

Impact of Health Education on Lifestyle Behaviors among School-Age Children At Selected Primary School, Kanpur, UP.

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ABSTRACT

Health education is a key strategy in promoting healthy lifestyle behaviors among children. This study aimed to assess the impact of health education on lifestyle behaviors among school-age children in Kukradev Prathamik Vidyalaya, Kanpur, Uttar Pradesh. A pre-experimental one-group pre-test post-test design was adopted with a sample size of 100 students selected through convenience sampling. Data were collected using a structured questionnaire covering diet, physical activity, personal hygiene, and sleep habits. Following the implementation of a structured health education program, a post-test was conducted. The results showed a significant improvement in lifestyle behaviors, with the mean score increasing from 18.5 (pre-test) to 28.7 (post-test). The calculated t-value (20.4) was highly significant at $p < 0.05$. Association analysis revealed that socio-demographic variables such as class, mother's education, father's occupation,

and family income were significantly associated with lifestyle behaviors, while age and gender were not. The study concludes that health education is an effective intervention for improving lifestyle behaviors among school children.

Keywords:

Health education, Lifestyle behaviors, School children, Physical activity, Personal hygiene.

INTRODUCTION

Health is a fundamental human right and an essential component of sustainable development. School-age children represent a critical population group in which healthy lifestyle habits can be effectively cultivated. Behaviors such as balanced nutrition, regular physical activity, proper hygiene, and adequate sleep play a crucial role in ensuring optimal growth and development.

In recent years, there has been a growing concern about unhealthy lifestyle behaviors among children, leading to an

increased risk of both communicable and non-communicable diseases. Schools provide an ideal setting for implementing health education programs, as children are accessible and receptive to learning.

Community health nurses play a vital role in promoting health among school children by providing education, conducting screenings, and encouraging healthy practices. This study focuses on evaluating the effectiveness of health education in improving lifestyle behaviors among school-age children.

Need of the Study

Children's lifestyle behaviors, including diet, physical activity, personal hygiene, and sleep habits, play a crucial role in their overall growth and development. In recent years, unhealthy lifestyle practices among school-age children have been increasing due to poor dietary habits, reduced physical activity, and lack of awareness about health-promoting behaviors. These unhealthy patterns can lead to various health problems such as obesity, infections, and poor academic performance.

School-age children are at a formative stage where positive habits can be effectively developed and sustained throughout life. Schools provide an ideal setting for implementing health education

programs, as children are more receptive to learning and behavior change in a structured environment. However, many children lack adequate knowledge and guidance regarding healthy lifestyle practices.

Health education is considered a cost-effective and practical approach to improving knowledge and promoting healthy behaviors. By providing structured health education, children can be empowered to make informed decisions about their health and adopt healthier lifestyles.

Despite the importance of health education, there is limited evidence regarding its effectiveness in improving lifestyle behaviors among school children in rural and semi-urban areas like Kukradev Prathamik Vidyalaya, Kanpur. Therefore, this study was undertaken to assess the impact of health education on lifestyle behaviors among school-age children and to determine its effectiveness as an intervention strategy.

STATEMENT OF THE PROBLEM:

Impact of Health Education on Lifestyle Behaviors among School-Age Children at selected school, Kanpur, UP.

OBJECTIVES

1. To assess pre-test lifestyle behaviors among school-age children.
2. To implement a structured health education program.
3. To evaluate the effectiveness of health education.
4. To determine the association between lifestyle behaviors with their selected demographic variables.

HYPOTHESIS

H₁: There is a significant difference between pre-test and post-test lifestyle behavior scores.

H₂: There is a significant association between lifestyle behaviors with their selected demographic variables.

Null Hypothesis:

H₀₁: There is no significant difference between pre-test and post-test lifestyle behavior scores.

H₀₂: There is no significant association between lifestyle behaviors with their selected demographic variables.

Delimitations of the Study

- The sample size was restricted to school-age children only.

- The study focused only on selected lifestyle behaviors such as diet, physical activity, personal hygiene, and sleep habits.
- The duration of the study and intervention was limited to a specific period.

Assumptions of the Study

- The students responded honestly and accurately to the questionnaire.
- Health education has the potential to improve knowledge and influence lifestyle behaviors among children.
- The structured questionnaire is a valid and reliable tool for assessing lifestyle behaviors.
- Students were able to understand the questions and instructions properly.
- The health education program was delivered effectively and consistently to all participants.

METHODOLOGY

Research Design

Pre-experimental one-group pre-test post-test design.

Setting

Kukradev Prathamik Vidyalaya, Kanpur, Uttar Pradesh.

Population

School children aged 6–12 years.

Sample Size

100 school going children.

Sampling Technique

Convenience sampling technique.

Inclusion Criteria

- Students present during data collection
- Willing to participate

SCORE INTERPRETATION

Score	Category
0–13	Poor
14–26	Average
27–40	Good

DATA COLLECTION PROCEDURE

- Pre-test conducted
- Health education program implemented (lectures, charts, demonstrations)
- Post-test conducted after 7 days

RESULTS

SECTION-A

Table 1: Pre-Test Lifestyle Behavior Scores (n=100)

Category	Frequency	Percentage
Poor	45	45%
Average	40	40%
Good	15	15%

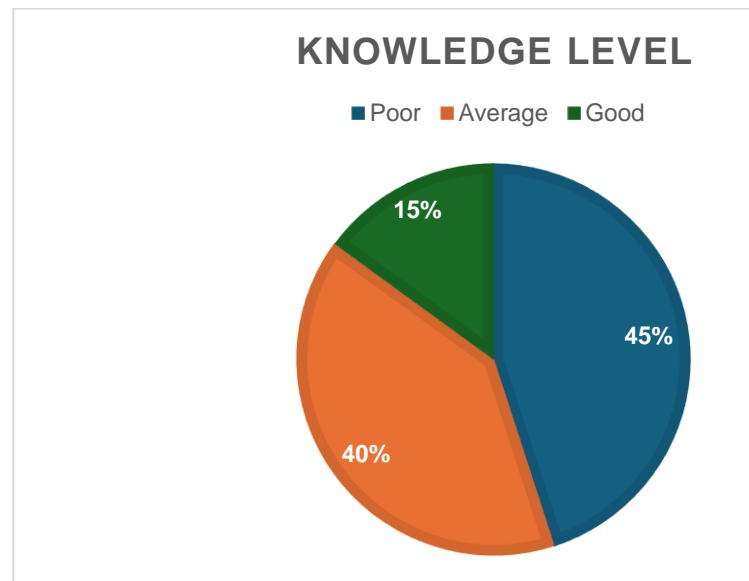
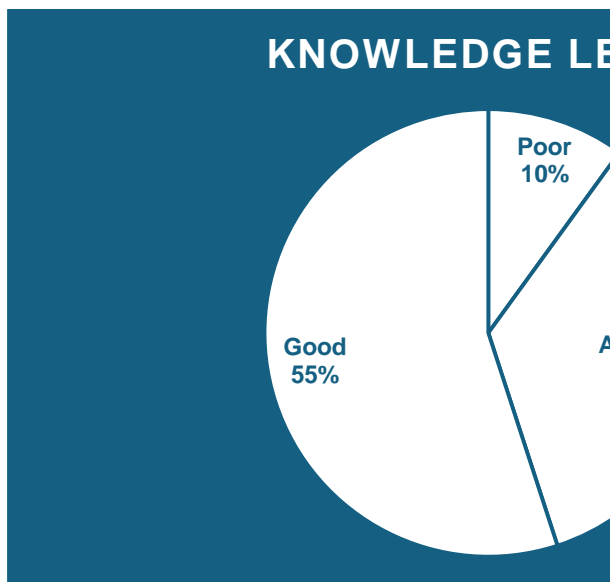


Table 2: Post-Test Lifestyle Behavior (n=100)

Category	Frequency	Percentage
Poor	10	10%
Average	35	35%

Category	Frequency	Percentage
Good	55	55%



SECTION B: DEMOGRAPHIC VARIABLES

S. No	Demographic Variable	Category	Frequency (n)	Percentage (%)
1	Age	6–8	30	30%
		9–10	40	40%
		11–12	30	30%
2	Gender	Male	50	50%

S. No	Demographic Variable	Category	Frequency (n)	Percentage (%)
		Female	50	50%
3	Class	1–2	30	30%
		3–4	40	40%
		5	30	30%
4	Mother's Education	Illiterate	30	30%
		Primary	30	30%
		Secondary+	40	40%
5	Father's Occupation	Labour	35	35%
		Farmer	30	30%
		Service	35	35%
6	Family Income	Low	35	35%
		Middle	40	40%
		High	25	25%

STATISTICAL ANALYSIS

Mean and Standard Deviation

- Pre-test Mean = 18.5, SD = 5.2
- Post-test Mean = 28.7, SD = 4.8

Paired t-test Calculation

Mean Difference = 10.2

$$t = \frac{10.2}{5/\sqrt{100}} = \frac{10.2}{0.5} = 20.4$$

- Calculated t = **20.4**
- Table value = **1.98**

Highly Significant

ASSOCIATION WITH DEMOGRAPHIC VARIABLES

Table 3: Age

Age	Poor	Avg	Good	Total
6-8	3	12	15	30
9-10	4	13	23	40
11-12	3	10	17	30

$\chi^2 = 0.62, \text{Not Significant}$

Table 4: Gender

Gender	Poor	Avg	Good	Total
Male	6	20	24	50

Gender Poor Avg Good Total

Female	4	15	31	50
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$\chi^2 = 1.82, \text{Not Significant}$

Table 5: Class

Class	Poor	Avg	Good	Total
1-2	5	15	10	30
3-4	3	12	25	40
5	2	8	20	30

$\chi^2 = 10.5, \text{Significant}$

Table 6: Mother's Education

Education	Poor	Avg	Good	Total
Illiterate	5	18	7	30
Primary	3	10	17	30
Secondary+	2	7	31	40

$\chi^2 = 15.2, \text{Significant}$

Table 7: Father's Occupation

Occupation	Poor	Avg	Good	Total
Labour	6	20	9	35
Farmer	2	8	20	30

Occupation	Poor	Avg	Good	Total
Service	2	7	26	35

$\chi^2 = 12.8$,Significant

Table 8: Family Income

Income	Poor	Avg	Good	Total
Low	6	22	7	35
Middle	3	10	27	40
High	1	3	21	25

$\chi^2 = 18.6$,Significant

DISCUSSION

The study findings revealed a significant improvement in lifestyle behaviors following the health education intervention. The increase in mean scores and reduction in poor category percentages demonstrate the effectiveness of the program.

The association analysis indicated that socio-economic and educational factors significantly influence lifestyle behaviors. However, age and gender did not show a significant association, suggesting that health education is universally effective across these groups.

IMPLICATIONS

Nursing Practice

School health programs should be strengthened to promote healthy lifestyle behaviors among children.

Nursing Education

Greater emphasis should be placed on preventive care in nursing education to prepare nurses for promoting health among school-age children.

Nursing Administration

Nursing administration should provide policy support to enhance and implement effective school health programs.

Nursing Research

Further large-scale studies are recommended to explore the effectiveness of health education on lifestyle behaviors among children.

Limitations of the Study

- The study was limited by a small sample size.
- The duration of the study was short.
- The study was conducted in a single setting only.

RECOMMENDATIONS

- Larger studies should be conducted to obtain more reliable and generalizable results.
- Parent involvement should be encouraged to reinforce healthy lifestyle behaviors among children.
- Continuous health education programs should be implemented to sustain and further improve healthy behaviors over time.

CONCLUSION

The study concludes that structured health education significantly improves lifestyle behaviors among school-age children. Community health nurses play a crucial role in promoting healthy habits and preventing diseases. Early intervention through school-based programs can contribute to a healthier future generation.

REFERENCES (APA Style)

1. Mahajan A, Negi PC, Gandhi S, Sharma D, Grover N. **Impact of school-based health behavioral intervention on awareness, practice pattern of healthy lifestyle, and cardiometabolic**

risk factors among school children of Shimla: A cluster-randomized intervention study.*Indian J Pediatr.* 2022;89(4):343–350. This study assessed the effect of a health behavior intervention on knowledge and practices among school children.

2. van Sluijs EMF, et al. **Effect of a school-based intervention to promote healthy lifestyles in 7–11-year-old children.***Int J Behav Nutr Phys Act.* 2009;6:90. This intervention evaluated changes in physical activity and dietary behaviors following a school program.
3. Jovanović GK, Janković S, Pavičić Žeželj S. **The effect of nutritional and lifestyle education intervention program on nutrition knowledge, diet quality, lifestyle, and nutritional status of Croatian school children.***Front Sustain Food Syst.* 2023;7:1019849. This research demonstrated improvements in nutrition knowledge and lifestyle after an educational intervention.
4. Chatterjee P, Nirgude A. **A systematic review of school-based nutrition interventions for promoting healthy dietary practices and lifestyle among school children and adolescents.***Cureus.* 2024;16(1):e53127. This review highlights the effectiveness of school-based programs on diet and lifestyle behaviors.
5. <https://www.sciencedirect.com/science/article/pii/S2211335525000385>
6. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10901392/>