

PREVENTION OF OBESITY AMONG SELECTED SCHOOL STUDENTS.

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Abstract

A true experimental research study to assess the effectiveness structured teaching programme on knowledge regarding prevention of obesity was undertaken. A quantitative approach with true experimental research design was used in this study. The sample size was 60, 30 in experimental group and 30 in control group. Both male and female students studying in VI, VII and VIII standard were included in the study. Simple random sampling technique was used to select the samples. The study results proved that there was significant increase in post test level of knowledge in the experimental group. No significant association was found between pretest level of knowledge in experimental and control group with selected demographic variables. Samples in the age group of 12 years with previous source of health information were found to have significant association with post test level of knowledge.

Key words: Childhood Obesity, school children.

Introduction

One of the most common problems related to today's lifestyle is being overweight or obesity. It is a risk factor in the development of many chronic diseases such as heart and respiratory disease, noninsulin dependent diabetes mellitus, hypertension and some types of cancers. Obesity and overweight are serious problems that pose a huge and growing financial burden for national resources. However, the conditions are largely preventable through sensible lifestyle changes. The factors attributing to increasing childhood obesity are increased intake of high calorie foods that are low in vitamins, minerals and micronutrients coupled with decreased physical activity. Childhood obesity is a major public crisis

nationally and internationally. The prevalence of childhood obesity has increased over few years.

State of the problem

A study to assess the effectiveness of structured teaching programme on knowledge regarding prevention of obesity among selected school students.

Objectives

- To assess the existing level of knowledge (pretest) on prevention of obesity among students in control and experimental group.
- To compare and determine the effectiveness of structured teaching programme on prevention of obesity among school students in experimental group.
- To associate the pre and post test level of knowledge on prevention of obesity in control and experimental group with selected demographic variables.

Hypothesis

There will be a significant increase in the post test level of knowledge on prevention of obesity.

Methodology

A quantitative approach with true experimental research design was used in this study. The present study was conducted in D.V.S.Reddy Higher Secondary School, Minjur. The sample size was 60. Thirty samples in the experimental group, and 30 samples in the control group. Simple random sampling technique was used to select the samples. The study includes both male and female students, studying in 6th, 7th, 8th standard, that is the students

between the age group of 11 to 13 years. The students who were unable to understand either Tamil or English and students who were absent on the day of data collection were excluded from the study.

Tools of the study.

Part-I: Deals with socio demographic data. It includes age, sex, education, food habits, religion, hours spent with TV and source of health information. **Part-II:** Consists of structured questionnaire to assess the knowledge on prevention

of obesity. This questionnaire consists of 20 questions. The collected data was transferred to a coding sheet. The correct answers carry 1 mark and 0 for wrong answer. **Part-III:** Structured teaching programme was administered to the 30 samples in the experimental group regarding prevention of obesity. It includes definition, classification, causes, symptoms, diagnosis, prevention and complications of obesity. Structured teaching was given for approximately 45 minutes.

Results

Table 1: Data Pertaining Frequency and Percentage Distribution of Pretest Level of Knowledge among Experimental and Control Group. (N = 60)

	Group				Chi square test
	Experiment		Control		
	n	%	n	%	
Inadequate Knowledge	14	46.7%	12	40.0%	X²=0.27
Moderate Knowledge	16	53.3%	18	60.0%	P=0.60
Adequate Knowledge	0	0.0%	0	0.0%	DF=2
Total	30	100.0%	30	100.0%	Not Significant

Not significant $P > 0.05$ *significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.0001$

Table 1 reveals the pretest level of knowledge between experimental and control group. In the experimental group, 14 samples (46.7%) had inadequate knowledge, 16 samples (53.3%) had moderately adequate knowledge and no one was in the cadre of adequate knowledge. In the control group, 12 samples (40 %) had inadequate knowledge, 18 samples (60 %) had moderately adequate knowledge and no one was in the cadre of adequate knowledge. It shows that statistically there is no significant difference between experimental and control group > 0.05 . It was confirmed using chi-square test.

Table 2: Data Pertaining To Frequency and Percentage Distribution of Post Test Level of Knowledge among Experimental and Control Group. (N = 60)

	Group				Chi square test
	Experiment		Control		
	n	%	n	%	
Inadequate Knowledge	0	0.0%	10	33.3%	X²=35.17
Moderate Knowledge	9	30.0%	20	66.7%	P=0.001***
Adequate Knowledge	21	70.0%	0	0.0%	DF=2
Total	30	100.0%	30	100.0%	Significant

Not significant $P > 0.05$ *significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.0001$

Table 2 shows the post test level of knowledge between experimental and control group. In the experimental group no one was in the cadre of inadequate knowledge, 9 samples (30 %) had moderately adequate knowledge and 21 samples (70 %) had adequate knowledge. In the control group 10 samples (33.3%) had inadequate knowledge, 20 samples (66.7%) had moderately adequate knowledge and no one was in the cadre of adequate knowledge. It shows that statistically there is a significant difference between experimental and control group ($p=0.001$). It was confirmed using chi-square test.

Table 3: Comparison of Pretest and Posttest Level of Knowledge among Experimental and Control Group.

(N = 60)

	Pre test		Post test		Mean difference	Student paired-test
	Mean	SD	Mean	SD		
Experiment	10.20	2.12	15.20	2.33	5	T=10.13 P=0.001***, significant
Control	10.50	2.09	10.90	2.38	0.40	T=1.43 P=0.16 not significant

Not significant $P>0.05$ * significant at $P\leq 0.05$ ** highly significant at $p\leq 0.01$ * very high significant at $P\leq 0.001$**

The mean value of pre test level of knowledge among experimental group was 10.20 with the standard deviation of 2.12. The mean value of post test level of knowledge among experimental group was 15.20 with standard deviation of 2.33. The mean value of pretest level of knowledge among control group was 10.50 with standard deviation of 2.09. The mean value of post test level of knowledge among control group was 10.90 with the standard deviation of 2.38. In the pretest, statistically no significant difference was found between experimental and control group. ($t=10.13, P=0.001$ ***, significant). In the post test statistically significant improvement was found between the experimental and control group (1.43, $P=0.16$, not significant)

Major findings of the study

- With regard to pre test level of knowledge, in the experimental group 14 samples had inadequate knowledge and 16 samples had moderate knowledge. In the control group 12 samples had inadequate knowledge and 18 had samples had moderate knowledge.
- With regard to the post test level of knowledge, in the experimental group, no one was in the cadre of inadequate knowledge, 9 samples (30 %) had moderate knowledge and 21 samples (70 %) had adequate knowledge. In the control group 10 samples (33.3%) had inadequate knowledge, 20 samples (66.7%) had moderate knowledge and no one was in the cadre of adequate knowledge. It shows that statistically there is a significant difference between experimental and control group ($p=0.001$). It was confirmed using chi-square test.
- The mean value of the post test level of knowledge in the experimental group was 15.20. The mean value of post test level of knowledge in the control group was 10.90. This shows a statistically significant improvement in the experimental group at the level of $p=0.001$.
- The percentage of improvement in the post test level of knowledge in the experimental group was 23.6%. In the control group it was only 2 %. It shows that there is a statistically significant improvement in the post test level of knowledge in experimental group.
- No significant association was found between pre test level of knowledge in the experimental and control group with selected demographic variables.

- Samples in the age group of 12 years, female coming under the category of Hindu religion with previous source of health information through friends and neighbours were found to have significant association with post test level of knowledge.

Conclusion

The finding of the study concludes that the structured teaching programme was effective in improving the knowledge score of samples in the experimental group. That is out of 30 samples, 21 samples had adequate knowledge and 9 samples had moderately adequate knowledge in the post test. This study finding also indicates that there is a strong need for health awareness program among general public to reduce the occurrence of obesity in future. This study finding serves as a reference material to the government of India to formulate health related policies with regard to prevention and control of obesity.

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Sleeping with lights on and weight gain in women linked in new study

Keeping a lot of light on while you snooze, such as from a television or bright nightlight, has been linked with an increased risk of weight gain and obesity.

Specifically, sleeping with a television or light on in the room was positively associated with gaining five kilograms, or 11 pounds, over a five-year period among women in a new study published in *JAMA Internal Medicine* on Monday. "There was a 17% chance of gaining the five kilograms after we adjusted for confounding factors," said Dale Sandler, a senior investigator at the National Institute of Environmental Health Sciences in North Carolina and senior author of the study. (CNN, June 10, 2019)

(eMediNexus, 11 June 2019.)



“In the end, we will remember not the words of our enemies, but the silence of our friends.”

- Martin Luther King Jr.