



# A STUDY TO EVALUATE THE EFFECTIVENESS OF INFORMATION EDUCATION COMMUNICATION ON KNOWLEDGE REGARDING PREVENTION OF OBESITY AMONG SCHOOL CHILDRENS IN SRI RANGAPOOPATHI COLLEGE OF NURSING (CBSE) IN ALAMPOONDI AT VILLUPURAM

**Menaga Gandhi B\***

## Article Info

Received 26/12/2023

Revised 27/12/2023

Accepted 02/01/2024

## Key word:

Effectiveness,  
Information Education  
Communication,  
Knowledge, Obesity,  
School childrens.

## ABSTRACT

Obesity is a pathological condition in which excess body fat. It is a disorder with complex interaction between genetic and environmental factors. It is characterized by high cholesterol, fatty acids levels and excessive adipose mass accumulation with hyperplasia and hypertrophy. A quantitative research approach with pre experimental design was considered. The study was conducted at Sri Rangapoopathi International school(CBSE). After getting permission from the concerned authority the started data collection 60 samples were selected by adopting non probability convenient sampling and obtained written consent from each sample. On day-1 pre test was conducted by using demographic and structured knowledge on 8th day the post test level of knowledge were assessed by using the same questionnaire. The overall mean pre test and post test score on information education communication on level of knowledge regarding prevention of obesity with paired test t value was  $t=-23.14$  which was significant at  $p<0.05$  level. The overall mean pre test and post test score on information education communication on level of knowledge regarding prevention of obesity.

## INTRODUCTION

Obesity is now considered as a "killer lifestyle disease". An internet obesity prevention program for childrens state that prevention is widely a advocated as important strategy to address the rising prevalence of obesity in childrens. School based information education communication program are one approach to reach childrens at risk for overweight and obesity as well as engage childrens in learning strategies to improve health behavior. Unfortunately, overweight and obesity is now common in both children and adolescents.

Although the causes of excess body weight are multi – factorial, the most important factors are excess caloric intake coupled with limited energy expenditure. Therefore, lifestyle modification can significantly reduce the risk of morbidity and mortality and thereby increase longevity and improve the quality of life. (Centers of disease prevention and routine care).

Many behavioural factors play a role in obesity as well, including eating habits and daily activity level. Weight that is higher than what is considered healthy for a given height is described as overweight or obesity. Body Mass Index is a screening tool for overweight or obesity. BMI is a person's weight in kilograms divided by the square of height in meters. The results of a BMI measurement can give an idea about whether a person has

Corresponding Author

**Menaga Gandhi B**

Email: mnggandhi@gmail.com

Research Article



the correct weight for their height. If a person's body mass index is outside of the healthy range, their health risks may increase significantly. A body mass index (BMI) over 25 is considered overweight, and over 30 is obese.

#### AIM:

Effectiveness of information education communication on knowledge regarding prevention of obesity.

#### OBJECTIVES:

- to assess the level of knowledge regarding prevention of obesity among school childrens.
- to evaluate the effectiveness of information education communication on level of knowledge regarding prevention of obesity among school childrens.
- to associate in mean difference level of knowledge among school childrens with their demographic variables.

#### ASSUMPTIONS:

- Childrens may have inadequate knowledge regarding prevention of obesity.

- Childrens can identify obesity at an earlier stage and it can be prevented and effectively managed.
- Obesity remains unnoticed in children's due to lack of specific symptoms.

#### RESEARCH HYPOTHESIS:

**H 1:** There will be a significant difference between pre test and post test level knowledge regarding prevention of obesity among school childrens at  $p < 0.05$  level.

**H 2:** There will be a significant association between pre test and post test level of knowledge regarding prevention of obesity among school childrens with their demographic variables.

#### INCLUSION CRITERIA:

Childrens who are

1. Within the age group of 10-13 years.
2. All willing to participate in this study.
3. Will be available at the time of data collection.

#### EXCLUSION CRITERIA:

Childrens who are

1. Students who are deaf and dump.
2. Students who are suffering from any illness or absent.
3. Students who are aging below 10 years. .

**Table 1: Pre-test level of knowledge regarding prevention of obesity (n=60)**

S.NO	LEVEL OF KNOWLEDGE	PRE TEST	
		f	%
1.	Inadequate knowledge	25	41.7%
2.	Moderately adequate knowledge	33	55%
3.	Adequate knowledge	2	3.3%

Table.1 shows that, In pre-test among 60 samples majority 33 (55%) of them had moderate knowledge and 25 (41.7%) had inadequate knowledge and 2 (3.3%) of the students had adequate knowledge regarding prevention of obesity

**Table 2: Post-test level of knowledge regarding prevention of obesity (n=60)**

S.NO	LEVEL OF KNOWLEDGE	POST TEST	
		f	%
1.	Inadequate knowledge	0	0%
2.	Moderately adequate knowledge	1	1.7%
3.	Adequate knowledge	59	98.3%

Table 2 shows that, In post-test majority 59 (98.3%) of them had adequate knowledge and 1 (1.7%) had moderate knowledge.

**Table 3: Mean, standard Deviation, Mean Difference and 't' value of Pre-test and Post-test level of knowledge score regarding obesity among school children.**

GROUP	LEVEL OF KNOWLEDGE	MEAN	SD	MD	't' VALUE
Group	Pre test	13.18	3.91	13.42	-23.14
	Post test	26.6	2.34		

#### \*-significant at $p < 0.05$ level

Table.3 shows that, the mean pre-test level of knowledge score was 13.18, standard deviation was 3.91 and the mean post-test level of knowledge score was 26.6, standard deviation was 2.34. The mean difference was 13.42. The obtained 't' value is -23.14. It was significant at  $p < 0.05$  level. Hence, the stated hypothesis (H1) is accepted.



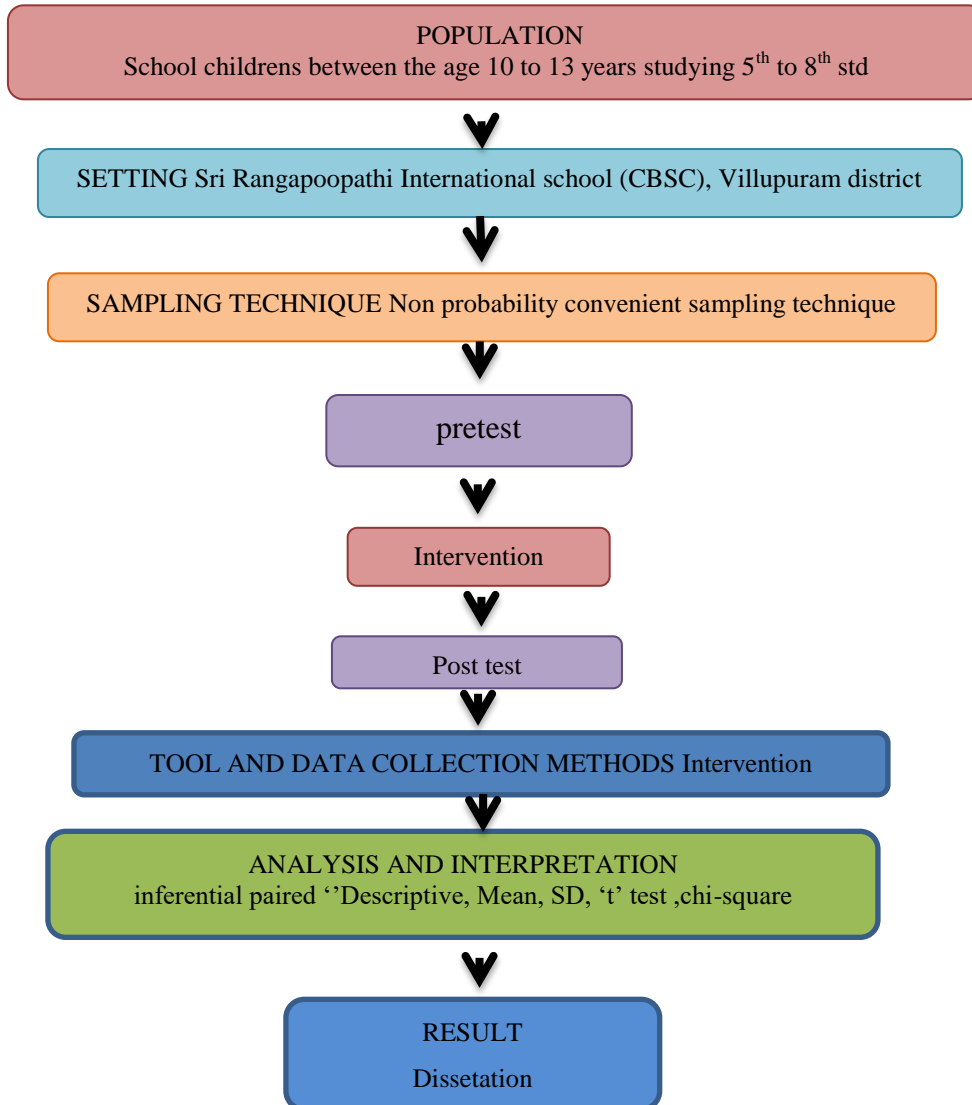
**Figure 1: Schematic Representation of Research Methodology.****RESEARCH METHODOLOGY :**

Figure 2: Pre Test Level of Knowledge

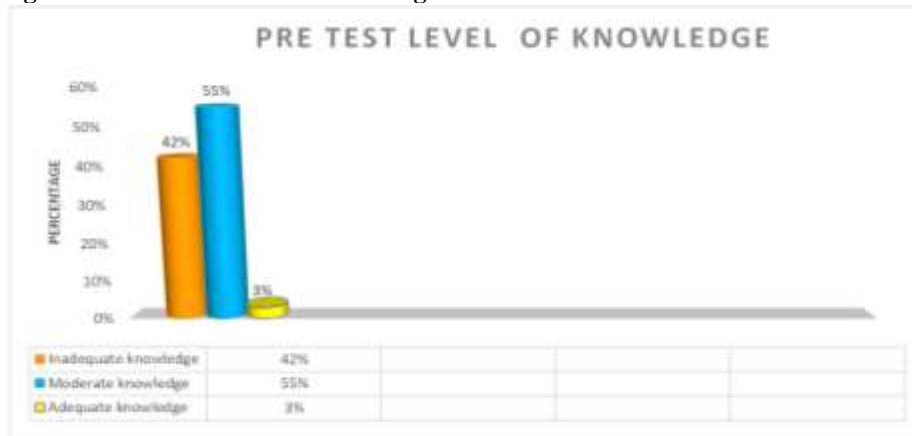


Figure 3: Post Test Level of Knowledge

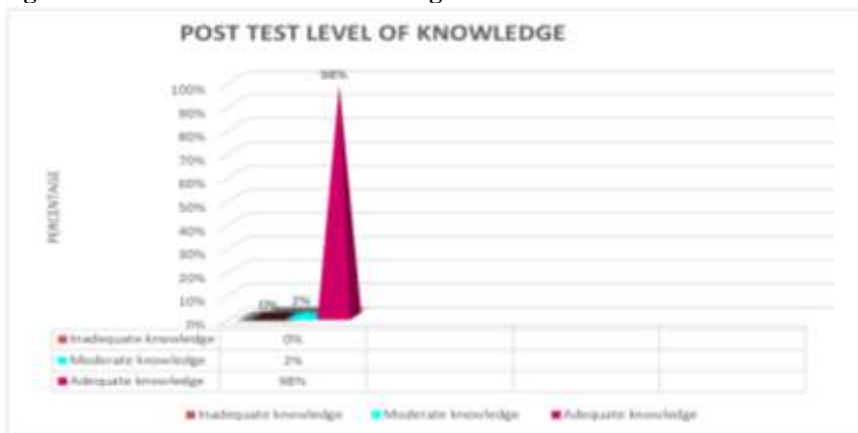
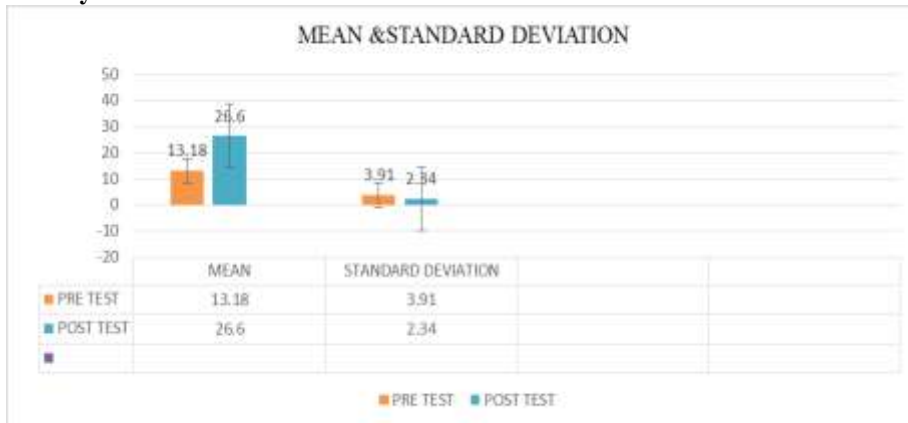


Figure 4: Mean and Standard Deviation of Pre Test and Post Test Level of Knowledge Regarding Prevention of Obesity.

**RESULTS AND DISCUSSION:****REVIEW OF LITERATURE:**

**SECTION 1:** Studies related to prevalence of obesity.

**SECTION 2:** Studies related to knowledge regarding obesity.

**SECTION 3:** Studies related to effects of obesity among school childrens.

**SECTION 4:** Studies related to effectiveness of Information Education Communication (IEC) on knowledge regarding prevention of obesity.

## Development and Description of the Tool:

### SECTION A:

**Assessment of Demographic Variables** - Such as age, sex, religion, fathers education, mothers education, fathers occupation, leisure time activity, type of family, type of food, previous awareness regarding obesity.

### SECTION B:

**Structured Self-Administered Knowledge Questionnaire** – This section consists of 30 multiple choice questions regarding prevention of obesity.

### CONCLUSION:

The main conclusion drawn from this present study was Information Education Communication (IEC) on prevention of obesity was effective in improving knowledge that denoted by significant difference between pre-test and post-test level of knowledge score. Samples became aware about prevention of obesity and found themselves comfortable and also expressed satisfaction,

and also the investigator understood the needs and purpose of Information Education Communication (IEC) regarding prevention of obesity and developed adequate knowledge regarding approaches and methods in doing research. The findings of the study encourage the nurses to adopt this Information Education Communication (IEC) as a part of their awareness nursing education programme in primary care setting.

### ACKNOWLEDGEMENT:

I want to express our sincere thanks to the committed BSc (N) III RD YEAR 9 th batch Students whose efforts and input were instrumental in the success of this study. A special shout-out to the participants whose involvement was crucial; without them, this project wouldn't have come to fruition. Our appreciation extends to the authors, editors, and publishers of the articles, journals, and books that were invaluable in shaping the literature discussed in this article. Gratitude also goes out to everyone who, in various ways, aided us in completing this study.

### REFERENCES

- Swaminathan M. (2005). Principles Nutrition, Dietics. Second edition, Bapco Publishing, Bangalore.
- Bellize M.C. (2001). Standard definition for childhood overweight and obesity. Br med.
- Wongs. (2001). wongs essentials of pediatric nursing (2nd edition) missorimos by publications.
- Steinberger J Morgan A, Hong CP, Jacobs DR Jr. Sinaiko AR. (2001). Adiposity in childhood predicts obesity and insulin resistance in young adulthood. *JPediatr*.
- Arthasarathy A. (2009). IAP text book of pediatrics (4th edition) newdelhi publications.
- Pouliot MC, Despre's JP, Nadeau A. (1992). Visceral obesity in men. Associations with glucose tolerance, plasma insulin and lipo protein level Diabetes.
- Hakim AS. (2002). Medical complications of obesity, SB Gupta (ed), Medicine Update Associations of Physicians of India, Mumbai, 480-528) Colditz GA, Willett WC, Stampfer MJ. Weight as a risk factor for clinical diabetes in women. *Am J Epidemiol* 1990; 132:
- Klesges RC, Coates TJ, Brown G. (1986). Parental influences on children' eating behavior and relative weight. *J Appl Behav Ana* 371-378.
- Parul Datta., "Text Book of Paeditric Nursing", Second Edition., J.P. Brothers Medical Publication., New Delhi., Pg. 259,480.
- Sister Nancy., "Principles and Practice of Nursing"., 4th Edition., 2nd Volume., N.R. Brothers Publication., Indore., Pg. No. 170-180.
- American Academy of Pediatrics Policy Statement (2007) Prevention of Pediatric Overweight and Obesity, *Pediatrics* 12(2)
- Americas children viewed online 2-21-07@ [www.childstats.gov/americaschildren](http://www.childstats.gov/americaschildren).
- American Heart Association; Cardiovascular Disease Statistics Viewed online August 28, 2007 at <http://www.americanheart.org/presenter.jhtml>
- Anderson, P. M., & Butcher, K. M. (2006) Childhood obesity, trends and potential causes *The Future of Children*: 16(1).
- Annie E. Casey Foundation Kids Count Special Report (2004) City and Rural, Kids Count Data Book. Anne E. Casey Foundation viewed at [www.aecf.org/knowledgecenter/publications](http://www.aecf.org/knowledgecenter/publications)
- Barlow S. F, Bobra S. R, Elliott M. B, Brownson R. C & Haire-Joshu D. (2007). Recognition of childhood overweight during health supervision visits: Does BMI help pediatricians. *Obesity* 15, 225-232.

