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"A Study To Evaluate The Effectiveness Of Information Education And Communication And (Iec) On Knowledge Regarding Prevention Of Childhood Obesity Among Students In Selected High Schools At Nelamangala."

1Pushpa D M, 2Dr.Rajesh R
1Assistant Professor, 2Prinicipal
1HARSHA COLLEGE OFNURSINGRGUHS,
2Harsha College of Nursing

ABSTRACT:
Evaluative approach was used for the study.Quasi experimental pre-test post -test design with control group was adopted for this study. The Conceptual framework for the study was based on Ernestine Wiedenbacg's model. The study as done at Harsha International Public School, Sondekoppa circle, Nelamangala, Bangalore.The 60 samples were selected through simple random technique. The tool used were a self-administered structured knowledge questionnaire.

Key words: Assess, Knowledge, Information Education Communication, Prevention of childhood obesity, High school children.

INTRODUCTION:

Obesity means having too much body fat. It is not the same as being overweight, which means weighing too much. A person may be overweight from extra muscle, bone, or water, as well as from having too much fat. Obesity is defined as the condition of abnormal excessive fat accumulation in adipose tissue to that extent the health may be impaired (WHO). Life style is considered to be an important determinant of health and sickness. Some of the health problems are rooted in childhood habits, among them obesity is a major problem. Today it is estimated that over 250 million people in low and middle income countries suffer from obesity. Globally more than one billion adults are overweight and of these 300 million are obese.

Obesity now considered as a "killer lifestyle" disease is an important cause of preventable death worldwide. According to the World Health Organization, 1.2 billion people worldwide are officially classified as, overweight. This is probably the most sedentary generation of people in the history of the world.

Statement of the problem:

"A study to evaluate the effectiveness of information education and communication and (IEC) on knowledge regarding prevention of childhood obesity among students in selected high schoolsat Nelamangala."

Objectives:

1. To assess the pre-test level of knowledge regarding prevention of childhood obesity among students in selected schools at Nelamangala.
2. To evaluate the effectiveness of Information Education and Communication (IEC) on knowledge regarding prevention of childhood obesity among students in selected high schools at Nelamangala.
3. To find the association between the pre-test and post test knowledge among students and their selected demographic variables of high school students.

Hypothesis:

H1: There will be a significant difference between pre-test and post-test level of knowledge regarding prevention of obesity among students in selected high school at Nelamangala.
H2: There will be a significant association between pre-test and post-test level of knowledge regarding prevention of childhood obesity among students in selected schools at Nelamangala and their selected demographic variables.

METHODOLOGY:

Research design: Quasi experimental pre-test post-test control group design.
Population
Target population - A ll the students between the age group of 13-15 years.
Accessible Population - 8th-10thclass students selected in Harsha International School at Nelamangala. Bangalore.
Sample Size - 60
Pre-Experimental group-60
Sampling-technique – Simple random sampling technique.
Inclusion Criteria
Students who were:
Students within the age group of 13-15years.
Students who are willing to participate in the study.
Students who will be available at the time of data collection.
Exclusion Criteria
Students who were:
Students who are deaf and dump.
Students who are suffering from any illness or absent.
Students who are aging below 10 years.

DESCRIPTION OF THE TOOL

The Structured self-administered questionnaire was used to evaluate the effectiveness of Information Education Communication on level of knowledge regarding prevention of childhood obesity among students in high school. It consists of two parts.
PART I: A tool to assess the demographic data of high school students such as age, sex,religion, fathers education, mothers education, fathers occupation, leisure time activity, type of family,type of food,previous awareness regarding obesity.
PART II: The investigator developed 25 structured self-administered knowledge questionnaires regarding knowledge in prevention childhood of obesity.

METHODOLOGY:
The data was collected among students who were present at selected high school, in Nelamangala.Written permission was sought and obtained from the authorities concerned. The period of data collection was 6 weeks. A brief introduction about the study was given to the samples. Data was collected through structured questionnaire to assess knowledge and 3 point likert scale to assess the knowledge of childhood obesity.

Plan for data analysis
The data were analysed by using both the descriptive and inferential statistics.

RESULT: Table 1: Classification of Respondents by Demographic Characteristics

Sl. no	Characteristics	Category	Frequency	Percentage
1	Age	13-14 years 14-15 years 15-16 years	30 20 10	50% 33.33% 16.66%
2	Gender	Male Female	23 37	38.33% 61.66%
3	Religion	Hindu Muslim Christian Others	38 07 15 00	63.33% 11.66% 25% 00%
4	Father's educational status	Primary education Secondary Education Higher secondary Graduate No formal education	00 10 20 30 00	00 16.66% 33.33% 50% 00
5	Mothers' educational status	Primary education Secondary Education Higher secondary Graduate No formal education	00 30 20 10 00	00 50% 33.33% 16.66% 00

Sl. no	Characteristics	Category	Frequency	Percentage
6	Fathers Occupation	Government employee Private employee Self employed Unemployed	30 20 10 00	50% 33.33% 16.66% 00%
7	Leisure time activity	Outdoor games Watching TV Indoor games Exercise	20 20 10 10	33.33% 33.33% 16.66% 16.66%

8	Type of family	Nuclear family Joint family Extended family	40 20 00	66.7% 33.33% 00
9	Types of food intake	Veg Non Veg	30 30	50% 50%
10	Previous exposure to Knowledge	Yes No	10 50	16.66% 83.33%

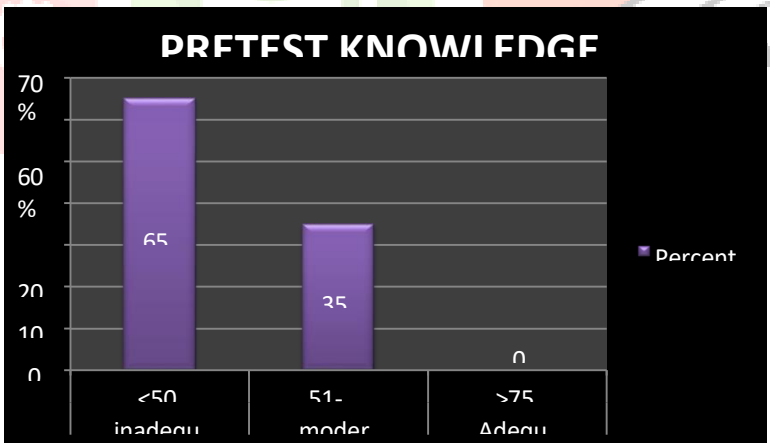
Table-1 depicts the characteristics of the high school students who are 13-16years and studying 8th to 10th standard at selected school Nelamangala by Age, Gender, religion, Father's educational status, Mother's educational status, Father's Occupation, Leisure time activity, Type of Family ,Type of Food intake and previous exposure to knowledge regarding prevention of Obesity. The findings indicate that majority 50% of high school students fall within 13-14 years, 33.33% are within 14-15 years and 16.66% are within 15-16years . With regard to gender, males (38.33%) and females (61.66%) respondents. Regarding Religion, Hindu (63.33%), Muslim (11.66%), Christian (25%). About Fathers education status majority 50% of respondents were graduates and 33.33% were having higher secondary education. About Mothers education status majority, 50% of respondents were having secondary education and 33.33% were having higher secondary education .With regard to Fathers occupation (50%) were Government employees and 16.66% were self employed. With response to leisure time activity , 33.33% spend time on outdoor games and watching TV. With regard to type of family 66.7% are from Nuclear family and 33.33% were from Joint family. About types of food intake equal 50 % takes Veg and Non veg diet and with regard to previous knowledge 50% were have no knowledge regarding prevention of childhood obesity.

TABLE- 2: Classification of Respondents Pre- test level scores regarding prevention of childhood obesity among students in selected high schools

N=60

Knowledge level	Category	Respondents	
		Number	Percent
Inadequate	≤ 50 % Score	39	65%
Moderate	51-75 % Score	21	35%
Adequate	> 75 % Score	00	00
Total		60	100%

Table-2 represents the frequency and percentage distribution of respondents on pretest knowledge level score of respondent regarding prevention of childhood obesity among students in selected high schools. Majority 65% of them had inadequate knowledge (≤50%) scores, 35% of them had moderate knowledge (51- 75%) scores and none of them had adequate knowledge (>75%) score in pretest.



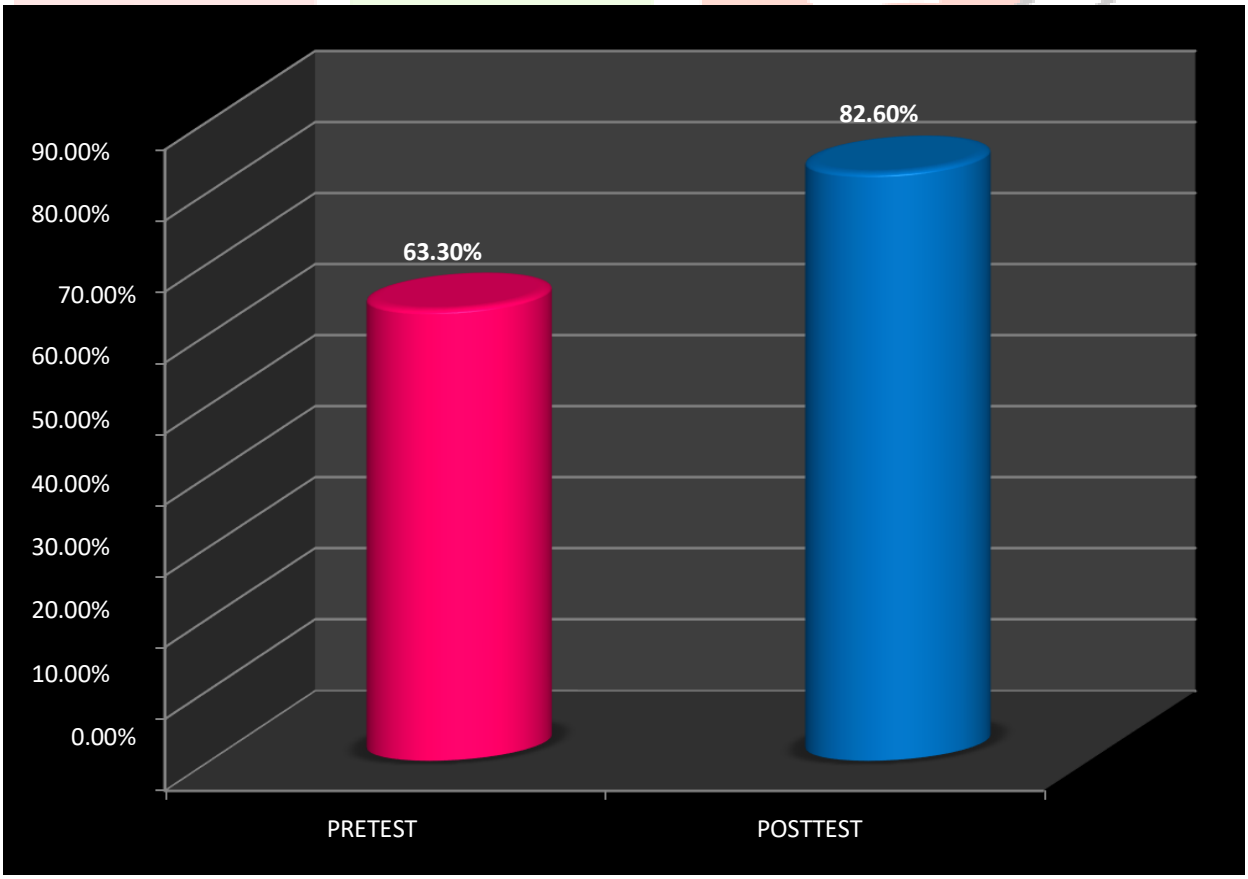
COMPARISON OF PRE- TEST AND POST- TEST KNOWLEDGE SCORES TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME.

TABLE -3: Over all Pre-test and Post-test Mean Knowledge scores regarding prevention of childhood obesity among students in selected high schools

N=60

Aspects	Max score	Knowledge scores				Paired t test
		Mean	SD	Mean%	SD%	
Pretest	25	15.825	4.079	63.3	16.31	**9.046***
Posttest	25	20.65	3.496	82.6	13.98	
Enhancement	25	4.825	0.583	16.17	1.94	

Table-4: projects the overall pretest, posttest and enhancement of mean knowledge scores prevention of childhood obesity. The mean pre-test knowledge was 15.825% with SD 4.079. The mean post-test knowledge found to be 20.65% with SD 3.496 However, the enhancement was proved as mean (16.17%) and SD of (1.94%). Further, the paired t-test value (9.046) shows statistical significance at level of $p<0.05$ with df (39), establishing the effectiveness of STP



ASSOCIATION BETWEEN MEAN PRETEST KNOWLEDGE SCORES WITH THEIR SELECTED SOCIO- DEMOGRAPHIC VARIABLES.

TABLE – 3: Association between Pre-test Knowledge level scores and variables regarding prevention of childhood obesity among students in high schools

N=60

S/No	Characteristics	category	sample	Knowledge level				X^2	P value	
				Moderate		Inadequate				
				N	%	N	%			
1	Age	13-14 years	30	10	33.33	20	66.66			
		14-15 years	20	10	50	10	50			
		15-16 years	10	5	50	5	50	1.71	0.42	NS
2	Gender	Male	23	08	34.78	15	65.21	0.03	0.85	
		Female	37	12	32.43	25	67.56			NS
3	Religion	Hindu	38	09	23.68	29	76.31			
		Muslim	07	03	42.85	04	57.14	1.31	0.51	NS
		Christian	15	05	33.33	10	66.66			
		Others	00	00	00	00	00			
4	Father's educational status	Primary education	00	00	00	00	00			
		Secondary Education	10	05	50	05	50	1.87	0.39	NS
		Higher secondary	20	05	25	15	75			
		Graduate	30	10	33.33	20	66.66			
		No formal education	00	00	00	00	00			

5	Mothers' educational status	Primary education Secondary Education Higher secondary Graduate No formal education	00 30 20 10 00	00 10 05 05 00	00 33.33 25 50 00	00 20 15 05 00	00 66.66 75 50 00	1.87	0.39	NS
6	Fathers Occupation	Government employee Private employee Self employed Unemployed	30 20 10 00	10 05 03 00	33.33 25 30 00	20 15 07 00	66.66 75 70 00	1.87	0.39	NS
7	Leisure time activity	Outdoor games Watching TV Indoor games Exercise	20 20 10 10	08 10 05 04	40 50 50 40	12 10 05 06	60 5 50 60	0.60	0.89	NS
8	Type of family	Nuclear Joint Extended	40 20 00	10 10 00	25 50 00	30 10 00	75 50 00	3.75	0.52	NS
9	Types of food intake	Veg Non Veg	30 30	11 12	36.66 40	19 18	63.33 60	0.07	0.79	NS

10	Previous exposure to Knowledge	Yes	10	05	50	05	50	1.18	0.27	NS
		No	50	16	32	34	68			

* Significant at 5% Level, NS: Non-significant S: Significant

DISCUSSION:

Finding revealed that the 50% belongs to 13-14 years, 33.3% belongs to 14-15 years,16.66% belongs to 15-16 years, in term of gender 38.33% were boys and 61.66% were girls, in term of education 43.33 % belong to eighth standard, in term of religion 63.33 % children's belong to Hindu, in term of type of family 66.7% belong to nuclear family and in term of source of information 50% gain information through parents.Based on the analysis of pre test knowledge scores of high school students (13-10) years , it is found that majority 65% of them had inadequate knowledge (≤50%) scores, 35% of them had moderate knowledge (51-75%) scores and none of them had adequate knowledge (>75%) score regarding childhood obesity.It was interfered that majority of high school students schools overall there is a need of structured teaching programme to enhance knowledge regarding childhood obesity. The mean pre-test knowledge score was 15.825% with standard deviation 4.079. The mean post- test knowledge was 20.65% with standard deviation 3.496. The mean (16.17%) and standard deviation (1.94%).It was inferred that there was significance enhancement in knowledge score after structured teaching programme in the experimental group. Hence, STP was effective. Hence there is no association between selected demographic variables and pre-test knowledge regarding prevention of childhood obesity among students in selected schools at Nelamangala and their selected demographic variables.

CONCLUSION: Overall observation showed that Information, Education and Communication on knowledge regarding road safety measure was effective. The "t" test was computed between pre test and post test knowledge scores, indicates the actual gain in knowledge. Hence it was concluded that STP was effective as teaching method to improve knowledge.

Implication of the study :

Nursing practice:

a. STP helps to improve the primary school children's level of knowledge on prevention of childhood obesity

b. STP can be used in various child health care centers, community areas, primary and high schools, to give health education to the primary and high level students.

Nursing education

a. The nurse educator should have the responsibility to update the knowledge, attitude and practice of nursing students on knowledge and awareness about prevention of childhood obesity

Nursing administration

a. It helps the nursing administrator to prepare STP regarding different prevention of childhood obesity

b. It helps the nurse to learn how they can reach the high school children, teacher to create awareness

regarding prevention of childhood obesity.

Nursing research

a. The study provides a baseline data for conducting other research studies.
The study will be a motivation for the budding researchers to conduct similar

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