

# Pre-Experimental Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge regarding Home-Based Management on Prevention of Obesity among Adolescent Students at selected Schools of Lucknow, U.P.

Amanjeet Kaur<sup>1</sup>, Migron Rubin<sup>2</sup>

kauramanjeet9[at]gmail.com

migronrubin10[at]gmail.com

**Abstract:** A pre-experimental study to assess the effectiveness of Planned Teaching Programme on knowledge regarding home-based management on prevention of obesity among adolescent students at selected schools of Lucknow, U.P was conducted. One group pre-test post-test design was adopted and Non probability convenient sampling technique was used to select 60 students. Data were collected by self structured knowledge questionnaire. The subjects received Planned Teaching Programme regarding home based management of obesity. The collected data were analyzed by using both descriptive statistics and inferential statistics. Independent “t” test was used to evaluate the effectiveness of Planned Teaching Programme. In pre-test among 70 samples majority 56 (70%) of them had moderate knowledge and 9 (12.85%) had adequate knowledge and 5 (7.14%) of the students had inadequate knowledge regarding home-based management of obesity. In post-test 2 (2.857%) of them had moderate knowledge and majority 68 (97.14%) had adequate knowledge. In post-test majority of the students, 68 (97.14%) had adequate knowledge. The result shows that the Planned Teaching Programme was effective in improving knowledge. With regards to association between the levels of knowledge regarding Home-based management of obesity among adolescent students with their selected demographic variables, there was no association between the levels of knowledge regarding prevention of obesity with their selected demographic variables.

**Keywords:** Effectiveness, Planned Teaching Programme, Home Based Management, Obesity, Students

## 1. Introduction

Obesity is a common but often underestimated condition of clinical and public health importance in many countries around the world. Its general acceptance by many societies as a sign of well-being or a symbol of high social status, and the denial by health care professionals and the public alike that it is a disease in its own right, have contributed to its improper identification and management

Overweight and obesity is largely preventable. Replacing foods of high energy density with foods of lower energy density, such as fruits and vegetables, can be an important part of a weight-management strategy. Home based management includes dietary and lifestyle changes. A healthy weight is important in maintaining good health. Even small changes, such as eating more vegetables and exercise a few times a week, can help to prevent obesity.

Planned teaching programme will help to enhance knowledge of adolescent students to modify their knowledge and bring change in their behavior and eating habits. Thus, the researcher felt need to assess the knowledge of adolescent students regarding home-based management for obesity and enhance their knowledge by Planned Teaching Programme.

## 2. Objectives

- 1) To assess pre-interventional knowledge score regarding home-based management of obesity among adolescent students.
- 2) To assess post-interventional knowledge score regarding home-based management of obesity among adolescent students.
- 3) To find out significant difference between pre and post interventional knowledge score regarding home-based management of obesity among adolescent students.
- 4) To associate pre-interventional knowledge score regarding home-based management of obesity among adolescent students with their selected demographic variables.

## 3. Literature

Dr. M. Vijayanthimala<sup>1</sup>, et. al. conducted a Quasi Experimental study on Effectiveness of Information, Education and Communication on Prevention of Obesity in Young Adolescents. 50 students were selected by purposive sampling technique. The tool comprises of demographic profile and 30 multiple choice questionnaire and structured questionnaire. The data was analyzed by using descriptive and inferential statistics. There was significant association between the knowledge and the selected demographic variables. Conclusion: Obesity in adolescents and children has raised to significant levels globally with serious public

health consequences. The findings of the study concluded that IEC was very effective in improving the knowledge of the students on prevention of obesity.

Ester Mary Pappiya<sup>1</sup>, et. al. (2018) conducted a True Experimental research on “Effectiveness of Healthy Eating and Active Lifestyle Intervention Program (HEALIP) on Body Mass Index among Children with Obesity. 200 samples who met the inclusion criteria. Healthy Eating and Active Lifestyle Intervention Program was administered for the samples in the experimental group and their Height, weight and body mass index (BMI) was measured. Data were analysed by descriptive and inferential statistics. The base line BMI score of the control group pre-test was 32.8 which was reduced to 31.72 in the post-test and in experimental group pre-test 32.71 and had marginally reduced to 30.26 during the post-test. There was a significant reduction in the body mass index in the experimental group post-test ( $p < 0.001$ ). The study findings emphasized that there was significant reduction in weight control.

#### 4. Methods

**Research Approach:** Quantitative Research approach

**Research Design:** Pre-experimental one group pre-test post-test design

**Setting:** Surya Public School, Sultanpur Road, Lucknow, U P.

**Sample:** 70 class 9th, 10th, 11th and 12th students studying in Surya Public School

**Sampling Technique:** Non-probability random sampling

**Materials:** Planned teaching Programme was developed on home based management of obesity after an extensive review of literature. The content validity of the tool was established by experts. The reliability of knowledge questionnaire was tested by Spearman Brown Prophecy (0.148) formula and tools were found reliable.

#### 5. Results

**Demographic Characteristics:** Results showed that out of 70 subjects 60 majority (85.7%) were belonged to the age group between 15- 17 years, 6 (8.57%) were belonging to the age group >17 years and 4 (5.71%) belonging to the age group <15 years, majority 38 (54.28%) were females. Majority of students 29 (41.42%) were in 11<sup>th</sup> standard, 25 (35.371%) were in 10<sup>th</sup> standard, 16 (22.85%) were in 12<sup>th</sup> standard. Regarding weight 11 students (15.71%) were < 40kg, 28 students (40%) were 41-50 kg and 19 (27.14%) belongs to 51-60 kgs and >60 kg 12 students (17.14%). 43 students (61.42%) were from urban area and 27 students (38%) are living in rural area. Regarding type of food, majority 41 students (58.6%) were vegetarian, 4 (5.71%) of them were egg vegetarian and 25 students (35.7%) were non-vegetarian. Regarding number of meals per day, 5 students (8.34%) take 2 meals per day, 35 students take 3 meals and 20 students (33.33%) consume more than 3 meals a day.

Table: 1 Frequency and Percentage Distribution of students on selected high school with their selected demographic variables

**Data on level of knowledge regarding home based management of obesity among adolescent students in selected school:** Results shows that, in pre-test among 70 samples majority 56 (70%) of them had moderate knowledge and 9 (12.85%) had adequate knowledge and 5 (7.14%) of the students had inadequate knowledge regarding home-based management of obesity. In post-test 2 (2.857%) of them had moderate knowledge and majority 68 (97.14%) had adequate knowledge.

**Data on effectiveness of planned teaching programme on level of knowledge regarding prevention of obesity among students:** Difference between pre-test and post-test knowledge regarding home based management of obesity

S. no.	Knowledge	Mean	Mean difference	Mean percentage	S D	T- value
1	Pre-test	10.95	5.460	13.68	2.32	17.358
2	Post-test	16.41			1.58336	

In relation to effectiveness of PTP on knowledge regarding home-based management of obesity the pre-test knowledge mean score was 10.95, standard deviation was 2.32 and post-test mean score was 16.4 and standard deviation 1.58 which was increased after administration of PTP. The calculated mean difference was 5.45 and the obtained t-value 17.358 was significant at  $p < 0.05$  level. The result shows that the PTP was effective in improving knowledge.

#### 6. Conclusion

It is concluded that Planned Teaching Programme on home-based management on prevention of obesity is effective in improving level of knowledge among selected adolescent students in selected school of Lucknow. There was no significant association found between age, gender, qualification, weight, living area, height and total no. of meals. There is significant association found between diet with pre-test knowledge.

#### 7. Future Scopes

On the basis of the study, it is recommended that:

- The study can be replicated with large number of sample.
- A experimental study can be done among middle adulthood.
- Effective information, education and communication package can be prepared to improve the knowledge regarding obesity

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