P-ISSN: 2617-9806
E-ISSN: 2617-9814

Impact Factor: RJIF 5.2
www.nursingjournal.net

International Journal of Advance Research in Nursing

Volume 8; Issue 1; Jan-Jun 2025; Page No. 294-298

Received: 23-11-2024
Accepted: 29-12-2024

Indexed Journal
Peer Reviewed Journal

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 Parentsin selected area of Vijayapur

[1]Rajashree Dhulakhed, [2]Lalita Rathod and [3]Marulsiddeshwar Devoor

[1]Associate Professor, Department of Paediatric Nursing, Tulza Bhavani College of Nursing, Vijayapur, Karnataka, India

[2]Professor, Department of OBG Nursing, Tulza Bhavani College of Nursing, Vijayapur, Karnataka, India

[3]Vice Principal, Rajeshwari Karpurmath Memorial College of Nursing, Vijayapur, Karnataka, India

DOI: https://www.doi.org/10.33545/nursing.2025.v8.i1.D.473

Corresponding Author: Rajashree Dhulakhed

Abstract

Background: Physical activity offers a broad range of benefits including the prevention of obesity, improved self confidence, and an overall sense of well being physical education programs within the school setting can set the stage for how children view physical fitness, activity level structure health.

Methodology: A quantitative approach with pre experimental pretest post test design was adopted for the study. The samples from the selected areas of Vijayapura were selected using purposive sampling technique. The sample consisted of 60 parents of children. The tools used for data collection was structured knowledge questionnaire and practice scale.

Results: The pre-test assessment revealed that the majority of respondents (36 individuals, 60%) had an average level of knowledge, while 13 respondents (21.7%) had poor knowledge and 11 respondents (18.3%) demonstrated good knowledge. In the post-test, most respondents (34 individuals, 56.7%) exhibited good knowledge, followed by 25 respondents (41.7%) with average knowledge, and only 1 respondent (1.7%) with poor knowledge. Regarding practice levels, the pre-test results showed that 26 respondents (43.3%) had an average level of practice, 25 respondents (41.7%) had poor practice, and 9 respondents (15%) demonstrated good practice. Post-test results indicated a significant improvement, with 43 respondents (71.7%) achieving an average level of practice, 12 respondents (20%) demonstrating good practice, and 5 respondents (8.3%) remaining in the poor practice category. The paired t-test analysis revealed a statistically significant difference between pre-test and post-test scores at a 5% significance level ($P < 0.05$), with a paired t-value of 13.80 for knowledge and 10.14 for practice. These findings confirm the positive impact of the planned teaching program in enhancing both knowledge and practice levels among participants.

Conclusion: Since a very few studies have been conducted regarding this topic in India, so the nurse researcher can take further studies on the same topic.

Keywords: Planned teaching program, knowledge, practice, physical exercise, parents

Introduction

God's greatest gift to humanity is children. Children make up around 40% of the population of India. Over the past three decades, promoting healthy child development has gained significant international attention.

Numerous advantages of physical activity include lowering the risk of obesity, boosting self-esteem, and promoting general wellbeing. School-based physical education programs can influence how kids perceive health, activity level, and physical fitness. In addition to giving students the chance to practise teamwork, physical education programs also cover general health and safety knowledge.

Youngsters are cultivating plants that, when fed different fertilisers, produce delectable fruits. The development and improvement of motor skills, or children's capacity to use and manipulate their own bodies, are referred to as physical development. Children's general health and well-being depend on these developments, which are seen in their gross and fine motor skills.

Regular exercise promotes healthy body weight, strong bones, and even improved sleep, according to Kids Health. Because their bodies will naturally require more energy to keep active, children who participate in regular physical education can even be encouraged to eat better.

Additionally, aerobic exercise will support heart and blood vessel function. Every aspect of a child's growth is crucial, and physical development is no exception.

Children who are active will have lower blood pressure and cholesterol levels and a lower chance of type 2 diabetes. Children's strength, flexibility, and endurance can all be improved with appropriate and diverse exercise. A healthy lifestyle is also established for years to come by creating an atmosphere where healthy activities are accepted. We should be sure to support children's physical health in the same way that we provide them with opportunity for academic growth.

It has been demonstrated that parents' and educators' involvement is crucial in encouraging teenagers to be physically active. The degree of physical activity in childhood and later life is directly impacted by parental involvement in their kids' physical education. Adolescence is a crucial time for developing healthy lifestyle choices that last throughout adulthood. Consequently, it's critical to understand the variables that affect adolescents' levels of physical activity.

Objectives

1. To assess the knowledge and practice of parents regarding physical education rather than use of electronic devices to reduce obesity and related health problems in children in terms of pre-test and post test knowledge and practice scores.
2. To evaluate the effectiveness of planned teaching program on knowledge and practice of parents regarding physical education rather than use of electronic devices to reduce obesity and related health problems in children by comparing pre-test and post-test knowledge and practice scores.
3. To find the association between the post test level of knowledge and practice scores and selected socio demographic variables.

Hypothesis

- **H_1:** The mean post test knowledge scores of the parents exposed to planned teaching program on physical education rather than use of electronic devices to reduce obesity and related health problems in children will be significantly greater than the mean pretest knowledge scores at 0.05 level of significance.
- **H_2:** The mean post test practice scores of the parents exposed to planned teaching program on physical education rather than use of electronic devices to reduce obesity and related health problems in children will be significantly greater than the mean pretest knowledge scores at 0.05 level of significance. level of significance.
- **H_3:** There will be statistical association between the mean post test knowledge scores of parents regarding physical education rather than use of electronic devices to reduce obesity and related health problems in children and their selected demographic variables at 0.05 level of significance.
- **H_4:** There will be statistical association between the mean post test practice scores of parents regarding physical education rather than use of electronic devices to reduce obesity and related health problems in children and their selected demographic variables at 0.05 level of significance.

Methodology

- **Research Approach:** Quantitative Research Approach
- **Research Design:** Pre experimental one group pretest post test research design Sampling technique: Non-Probability; purposive Sampling Technique
- **Target population:** Parents of children at selected areas
- **Sample size:** 60
- **Setting of study:** Selected areas at Vijayapur
- **Method of data collection:** Structured self report

Tools used

Part I: Demographic data: It consists of 7 items related to demographic data which includes age, Gender, Religion, Education of father and mother, Type of family, Number of children in the family, family income and source of information.

Part II: Structured knowledge questionnaire

This portion of 22 structured multiple-choice items, each with several options, designed to evaluate parents' understanding of the importance of physical education over electronic device use in preventing childhood obesity and associated health issues. From the alternatives provided, the participant must select one correct response. The maximum score is 22, with the correct response receiving a mark of "one" and the incorrect response receiving a mark of "zero."

Part II: Structured practice scale

Eleven assertions on the use of physical education instead of electronic devices to prevent childhood obesity and associated health issues made up a structured practice scale. Yes and No are the two alternate response columns. In accordance with their habits, participants must select one suitable response. The overall score falls between 0 and 11.

Results

The findings related to socio-demographic variables of participants: Study comprised of 60 participants. The socio demographic variables are presented in following table.

Table 1: Frequency & Percentage Distribution of participants according to socio demographic variables, N=60

S. No	Socio-Demographic Variables	Frequency (f)	Percentage (%)
1	**Age in years**		
	a) 20-30 years	11	18.3
	b) 31-40 years	27	45.0
	c) 41-50 years	18	30.0
	d) >50 years	4	6.7
2	**Gender**		
	a) Male	31	51.7
	b) Female	29	48.3
3	Religion		
	a) Hindu	27	45.0
	b) Muslim	16	26.7
	c) Christian	13	21.7

	d) Other	4	6.7
4	**Education of Respondents**		
	a) No formal education	11	18.3
	b) Primary education	13	21.7
	c) High school	25	41.7
	d) PUC	4	6.7
	e) Graduation and above	7	11.7
5	**Type of Family**		
	a) Nuclear	37	61.7
	b) Joint	23	38.4
6	**Family Income (Rs/Month)**		
	a) < Rs. 10,000	9	15.0
	b) 10,001 - 20,000	21	35.0
	c) 20,001 - 30,000	18	30.0
	d) > Rs. 30,000	12	20.0
7	**Number of Children in Family**		
	a) One	11	18.3
	b) Two	25	41.7
	c) Three	17	28.3
	d) More than three	7	11.7

Distribution Knowledge and practice Scores of Respondents

Table 2: Mean median mode, standard deviation and range of pre test and post test knowledge scores of respondents, n = 60

Area of Knowledge	Number of Items	Mean	Median	Mode	Standard deviation	Range
Pre test	22	11.25	11.50	12	3.88	5-20
Post test	22	15.30	15	14	3.06	7-22

Table 2 reveals that respondents' pre-test knowledge scores ranged from 5 to 20 with a mean of 11.25, median of 11.50, mode of 12, and standard deviation of 3.88. Respondents' post-test knowledge scores ranged from 7 to 22, with a mean of 15.30, median of 15, mode of 14, and standard deviation of 3.06.

Table 3: Mean, mode, standard deviation and range of pre test and post test practice scores of Respondents, n = 60

Area of practice	Number of Items	Mean	Median	Mode	Standard deviation	Range
Pretest	11	5.23	5	5	2.46	1-11
Post test	11	6.98	7	7	1.98	2-11

Table 3 Reveals that, In pre test, respondents mean 5.23, median was 5, mode was 5 with standard deviation 2.46 and score range was 1-11. And In post test, respondents mean was 6.98, median was 7, mode was 7 with standard deviation 1.98 and score range was 2-1.

Distribution Respondents Pretest and Post Test Scores According To Their Level Of Knowledge And Practice

Table 4: Frequency and percentage distribution of respondents according to level of knowledge, n=60

Level of knowledge					
Pre test			Post tesst		
Poor f(%)	Average f(%)	Good f (%)	Poor f(%)	Average f(%)	Good f (%)
13(21.7%)	36 (60%)	11(18.3%)	01(1.7%)	25 (41.7%)	34 (56.7%)

The data presented in the Table 4 depicts that, in the pre-test assessment, the majority of respondents (36 individuals, 60%) demonstrated an average level of knowledge. Meanwhile, 13 respondents (21.7%) had poor knowledge, and 11 respondents (18.3%) exhibited good knowledge. Following the post-test, there was a notable improvement, with the majority (34 respondents, 56.7%) achieving a good level of knowledge. Additionally, 25 respondents (41.7%) had an average knowledge level, while only 1 respondent (1.7%) remained in the poor knowledge category.

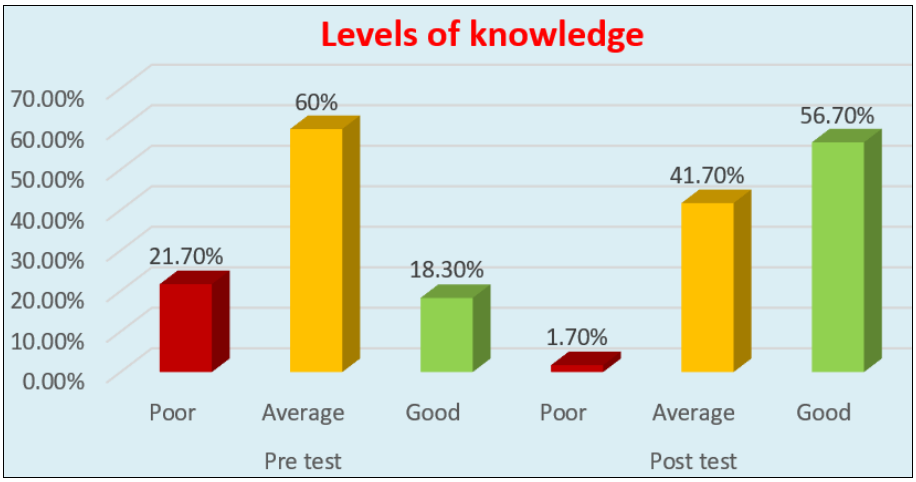

Fig 1: Pre test and post test level of knowledge

Table 5: Frequency and Percentage distribution of respondents according to level of Practice, n=60

Level of practice					
Pre test			Post test		
Poor f(%)	Average f(%)	Good f (%)	Poor f(%)	Average f(%)	Good f (%)
25 (41.7%)	26 (43.3%)	9(15%)	5 (8.3%)	43 (71.7%)	12 (20%)

The data presented in the Table 5 depicts the respondents level of practice, it shows that, In the pre-test assessment of practice levels, the majority of respondents (26 individuals, 43.3%) demonstrated an average level of practice. Additionally, 25 respondents (41.7%) had poor practice, while 9 respondents (15%) exhibited good practice.

Following the post-test, most respondents (43 individuals, 71.7%) showed an average level of practice. Meanwhile, 12 respondents (20%) demonstrated good practice, and 5 respondents (8.3%) remained in the poor practice category.

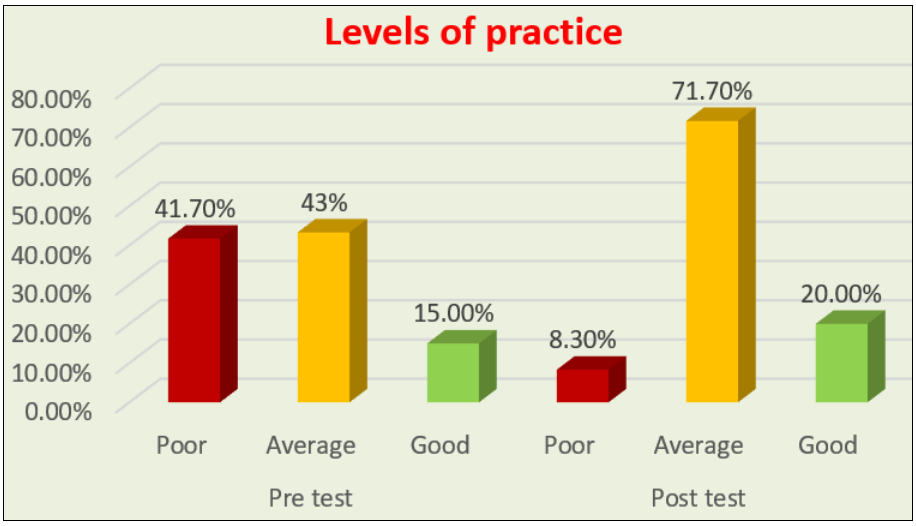

Fig 2: Pre test and post test level of practice

Effectiveness of planned teaching program

Table 6: Mean, standard deviation, standard error of difference and 't' value of pre test and post test knowledge and practice scores, N=60

Area	Aspects	Mean	sd	SEMD	Paired t test
Knowledge	Pre test	11.25	3.88	0.29	13.80*
	Post-test	15.30	3.06		
Practice	Pre-test	5.23	2.46	0.17	10.14*
	Post-test	6.95	1.98		

* Significant at 5% level

Table 6 indicated the overall mean knowledge and practice scores of pre test and post test scores

Knowledge

The findings indicate that participants' post-test mean knowledge score [Mean = 15.30, SD = 3.06] was higher compared to the pre-test mean knowledge score [Mean = 11.25, SD = 3.88].

The paired t-test analysis revealed a statistically significant difference between pre-test and post-test scores at a 5% significance level ($P < 0.05$), with a paired t-value of 13.80. This statistical significance suggests a positive impact of the planned teaching program on participants' knowledge levels.

Practice

The findings indicate that participants' post-test mean practice score [Mean = 6.95, SD = 1.98] was higher compared to the pre-test mean practice score [Mean = 5.23,

SD = 2.46].

The paired t-test analysis showed a statistically significant difference between pre-test and post-test scores at a 5% significance level ($p< 0.05$), with a paired t-value of 10.14. This statistical significance highlights the positive impact of the planned teaching program on participants' practice levels.

Association between knowledge and practice scores of participants and selected sociodemographic variables

The computed Chi-square value for association between level of knowledge and practice of parents regarding physical education rather than use of electronic devices to reduce obesity and related health problems in children and their selected demographic variables is not found to be statistically significant at 0.05 levels for any of the selected socio demographic variables.

Conclusion

The overall pre-test assessment revealed that parents' knowledge and practice regarding physical education, as opposed to the use of electronic devices to reduce obesity and related health issues in children, were at an average level. However, post-test results demonstrated a significant improvement in both knowledge and practices in this area. This indicates that the planned teaching program was effective in enhancing and updating parents' understanding and practices related to physical education, promoting healthier habits over screen time to combat obesity and associated health concerns in children.

Conflict of Interest: Not available.

Financial Support: Not available.

References

1. Health. [cited 2023 Jun 2]. Available from: http://www.medicalnewstoday.com
2. Disease. [cited 2023 Jun 2]. Available from: en.m.wikipedia.org
3. Pinhas-Hamiel O, Benary D, Mazor-Aronovich K, Ben-Ami M, Levy-Shraga Y, *et al*. Advanced bone age and hyperinsulinemia in overweight and obese children. Endocr Pract. 2014;20:62-67.
4. Linda Valor. The Importance of Physical education for young children, Type 2 diabetes in children and adolescents. American Diabetes Association. Diabetes Care. 2000 Mar;23(3):381-389.
5. Physical education. [cited 2023 Jun 5]. Available from: www.google.com
6. Yapbeelee. Positive and negative Impacts of Electronic Devices on children. 2022 Dec 19 [cited 2025 Mar 16]. Available from: https://wehavekids.com/parenting/dlectronicdevices-and-gadgets to Children
7. Halford JCG, Bereket A, Bin-Abbas B, *et al*. Misalignment among adolescents living with obesity, caregivers, and healthcare professionals: ACTION Teens global survey study. Pediatric Obes. 2022;e12957.
8. Smith JD, Fu E, Kobayashi MA. Prevention and Management of Childhood Obesity and Its Psychological and Health Comorbidities. Annu Rev Clin Psychol. 2020 May 07;16:351-378.
9. Nikhil Rampal. Indians are growing fatter, and the problem is biggest for wealthy women, shows NFHS data. 2023 Feb 5 [cited 2025 Mar 16]. Available from: [No URL provided in the original query, so I cannot provide one here.]
10. Usha M Thomas, D Narayan Appa and MS Sujatha. Prevalence of overweight and obesity among school children in Mysuru, Karnataka. J Family Med Prim Care. 2021 Aug;10(8):2788-2792.

How to Cite This Article

Dhulakhed R, Rathod L, Devoor M. 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 Parentsin selected area of Vijayapur. International Journal of Advance Research in Nursing. 2025;8(1):294-298.