A Study to Assess the Effect of Structured Teaching Programme on Knowledge and Attitude Regarding Junk Food Consumption Among Adolescents at Selected Secondary School, Lucknow

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***Abstract*- Food is crucial for human life as it supplies the body with energy and helps to protect against illness. The right kind of food is of utmost importance for promotion of health and the wrong kind of food leads to promotion of diseases. Eating junk food has become a popular trend today, despite being very harmful to health. This habit often formed in childhood, can become a lifelong dependency with severe health consequences. Adolescents and young adults are particularly more prone to consuming junk food as compared to older people. The main objectives were to assess the effect of structured teaching programme on knowledge and attitude as well as to find out the association between the level of knowledge and attitude regarding junk food consumption among adolescents at selected secondary school, Lucknow. This study was conducted by using Quantitative research approach and Quasi-Experimental research design. The total sample size was 120 and Purposive sampling technique was used. Data collection was done by using self-structured knowledge questionnaire and attitude checklist. The findings of the study indicated that the implementation of structured teaching programme improved adolescents' knowledge with favourable attitude. Apart from that, there was a significant association existing between knowledge and attitude at p value >0.05.**

***Index Terms*- Adolescents, Attitude, Junk Food, Knowledge, Structured Teaching Programme**

I. INTRODUCTION

In the whirlwind of contemporary existence, where time seems fleeting and demands unceasing, one facet that often gets demoted to the sidelines is our health. Health is the dynamic equilibrium achieved when the physical, mental, social and spiritual dimensions of an individual harmonize to foster overall well-being. It's not merely the absence of illness, but a state of flourishing where one experiences vitality, resilience, and a sense of purpose in life's journey. It serves as the foundation upon which we build our lives, enabling us to pursue our passions, achieve our goals, and experience fulfilment. Life can only be sustained with proper nourishment. Humans require food for growth, development and to maintain an active and healthy lifestyle. Food generally composed of substances like carbohydrates, fats, proteins and water which can be consumed by both humans and animals for nutrition or pleasure.[1]

Healthy food has been substituted by the modern luscious food mantra- JUNK FOOD. Junk food was coined in 1972 by Michael Jacobson, Director of the unit of science, Washington.[2] Junk food is associated with obesity, cardiovascular disease, weight gain, diabetes and various other chronic health issues due to its additional fats, carbs and processed sugars.[3] The consumption of fast foods has become almost a global phenomenon. India's fast-food industry is growing at a rate of 40% each year. In terms of total annual spending, India ranks 10th in per capita expenditure on fast food, accounting for 2.1% of overall spending.[4]

Fast food culture is a growing trend among younger generation. Its popularity among children and adolescents can be attributed to factors such as convenience, great taste, low prices, marketing tactics, and the influence of peers.[5] Urban area with busy lifestyles and advanced technology has widely affected the life of many people. The effect of these changes has substituted the tradition of cooking and eating at home.[2] Fast food chains are becoming increasingly popular among nuclear families because working parents often have limited time to

prepare meals at home. The vast majority of working parents with school going children exhausting commutes, other household chores, stress and lack of parental awareness.[5] Other major causes of junk food consumption is television advertising and attractive packaging.[6]

Department of Medical and Allied Science, 2020 in Nepal found that consumption of junk food had recognised as a serious health problem in the world. Based on observation, educational intervention aims that changing the behavioural intentions regarding junk food consumption among school adolescents can help foster a better understanding of healthy eating practices and proper food choices.[7]

II. OBJECTIVES OF THE STUDY

- To assess the effect of Structured Teaching Programme on knowledge regarding junk food consumption among adolescents at selected secondary school, Lucknow.
- To assess the effect of Structured Teaching Programme on attitude regarding junk food consumption among adolescents at selected secondary school, Lucknow.
- To find out the association between the level of knowledge and attitude regarding junk food consumption among adolescents at selected secondary school, Lucknow.

III. RESEARCH METHODOLOGY OF THE STUDY

The study was conducted by using Quantitative research approach at Eram Inter College, Lucknow. In the present study, Quasi-Experimental one group pre-test & post-test research design was used to achieve the objectives of the study. Adolescents in the age group of 14-19 years were the population. The total sample size was 120 as per Cochran's formula. Before conducting the study, informed consent was obtained from the samples. Purposive sampling technique was used. Data collection was done by using self-structured knowledge questionnaire and attitude checklist to assess the knowledge and attitude regarding junk food consumption among adolescents.

Data was collected by the following tools:

Section A: Demographic Variables

It consists of 8 items to obtain Personal information such as Age, Gender, Type of family, Residential area, Parent's Education and Occupation, Monthly Family Income and Source of information.

Section B: Knowledge Questionnaire

It consists of 27 questions based on knowledge related to:

- Junk food and healthy food
- Contributing elements and ingredients behind junk food
- Ill effects of junk food on health
- Prevention from junk food

Criteria Measures for knowledge score

S.NO.	LEVEL OF KNOWLEDGE	SCORE
1.	Inadequate Knowledge	0-9 marks
2.	Moderate Knowledge	10-18 marks
3.	Adequate Knowledge	19-27 marks

Section C: Attitude Checklist

Attitude checklist regarding junk food consumption among adolescents.

LEVEL OF ATTITUDE	CATEGORY	SCORE
Unfavourable Attitude	<50%	1-4 marks
Moderately favourable Attitude	50-70%	5-8 marks
Favourable Attitude	>75%	9-12 marks

IV. DATA ANALYSIS AND INTERPRETATION

The analysed data was organized according to the objectives and presented under the following sections:

PART 1- Distribution of adolescents according to selected demographic variables.

Table1: Frequency and percentage distribution of samples according to their selected socio-demographic variables.

N=120

S. No.	Demographic variables	Category	Frequency (f)	Percentage (%)
1.	Age	14-15 years	69	57.5
		16-17 years	48	40
		18-19 years	3	2.5
2.	Gender	Male	48	40

		Female	72	60
3.	Family	Nuclear	51	42.5
		Extended	21	17.5
		Joint	48	40
4.	Residence	Rural	49	40.8
		Urban	71	59.1
5.	Parent's Education	Non-formal	22	18.3
		Intermediate	60	50
		Graduate	38	31.6
6.	Parent's Occupation	Working	73	60.8
		Not working	2	1.6
		Businessman	45	37.5
7.	Family's Income	>15,000	47	39.16
		15,001-30,000	43	35.8
		30,001 & above	30	25
8	Source of information	Family	68	56.6
		Friends	4	3.3
		Social media	48	40

Above table reveals the demographic information of samples those who participated for the following study on "A study to assess the effect of structured teaching programme on knowledge and attitude regarding junk food consumption among adolescents at selected secondary school, Lucknow".

In considering the age wise distribution of samples 69(57.5%) were from 14-15 years age group, 48(40%) were from 16-17 age group, 3(2.5%) were from 18-19 age group.

Results show gender among 120 samples: 48 (40%) were males and 72 (60%) were females.

Regarding family 51(42%) were nuclear family, 21 (17.5%) were from extended family and 48 (40%) were from joint family.

The findings reveal that 49 participants (40.8%) were from rural areas while 71 participants (59.16%) were from urban areas.

When considering parent's education, the results were 22 (18.3%) having non formal education, 60 (50%) were having intermediate education and 38 (31.6%) having graduate.

Regarding the parent's occupational breakdown of the sample group, 73 individuals (60.83%) are working, 2 individuals (1.66%) are not working and 45 individuals (37.5%) are involved in business.

Based on the family's income distribution, 47 individuals (39.16%) have an income of up to 15,000, 43 individuals (35.83%) earn between 15,001 and 30,000 while 30 individuals (25%) have an income above 30,001.

Based on the sources of information, 68 individuals (56.66%) learned from their family, 4 individuals (3.3%) from friends, and 48 individuals (40%) from social media.

Figure 1 (a) - Pie chart depicts percentage distribution of age among adolescents

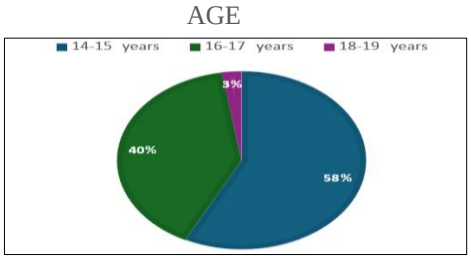


Figure 1 (b) - Pie chart depicts percentage distribution of gender among adolescents

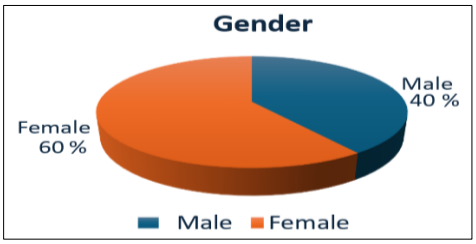


Figure 1 (c) - Bar diagram depicts percentage distribution of family among adolescents

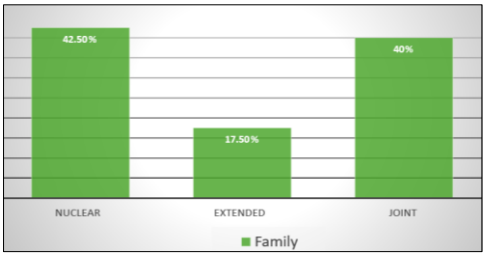


Figure 1 (d) - Pie chart depicts percentage distribution of residence among adolescent

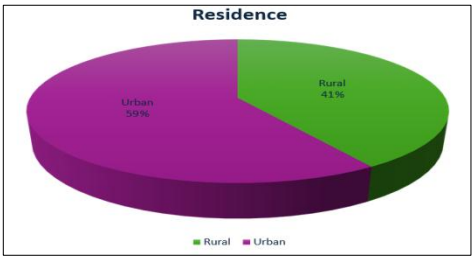


Figure 1(e) - Bar diagram depicts percentage distribution of parent's education among adolescents

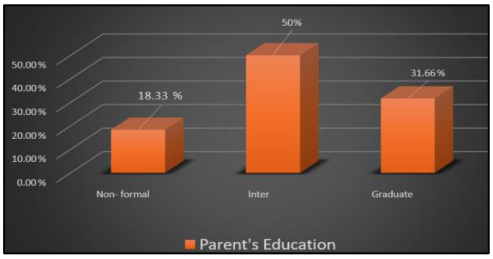


Figure 1 (f) - Pie chart depicts percentage distribution of parent's occupation among adolescents

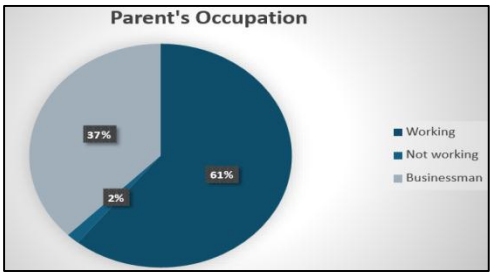


Figure 1 (g) - Pie chart depicts percentage distribution of family's income among adolescent

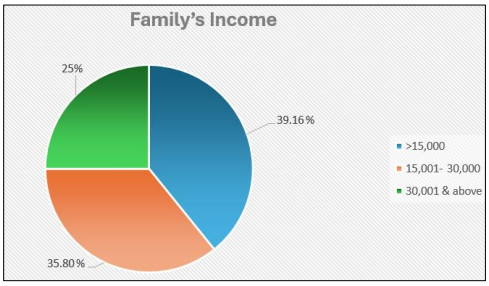
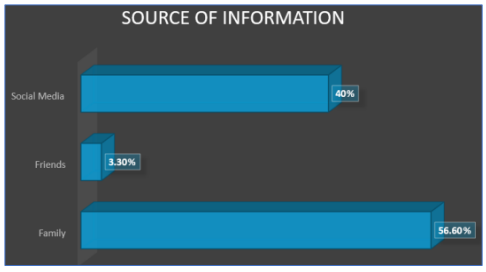


Figure 1 (h) - Bar diagram depicts percentage distribution of source of information among adolescents



OBJECTIVE-I

Assess the effect of Structured Teaching Programme on knowledge regarding junk food consumption among adolescents at selected secondary school, Lucknow.

Section A- Evaluate the pre-test knowledge on effect of junk food among adolescents

Knowledge	Category	Range of score	Respondents	
			Frequency (f)	Percentage (%)
Inadequate knowledge	<50% score	1-13	63	52.5%
Moderate knowledge	51-75% score	14-20	51	42.5%
Adequate knowledge	>75% score	21-27	6	5%
Total			120	100%

Table 2.1: Frequency and percentage distribution of samples according to pre-test knowledge on effect of junk food among adolescents.

Figure 2- Pie chart depicts percentage distribution of pre-test level of knowledge on effect of junk food

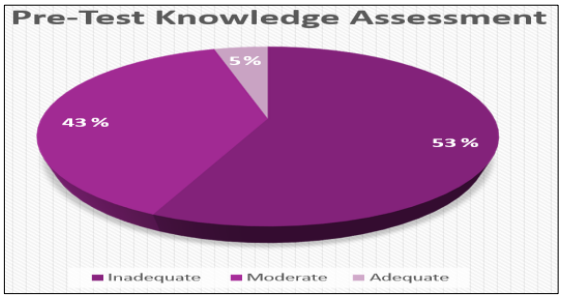


Table 2.2: It depicts Mean (12), S.D. (5.06), Median score (13), Maximum score (24), Minimum score (3) and Range (16) of pre-test knowledge on effect of junk food among adolescents.

N= 120						
Descriptive statistics	Mean	S.D.	Median Score	Maximum	Minimum	Range
Pre test knowledge	12	5.06	13	24	3	16
Maximum=27				Minimum= 0		

Section B- Evaluate the Post-Test Knowledge on Effect of Junk Food Among Adolescents

Table 3.1: Frequency and percentage distribution of samples according to post-test knowledge on effect of junk food among adolescents.

Knowledge	Category	Range of score	Respondents	
			Frequency (f)	Percentage (%)
Inadequate knowledge	<50%	1-13	5	4.16%
Moderate knowledge	51-75%	14-20	26	21.6%
Adequate knowledge	>75%	21-27	89	74.1%
Total			120	100%

Figure 3- Pie chart depicts percentage distribution of post-test level of knowledge on effect of junk food

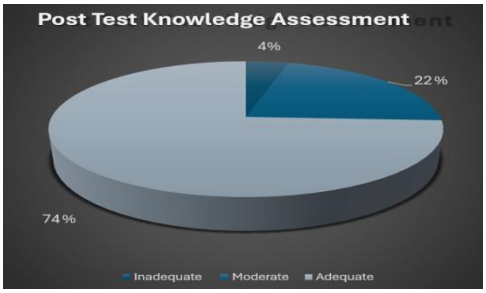


Table 3.2: It depicts Mean (21.29), S.D. (3.16), Median score (22), Maximum score (26), Minimum score (10) and Range (16) of post-test knowledge on effect of junk food among adolescent

N= 120						
Descriptive statistics	Mean	S.D.	Median score	Maximum	Minimum	Range
Post test knowledge	21.29	3.16	22	26	10	16
Maximum= 27				Minimum= 0		

Section C- Effect of descriptive statistics of pre-test and post-test scores of knowledges

Table 3.3: Description on effect of descriptive statistics of pre-test and post-test scores of knowledges

N= 120

Knowledge	Mean+ S.D.	Range	Mean difference	Paired t-test	p-value	Tabulated t-value at 0.05
Pre-test score	12 +5.06	3-24	9.29	4.5	<0.05	1.98
Post-test score	21.29 +3.16	10-26				
Significance level= 0.05			Maximum= 27		Minimum= 0	

Applied paired t-test for significance. t-value= 4.5; p-value=<0.05; considered highly significant.

Table 3.3 shows that the mean 21.29 of post-test knowledge score was more than the mean 12 of pre-test knowledge score of adolescents with a mean difference of 9.29. Therefore, the calculated t-value [4.5] was greater than the tabulated t-value [1.98] at p<0.05 level of significance which is observed to be highly significant.

Hence, there was significant effect of structured teaching programme on knowledge regarding junk food consumption.

OBJECTIVE- II

Assess The Effect of Structured Teaching Programme on Attitude Regarding Junk Food Consumption Among Adolescents at Selected Secondary School, Lucknow.

Section A- Evaluate the pre-test attitude on effect of junk food among adolescents

Table 4.1: Frequency and percentage distribution of samples according to pre-test attitude on effect of junk food among adolescents.

Attitude level	Category	Range of score	Respondents	
			Frequency (f)	Percentage (%)
Unfavorable attitude	<50%	1-4	7	5.8%
Moderately favorable attitude	50-70%	5-8	99	82.5%
Favorable attitude	>75%	9-12	14	11.6%
Total			120	100%

Figure 4- Pie chart depicts percentage distribution of pre-test level of attitude on effect of junk food

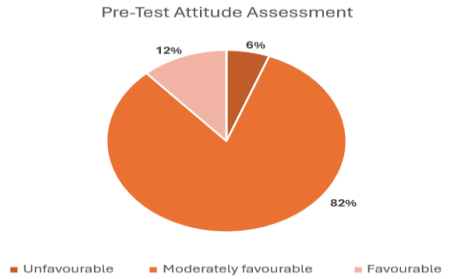


Table 4.2: It depicts Mean (6.48), S.D. (1.43), Median score (7), Maximum score (11), Minimum score (3), Range (8) of pre-test attitude on effect of junk food among adolescents.

N= 120						
Descriptive statistics	Mean	S.D.	Median score	Maximum	Minimum	Range
Pre-test attitude	6.84	1.43	7	11	3	8
Maximum= 12				Minimum= 0		

Section B- Evaluate the post-test attitude on effect of junk food among adolescents

Table 5.1: Frequency and percentage distribution of samples according to post-test attitude on effect of junk food among adolescents.

Attitude level	Category	Range of score	Respondents	
			Frequency (f)	Percentage (%)
Unfavorable attitude	<50%	1-4	0	0%
Moderately favorable attitude	51-70%	5-8	20	16.6%
Favorable attitude	>75%	9-12	100	83.3%
Total			120	100%

Figure 5- Pie chart depicts percentage distribution of post-test level of attitude on effect of junk food.

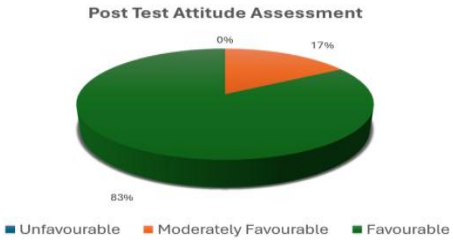


Table 5.2: It depicts Mean (9.82), S.D. (1.48), Median score (10), Maximum score (12), Minimum score (6) and Range (6) of post-test attitude on effect of junk food among adolescents.

N= 120						
Descriptive statistics	Mean	S.D.	Median score	Maximum	Minimum	Range
Post-test attitude	9.82	1.48	10	12	6	6
Maximum= 12				Minimum= 0		

Section- C: Effect of descriptive statistics of pre-test and post-test scores of attitudes

Table 5.3: Description on effect of descriptive statistics of pre-test and post-test scores of attitudes

N=120

Attitude	Mean + S.D.	Range	Mean difference	Paired t-test	p-value	Tabulated t-value at 0.05
Pre-test score	6.84+1.43	3-11	2.98	2.06	<0.05	1.98
Post-test score	9.82+1.48	6-12				
Significance level: 0.05			Maximum: 12		Minimum: 0	

Applied paired t-test for significance. t-value= 2.06; p-value=<0.05; considered highly significant

Table 5.3 shows that the mean 9.82 of post-test attitude score was more than the mean 6.84 of pre-test attitude score of adolescents with a mean difference of 2.98. Therefore, the calculated t-value [2.06] was greater than the tabulated t-value [1.98] at p<0.05 level of significance which is observed to be highly significant.

Hence, there was significant effect of structured teaching programme on attitude regarding junk food consumption.

OBJECTIVE- III

Find out the association between the level of knowledge and attitude regarding junk food consumption among adolescents at selected secondary school, Lucknow.

Section A- Evaluate the association of pre-test knowledge and attitude on effect of junk food among adolescents

Table 6: This section focuses on the findings related to the association between pre-test knowledge and attitude. The chi-square test was employed to determine the association between pre-test knowledge and attitude.

Category	Knowledge	Attitude	Total	Chi-square	df	p-value	t- value
<50%	63	7	70	63.36	2	0.05	5.99
51-70%	51	99	150				
>75%	6	14	20				
Total	120	120	240				

Section B- Evaluate the association of post-test knowledge and attitude on effect of junk food among adolescents

Table 7: This section deals with the findings related to the association between post-test knowledge and attitude. The chi-square test was employed to determine the association between post-test knowledge and attitude.

Category	Knowledge	Attitude	Total	Chi-square	df	p-value	t-value
<50%	5	0	5	6.42	2	0.05	5.99
51-70%	26	20	46				
>75%	89	100	189				
Total	120	120	240				

V. RESULT AND DISCUSSION

The findings related to assess the effect of structured teaching programme on knowledge and attitude regarding junk food consumption. According to knowledge level in pre-test 52.5% of them having inadequate knowledge, 42.5% having moderate knowledge and 5% having adequate knowledge. According to attitude 5.8% having unfavourable attitude, 82.5% having moderately favourable attitude and 11.6% having favourable attitude. After providing structured teaching, the majority of adolescents 74.1% had adequate knowledge and 83.3% adolescents having favourable attitude regarding junk food consumption. The pre-test knowledge mean score was 12 (SD= 5.06) and post-test mean score was 21.29 (SD= 3.16) whereas in pre-test attitude mean score was 6.84 and in post-test attitude mean score was 9.82.

VI. CONCLUSION

The following conclusion were made on the basis of the finding of the study: the adolescents were having good knowledge with favourable attitude after providing structured teaching programme. Apart from that, there was a significant association

existing between knowledge and attitude at p value >0.05.

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