(REVIEW ARTICLE)

Effectiveness of educational intervention on prevention of junk food consumption and its ill effects among obese children in selected schools

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Abstract

The present study assessed the effectiveness of educational interventions on the prevention of junk food consumption and its ill effects among obese children in selected schools Pre-experimental one group pre-test post-test research design adopted for this study. The study was conducted at R.C. Higher Secondary School, Sendivakkam, K.V.S Secondary School in Kadapakkam, and G.V.R Matriculation Higher Secondary School, Kadapakkam, in Kancheepuram district. The target population was school going children obese children (aged between 9 and 12 years) based on their BMI. The sample size was 100 obese children, used for Non probability purposive sampling technique. Pre-test knowledge was assessed, providing educational intervention on the prevention of junk food consumption and its ill effects, and post-test knowledge was assessed. There was statistical significance between the pre-test and post-test mean knowledge score, with the 't' value of 33.47 was compared with the table value at the level ($P<0.001$). It implies that the educational intervention provided by the investigator was effective and showed improvement in the level of knowledge of obese children.

Keywords: Childhood Obesity; Junk food; I'll effects; Childhood prevention

1. Introduction

Junk food refers to food that is easily and quickly prepared with precooked or pre-heated ingredients, then packed and sold in stores and restaurants. Obesity is an abnormal or excessive fat accumulation that poses a risk for normal health. The risky age group is 6–12 years of age. In India, commonly available junk foods are bread, cookies, chips, candy bars, burgers, fries, pizza, pancakes, samosas, panipuri, carbonated beverages, etc. Junk food may cause obesity, high cholesterol levels, cardiovascular disorders and nutritional deficiencies. As these foods are commonly available in urban areas, children will be attracted to them because of their color, flavor and taste. The majority of junk food is sold in the streets without any protection, which leads to many health problems in children. Studies have found that food coloring can cause hyperactivity and a lack of concentration in children.

1.1. Need for the study

In recent days, the food patterns of family members have changed. Every child and family member needs to be aware of regarding the ill effects of junk food consumption. As life patterns and dietary habits change, people from different age groups, especially children, are attracted to the consumption of fast food. Based on the present scenario, the investigator would like to inform the children about their food habits and expose the ill effects of junk food and decided to do the research study on the topic.

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1.2. Statement of the problem

A study to assess the effectiveness of educational interventions on prevention of junk food consumption and its ill effects among obese children in selected schools.

Objectives

- To assess the knowledge on prevention of junk food consumption and its ill effects among obese children.
- To evaluate the effectiveness of educational intervention on junk food consumption among obese children.
- To find out the association of knowledge on prevention of junk food consumption and its ill effects among obese children with selected demographic variables.

1.3. Hypothesis

- H1: There will be a significant difference in the level of knowledge between pre-test and post -test score.
- H2: There will be a significant association between the post- test score with selected demographic variables.

Limitation

- The study is limited to fourth, fifth and sixth standard students studying in selected schools
- The study limited to school children with the age group of 9- 12 years
- The period of study was limited to a period of 6 weeks
- This study was limited to 100 obese children.

2. Methodology

Pre-experimental one group pre test- post test research design adopted for this study. The study was conductein R.C Higher secondary school, sendivakkam, K.V.S Matriculation maximum in Kadapakkam and G.V.R Matriculation Higher Secondary School, Kadapakkam at kancheepuram district. The target multiple-choice maximum was school going children - Obese children (aged between 9-12 years) based on the BMI. The sample size was 100 obese children, used for Non probability purposive sampling technique. The instrument consists of 25 population questions to assess the level of knowledge. Each question carries a multiple-choice Pre-testmaximum score of 1. The maximuPre-test maximumHigher Setheirlwould be 25. Pre test knowledge was assessed, provided educational intervention on prevention of junk food consumption and its ill effects and after assessed post test knowledge

2.1. Criteria for sample selection

2.1.1. Inclusion criteria

- Obese children both boys and girls between the age of 9-12 years.
- School children who are studying in the above mentioned school.
- School children who are willing to participate.
- Students who could understand Tamil or English.

2.1.2. Exclusion criteria

- Students who are not available during data collection
- Students who were exposed to similar teaching previously
- Students who are exposed to any health issues

2.2. Reliability

- Reliability of an instrument is the degree of consistency with which the instruments or procedures demonstrate whatever is measured. A self-structured scale is a tool that has been adapted for the study. The reliability was checked by the test-retest method. The reliability score obtained was r = 0.75.

3. Result

Demographic characteristics of the samples about children Age 32 (32%) between 9 and 10 years, 38 (38%) between 10 and 11 years, and 30 (30%) between 11 and 12 years Gender, 46 (46%), children were male and 54 (54%) were

female, standard, IV-31 (31%), V-35 (35%), VI-34 (34%), according to BMI, 32 (32%) were overweight and 68 (68%) were obese. 46 (46%) belonged to Hindus, 30 (30%) belonged to Muslims, and 24 (24%) belonged to Christians. Educational status of the parent, 43 (43%) were non literate, 30 (30%) completed primary education. 19 (19%) completed high school, and 8 (8%) studied up to HSC, scores occupation of the parents was 25 (25%) salaried, and 33 (33%) were occupied with their own businesses, 42(42%) were coolly, Number of siblings in the family 42(42%) had one sibling, 47(47%) had two siblings, and 11(11%) had more than two siblings regarding the food patterns of the children 17(17%) belonged to vegetarian, 79 (79%) belonged to non-vegetarian, and 4 (4%) were ova vegetarians. Monthly income 40 (40%) in the family income up to Rs. 5000, 37 (37%) in the family income of Rs. 5001 – Rs.10,000, 20 (20%) in the family income of Rs. 10001 – Rs.15,000 and 3 (3%) in the family income above Rs.15,000 , type of family 73 (73%) %) belonged to nuclear family and 27 (27%) %) belonged to joint family. Pre mean score revealed that most of the obese children 85 (85%) had an inadequate level of knowledge, 15 (15%) were have moderate level of knowledge. Post test score reveals that majority of the obese children 82 (82%) are have the adequate level of knowledge, 18 (18%) have moderate knowledge level. There was a statistically significance between pre test and post test mean knowledge score with the 't' value of 33.47 was compared with tabulated table value at the level (P<0.001).
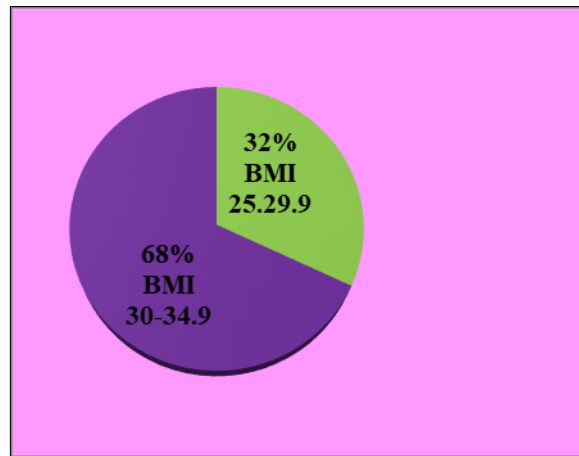
Figure 1 Percentage distribution of demopgraphic variable based on BMI

Table 1 Effectiveness of educational interventions on prevention of junk food consumption and its ill effects among obese children by using paired "t" test

Level of knowledge	Mean	N	SD	SD error mean	't' value	'p' value
Post test	21.30	100	2.24	2236	33.47**	P<0.001
Pre test	9.18	100	2.81	2808		

4. Conclusion

 The presenting study assessed the effectiveness of educational interventions on junk food consumption among obese children. The teaching was given, and it showed that there was an improvement in the knowledge and attitude of obese children regarding the prevention of junk food consumption and its ill effects. This would facilitate awareness among obese children about healthy dietary habits.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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