A study to assess the effectiveness of Planned Teaching Programme on knowledge regarding lifestyle modification on prevention of overweight among adolescents in selected schools in Mysuru.

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ABSTRACT: Overweight refers to the state of weighing more than average for height and body built. Overweight and obesity is one of the most widespread and major problems affecting children and adolescents and is a global nutritional concern. Children with BMI between the 85th and 95th percentile should be considered as risk for overweight. This study has been undertaken to assess the effectiveness of planned teaching programme on knowledge regarding lifestyle modification on prevention of overweight among adolescents in selected schools in Mysuru. A Pre-experimental One group pre test post test design was used and 100 adolescents were selected using Probability random sampling technique. Pilot study was conducted, the tool and study design were found to be feasible. Data were collected using a structured knowledge questionnaire. A planned teaching programme was conducted from adolescents. The result of the study reveals that the significance of difference between the mean pre test and mean post test knowledge scores which was statistically tested using paired 't' test and it was found to be significant at 0.05 level of significance't'=22.54, $p<0.05$ and the result also depicted that Planned teaching programme was effective in increasing the knowledge of adolescents regarding lifestyle modification on prevention of overweight among adolescent. Therefore the study recommends that, it is essential to organize health campaigns and teaching programmes to enhance the knowledge regarding regarding lifestyle modification on prevention of overweight among adolescents.

Keywords: Overweight, Effectiveness, adolescents, planned teaching programme, knowledge.

INTRODUCTION:

Overweight refers to the state of weighing more than average for height and body built. Overweight and obesity is one of the most widespread and major problems affecting children and adolescents and is a global nutritional concern. Children with BMI between the 85th and 95th percentile should be considered as risk for overweight.Overweight results from increased caloric intake that consistently exceeds caloric requirements.

Changing diet and decreasing physical activity are believed to be the two most important factors in causing childhood obesity. In addition to these other factors like urbanization and modernization, sedentary life, consumption of oily, junk food and other life style changes have contributed to overweight and obesity. Overweight in childhood and adolescence has been related to elevated cholesterol, high blood pressure, respiratory disorders, orthopedic conditions, some types of adult cancer, and an increase in type 2 diabetic mellitus. Childhood overweight and obesity is likely to offer serious public health problems in the future, as today's obese children become adults with a shorter life expectancy than today's adults.

Lifestyle modification involves altering long-term habits, typically of eating or physical activity, and maintaining the new behavior for months or years. Lifestyle modification can be used to treat a range of diseases, including overweight and obesity. Most of the time, personal lifestyle choices and cultural environment significantly influence overweight.

School plays an important role in shaping children's physical activity. School-based interventions on physical activity knowledge and behavior can be given. The school setting offers multiple opportunities for students to enjoy physical activity outside of physical education class, including recess periods for unstructured play in elementary schools, after-school programs, intramural

sports programs, and physical activity clubs. These opportunities are particularly important because they are accessible to all students, including those who are not athletically gifted and those with special health care needs.

OBJECTIVES:

1. To assess the knowledge regarding lifestyle modification on prevention of overweight among the adolescents.
2. To assess the effectiveness of planned teaching programme on knowledge regarding lifestyle modification on prevention of overweight among adolescents.
3. To find out the association between knowledge of adolescents regarding life style modification on prevention of overweight with their selected personal variables.
4. To develop a information pamphlet regarding lifestyle modification on prevention of overweight among adolescents.

HYPOTHESES:

The following hypotheses are formulated for the study and will be tested at 0.05 level of significance.

H_1: There will be significant difference between the mean pre-test and post-test knowledge scores of adolescents regarding lifestyle modification on prevention of overweight.

H_2: There will be significant association between the knowledge of adolescents regarding life style modification on prevention of overweight with their selected personal variables.

RESEARCHMETHODOLOGY:

The research was conducted in Mysuru district of Karnataka State. St. Thomas school and Tharalabalu high school was selected for the study. Structured knowledge questionnaire was used to collect data from adolescents regarding lifestyle modification on prevention of overweight..Pre-experimental - One group pre test post test design is used. A sample of 100 adolescents was selected by using Probability random sampling technique.

RESULTS:

TABLE 1

Frequency and percentage distribution of adolescents according to their selected personal variables

n=100

Sl.no	Sample characteristics	Frequency(f)	Percentage (%)
1	Age(in years)		
	1.1 12	14	14%
	1.2 13	55	55%
	1.3 14	31	31%
2	Gender		
	2.1 Male	37	37%
	2.2 Female	63	63%
3	Class of study		
	3.1 8th standard	69	69%
	3.2 9th standard	31	31%
4	Type of diet		
	4.1 Vegetarian	51	51%
	4.2 Mixed	49	49%
5	Religion		
	5.1 Hindu	75	75%
	5.2 Muslim	11	11%
	5.3 Christian	14	14%
6	Monthly family income in rupees		

	6.1 Below rupees 5000	14	14%
	6.2Rupees 5001-10000	19	19%
	6.3 Rupees 10001-15000	19	19%
	6.4 Above Rupees 15001	48	48%
7	Type of family		
	7.1 Nuclear	80	80%
	7.2 Joint	20	20%
8	Number of siblings		
	8.1 Nil	45	45%
	8.2 One	37	37%
	8.3 Two	18	18%
9	Hours of daily play		
	9.1 Less than 30 minutes	13	13%
	9.2 30-60 minutes	59	59%
	9.3 More than 60 minutes	28	28%
10	Duration of television watching in a day		
	10.1 Less than 30 minutes	44	44%
	10.2 30-60 minutes	56	56%
11	Do you have the habit of playing video game?		
	11.1 Yes	100	100%
	11.2 No		
	If yes, how long do you play video game in a day?		
	11.1.1 Less than 30 minutes	15	15%
	11.1 .2 30-60 minutes	64	64%
	11.1.3 More than 60 minutes	21	21%
12	Pattern of consumption of fried food		
	12.1 Daily	1	1%
	12.2 Once in two days	11	11%
	12.3 Weekly once	70	70%
	12.4 Occasionally	18	18%
13	Duration of bicycle activity		
	13.1 Less than 30 minutes	20	20%
	13.2 30-60 minutes	54	54%
	13.3 More than 60 minutes	26	26%

TABLE 2

Frequency and percentage distribution of level of knowledge of adolescents according to their pre test and post test scores.

n = 100

Knowledge level	**Pre test f(%)**	**Post test f(%)**
Poor knowledge(0-15)	62(62%)	--
Average knowledge(16-23)	38(38%)	61(61%)
Good knowledge(>24)	--	39(39%)

TABLE 3

Mean, Median, Standard deviation and Range of pretest and posttest knowledge score of adolescents

n=100

Test	Mean	Median	Range	SD
Pre test	14.5	14	11-20	±2.43
Post test	22.5	23	18-27	±2.55

TABLE 4

Mean, mean difference, standard deviation difference, standard error and paired 't' value of pre test and post test knowledge scores of adolescents

n=100

Knowledge scores	Mean	Mean Difference	S.D. Difference	Standard Error	Paired 't' test value
Pre-test	14.5	8.5	±3.534	0.3534	22.54*
Post-test	22.5				

$t_{(99)}$= 1.66 ; p<0.05* significant.

The data presented in the Table 4 shows that the mean difference between knowledge of pre test score and post test score is 8.5. To find the significant difference in mean knowledge scores, paired 't' test was computed and obtained value of paired 't'=22.54* , p<0.05 is found to be significant. Hence the null hypothesis is not accepted. It is inferred that there is significant improvement of knowledge after planned teaching programme.

TABLE 5

Chi-square values between level of knowledge of adolescents and their selected personal variables

n=100

Sl. no	Sample characteristics	Poor knowledge	Average & Good knowledge	Chi-square value
1	Age in years			
	1.1 12	10	4	7.564#*
	1.2 13	34	21	
	1.3 14	18	13	
2	Gender			
	2.1 Male	23	14	0.599
	2.2 Female	39	24	
3	Class of study			
	3.1 8th standard	44	25	0.857
	3.2 9th standard	18	13	
4	Type of diet			
	4.1 Vegetarian	31	20	0.987
	4.2 Mixed	31	18	

5	Religion			
	5.1 Hindu	46	29	3.493#
	5.2 Muslim	6	5	
	5.3 Christian	13	1	
6	Monthly family income in rupees			
	6.1 below rupees 5000	11	3	3.001#
	6.2 Rupees 5001-10000	11	8	
	6.3 Rupees 10001-15000	12	7	
	6.4 Above 15001	28	20	
7	Type of family			
	7.1 Nuclear	49	31	0.529
	7.2 Joint	13	7	
8	Number of siblings			
	8.1 Nil	29	16	1.613
	8.2 One	22	15	
	8.3 Two	11	7	
9	Hours of daily play			
	9.1 less than 30minutes	7	6	10.8*
	9.2 30-60 minutes	39	20	
	9.3 more than 60 minutes	16	12	
10	Average duration of television watching			
	10.1 less than 30minutes	26	18	1.217
	10.2 30-60 minutes	36	20	
11	Do you have the habit of playing video game____?			
	11.1 Yes	62	38	
	11.2 No			
	If yes, how long do you play video game in a day?			
	11.1.1 less than 30minutes	26	16	
	11.1.2 30-60 minutes	30	16	1.563
	11.1.3 more than 60 minutes	6	6	
12	Pattern of consumption of fried foods.			
	12.1 Daily	0	1	6.717
	12.2 Once in two days	6	5	
	12.3 Weekly once	45	25	
	12.4 Occasionally	11	7	
13	Daily bicycle activity			
	13.1 less than 30 minutes	10	10	4.929
	13.2 30-60 minutes	34	20	
	13.3 more than 60 minutes	18	8	

$\chi^2_{(2)}$=5.991; $\chi^2_{(4)}$=9.488; $\chi^2_{(6)}$=12.592, , p<0.05 *- significant, # - Yates correction

The data presented in table 5 shows that, there was no statistically significant association between the levels of knowledge of the adolescents with their selected personal variables except for age in years and hours of daily play. Hence, the null hypothesis is partially accepted and it is inferred that level of knowledge of adolescents regarding lifestyle modification on prevention of overweight among adolescents is not influenced by other selected personal variables.

CONCLUSION:

The planned teaching programme was effective in increasing the knowledge regarding lifestyle modification on prevention of overweight as the computed paired 't'= 22.54, $p<0.05$ is found to be significant at 0.05 level of significance. There was partially significant association between the pre-test levels of knowledge of adolescents with their selected personal variables.

Thus, it was concluded that, the planned teaching programme was effective in enhancing knowledge regarding lifestyle modification on prevention of overweight among adolescents. Therefore, the study reinforces the need to organize health campaigns and teaching programs which sensitize the adolescents to enhance the knowledge regarding lifestyle modification on prevention of overweight among adolescents.

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