physical Activity*, 7(1), 40.
- [6] Jago, R., et al. (2009). Parenting practices and physical activity in children. *American Journal of Preventive Medicine*, 36(5), 395-402.
- [7] LeBlanc, A. G., et al. (2015). Correlates of physical activity in youth: A review of reviews. *International Journal of Behavioral Nutrition and Physical Activity*, 12(1), 47.
- [8] Mohan, V., et al. (2019). Childhood obesity in India: A rising concern. *Indian Journal of Pediatrics*, 86(6), 506-510.
- [9] Pate, R. R., et al. (2006). Physical activity in children and adolescents: A review of the effects on health. *Journal of Pediatrics*, 148(6), 771-777.
- [10] Strong, W. B., et al. (2005). Evidence-based physical activity for school-age youth. *Journal of School Health*, 75(6), 238-248.
- [11] Viner, R. M., et al. (2017). Childhood obesity and life course. *The Lancet*, 379(9825), 674-681.
- [12] Whitaker, R. C., et al. (1997). Predicting obesity in young adulthood from childhood and parental obesity. *The New England Journal of Medicine*, 337(13), 869-873.
- [13] WHO (2018). Physical activity and sedentary behaviour. *World Health Organization*.
- [14] Janssen, I. (2007). Physical activity and health in children and youth: A critical review. *Journal of Physical Activity and Health*, 4(3), 9-17.