



## RESEARCH ARTICLE

### A PRE-EXPERIMENTAL STUDY TO EVALUATE THE EFFECTIVENESS OF A VIDEO-ASSISTED TEACHING PROGRAMME ON KNOWLEDGE AND PRACTICE REGARDING THE PREVENTION OF OBESITY AMONG SCHOOL-AGE CHILDREN IN A SELECTED SCHOOL AT KANKER (C.G.).

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#### ABSTRACT

A Pre experimental study to evaluate the effectiveness of video assisted teaching programmeon knowledge and practice regarding prevention of obesity among school age children in a selected Government primary school, Kokanpur, Kanker (C.G)". Quantitative approach with pre experimental one group pretest post-test design was usedto collect the data. A total of 60 school age children aged between 6 to 12 years from selected Government Primary school Kokanpur, Kanker was selected through non-probability purposive sampling technique. Structured questionnaires were used to assess the knowledge and checklist was used for practice regarding prevention of obesity. In pretest 70%had poor knowledge after video assisted teaching programme and no one had poor knowledge in post-test There was a significant improvement in mean post-test knowledge score (19.16) and practice score (8.95) and T value is 9.2 is greater than the table value of 1.96 at  $P < 0.05$  level of significance which was statistically highly significant. **Problem statement:** A Pre-Experimental Study to Evaluate the Effectiveness of a Video-Assisted Teaching Programme on Knowledge and Practice Regarding the Prevention of Obesity Among School-Age Children in a Selected School at Kanker (C.G.)

## INTRODUCTION

School age children is the age of transition from childhood to adolescent. The healthy childhood has its origin from their school age children period. Healthy youth is more productive and contribute much to the development of the nation. Many Schoolage children skip breakfast by choice either because they do not have time to eat or in order to lose weight. The Nutritional transition caused due to various factorslikeeconomic development and globalization leads to rapid change in poor dietary habits combined with decreased physical activity. In addition, many school children depend on junk foods for nourishment and have inadequate intake of fruit, vegetables and whole grains which have further led to an increase in overweight and obesity. Obesity is defined as a condition in which excess body fat negatively affects health. Childhood overweight and obesity are global problems, and obesity in childhood increases the risk of various health complications later in life. About 30% of total obesity cases are recorded in children, of which 50% to 80% progress to obesity in school-age children. Health outcomes related to childhood obesity include hypertension, type 2 diabetes mellitus, dyslipidemia, left ventricular hypertrophy, hepatitis, obstructive sleep apnoea, orthopedic problems, psychosocial issues, and certain congenital diseases.

## OBJECTIVES

- To assess the pre-test and post-test knowledge and practice regarding the prevention of obesity among school-age children.

- To evaluate the effectiveness of the video-assisted teaching programme on knowledge and practice regarding the prevention of obesity among school-age children.
- To compare the knowledge and practice regarding the prevention of obesity among school-age children.
- To find out the association between pre-test knowledge and pre-test practice on the prevention of obesity among school-age children and their selected demographic variables.

## HYPOTHESIS

**H1:** There will be a significant difference between the pre-test and post-test levels of knowledge and practice regarding the prevention of obesity among school-age children.

**H2:** There will be a significant correlation between knowledge and practice regarding the prevention of obesity among school-age children.

**H3:** There will be a significant association between the pre-test knowledge and pre-test practice scores and the selected demographic variables.

## METHODOLOGY

Quantitative research approach with a pre-experimental one-group pre-test post-test design was adopted for the present study.

The independent variable was the video-assisted teaching programme on knowledge and practice related to the prevention of obesity, while the dependent variable was the knowledge and practice of school-age children regarding obesity prevention. A total of 60 school-age children, aged 6 to 12 years, were selected from Government Primary School, Kokanpur, Kanker, using a non-probability purposive sampling technique.

### Research Tool

The tool consists of three parts.

**Part I** - It comprised of demographic variables.

**Part II** – The self-structured questionnaire consisted of 30 multiple-choice questions to assess knowledge regarding the prevention of obesity among school-age children. Each item had one correct response and was awarded 1 mark for the correct answer, while each incorrect response received 0 marks. The total score was 30.

### Scoring interpretation for knowledge

Poor Knowledge = 1-33%

Average knowledge = 34 – 66%

Good Knowledge = 67-100%

### Part –III

The Checklist was used for assessing the practice regarding prevention of obesity. It consists of 10 questions. Regularly – 5mark, Frequently – 4mark, Often- 3mark, Occasionally-2mark and Never-1mark.

### Scoring interpretation for practice

Poor Practice – 1-33%

Moderate Practice – 34 – 66%

Good Practice – 67-100%

### METHOD OF DATA COLLECTION

After obtaining the permission from the Head Mistress of the school, written consent was obtained from the parents and oral consent from the school going children. I phase:Pre-test was conducted. The investigator gathered information on demographic data and level of knowledge and practice was assessed by using structured questionnaires and practice checklist.

**Phase II:** A video-assisted teaching session was given to the school-age children regarding obesity and its causes. symptoms, prevention of obesity, is explained with the help of video assisted teaching for 45 minutes.

**III phase:** After 7 days, the post-test was conducted with the same structured questionnaires to assess the knowledge and practice was assessed by using the checklist.

## RESULTS

Majority of the subjects 15(25%) belong to age of 7-8-year, 11(18.3%) belong to age between 6-7-years, 11 (18.3%) subject belong to age between 8-9 years, and 6(10%) belong to age between 10-11 years and 11(18.3%) belong to age between 11-12 years. 42(70%) belong to nuclear family and 15(25%) belongs to joint family and 3 (5%) belong to extended family. Regarding the educational status of the mother and father, 7 (11.67%) father had no formal education, 5 (8.33%) had completed Primary school, 43 (71.67%) had their higher secondary school and 5 (8.33%) are graduate and above. 40(66.67%) mother had no formal education, 9 (15%) had completed Primary school, 5(8.33%) had completed their higher secondary education and 6(10%) were graduate and above. Regarding the income of the family, 22 (36.67%) have income of less than Rs.5000/month and 15(25%) have income of Rs.5000-10000/

month, 11 (18%) has income of Rs.10000-15000/ month, and 12(20%) has income of above Rs.20000/month.

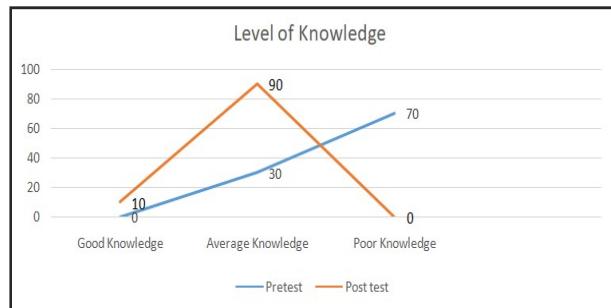


Fig -1: Showed that in pretest score majority 42 (70%) children had poor knowledge score, 18(30%) children had average knowledge, whereas in post –test 54 (90%) children had average knowledge and 6 (10%) children had good knowledge score.

Fig. 2. Percentage distribution of pre and post –test practice score regarding prevention of Obesity among school age children.

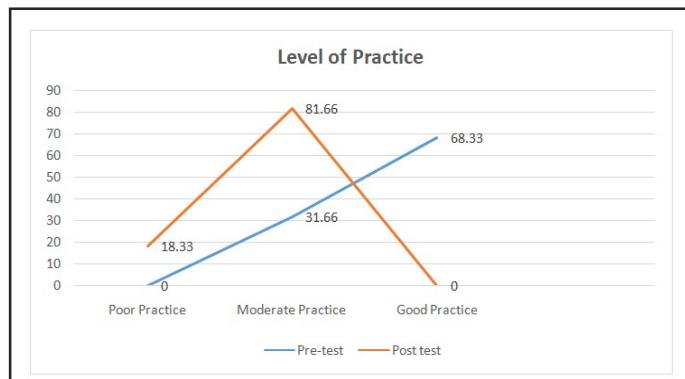


Fig. 2. Represented that in pre –test practice score 41 (68.33%) children had inadequate practice, 19 (31.66%) children had moderate practice, whereas in post-test 49(81.66%) children had moderate practice.

**Table No 1. Comparison of pretest and post-test knowledge score regarding prevention of Obesity among age children.(n = 60)**

Knowledge	Mean	SD	t “Value	Significance
Pre-test	9.66	4.7		
Post-test	19.16	6.4	9.2	P<0.05

The pre-test mean was  $9.66 \pm 4.7$  and the post-test mean was  $19.16 \pm 6.4$ . The obtained “t” value was 9.2 is greater than the table value 1.96 at  $P < 0.05$  level of significance. The study found that there was a significant increase in the knowledge score between posttest and pretest.

**Table No 2. Comparison of pretest and post-test practice score regarding prevention of Obesity among school age children (n=60)**

Practice	Mean	SD	t’ Value	Significance
Pre-test	5.26	1.3		
Post-test	8.95	3.6	7.46	P<0.05

Comparison of pretest and post-test practice score regarding prevention of Obesity among school age children. (n=60) In which pre-test mean is 5.26 with SD (1.3) while in post-test mean is 8.95 with SD (3.6). It indicates that there is significant gain in practice in post-test after the administration of video assisted teaching programme. Since the calculated “t” value is 7.46 is greater than the table value 1.96 at  $P < 0.05$  level of significance.

There was a significant correlation between knowledge and practice. The obtained 'r' value was 0.89 at  $P < 0.01$  level of significance. There was a significant association between age, type of family, educational status of father and educational status of mother and knowledge. The obtained chi square value  $\chi^2$  were 30.17, 15.26, 11.15, 10.14 at  $P < 0.05$  level of significance. There was a significant association between occupation of father, income of family and practice. The obtained chi square values were 12.8, 21.79 at  $P < 0.05$  level of significance.

## DISCUSSION

In pre-test knowledge score, majority 42 (70%) school going children had poor score, 18 (30%) school going children had average score. Whereas in post-test 54 (90%) school going children had average score, 6 (10%) school going children had good score. In the pre-test practice scores, 41 (68.33%) school-going children had inadequate practice, 19 (31.66%) had moderate practice, and none had adequate practice. In the post-test, 11 (18.33%) school-going children demonstrated adequate practice, while 49 (81.66%) had moderate practice. The pre-test mean knowledge score was 9.66 with an SD of 4.7, whereas the post-test mean knowledge score increased to 19.16 with an SD of 6.4. The obtained *t* value was 9.2 at the  $P < 0.05$  level of significance. This indicates that there was a significant gain in knowledge in the post-test after the administration of the video-assisted teaching programme. The pre-test mean practice score was 5.26 with SD (1.3) whereas in post-test mean practice score was 8.95 with SD (3.6). The obtained "t" value was 7.46 at  $P < 0.05$  level of significance. There will be a significant difference between pre-test and post-test level of knowledge and practice regarding prevention of obesity among school age children. Hence the researcher accepted the research hypothesis  $H_1$ . The following literature study was supported by the study of Sowmya, A.V., (2020). The study found that revealed that the overall post-test mean knowledge score 21.31 (85.26%) were significantly higher than the overall mean pre-test knowledge scores 8.63 (34.53%) and the computed paired 't' value 34.48 is higher than the table value 3.46 at  $P < 0.001$  level. The overall findings of the study clearly showed that the video assisted teaching programme was significantly effective in improving the knowledge regarding the impact of junk foods on obesity among school age children. There was a positive correlation 0.89 at  $P < 0.01$  between the Knowledge score and practice score. Significant association was found between knowledge and demographic variables such as age, type of family, educational status of the father, and educational status of the mother. The obtained chi-square ( $\chi^2$ ) values were 30.17, 15.26, 11.15, and 10.14, respectively. Significant association found between practice and the demographic information such as occupation of father and income of family. The obtained chi square value  $\chi^2$  were 12.8, 21.79.

## IMPLICATIONS

### Implication for Nursing Practice

- This study will help the nursing personnel to understand the importance of preventive measures of obesity among the school age children.
- The nurse can emphasize the children about the use of exercise, avoid the junk foods to prevent the obesity.
- Community health nurse plays a vital role in providing information about the obesity and its risk factors, complication and prevention measures to the children and their parents.

### Implications for Nursing Research

Obesity is considered as one of the most serious health challenges of the 21st century. Obesity in children is an equally significant public health concern. Childhood obesity is increasing at alarming rate every year all over the world.

- Promote more research activities on knowledge, attitude, and practice regarding the prevention of obesity, which can be assessed using various research methodologies.
- This study will be helpful in planning new interventional studies to improve knowledge regarding the prevention of obesity.

## RECOMMENDATIONS FOR FURTHER STUDY

- The study can be repeated on a larger sample for better generalization of the findings.
- A descriptive study can be conducted to assess the knowledge, attitude, and practice regarding the prevention of obesity.
- Similar studies can be conducted using various teaching aids to impart knowledge on obesity prevention among school-going children.
- The same study can be conducted as a comparative study to assess the knowledge, attitude, and practice regarding the prevention of obesity between government and private school children in the school-age group.
- The same study can be conducted as a comparative study to assess the knowledge, attitude, and practice regarding the prevention of obesity between urban and rural school-age children.

## CONCLUSION

Global Overview of Child hood obesity is a growing public health concern worldwide. Childhood obesity has become a significant Global Health concern, with rates increasing rapidly in both developed and developing countries. India, too, has seen an alarming rise in childhood obesity, with contributing factors such as unhealthy eating habits, sedentary lifestyles, and lack of physical activity. The findings revealed that the video teaching programme was effective in improving knowledge and practice. The study also motivated the participants to adopt proper dietary habits to prevent obesity and its associated complications.

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