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# A STUDY TO ASSESS EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON KNOWLEDGE AND ATTITUDE REGARDING PREVENTION OF OBESITY AMONG ADOLESCENT GIRLS IN SELECTED, SCHOOL KANPUR



**Nursing** 

Mrs. Minu.S. R Research scholar, Shri Venkateshwara University, Gajraula, Uttar Pradesh, India

Dr. Prof. S. N. Nanjunde Gowda\*

Principal, Anil Baghi college of Nursing, Ferozpur, Punjab, India \*Corresponding Author

# **ABSTRACT**

Life style diseases are a part of the modern society. Obesity is rising in younger population in an alarming rate. The present study was conducted to assess the knowledge and attitude regarding prevention of obesity among adolescent girls in selected school. An evaluative approach was used with pre experimental one group pre test post test research design. A structured knowledge questionnaire and an attitude scale was used for data collection. A sample size of 100 was selected by non probability convenient sampling technique. The pretest was followed by the administration of SIM. Post test was done after 7 days. The study results showed that level of knowledge among adolescent girls was inadequate for 58%, 32% had moderate level of knowledge and only 5% had adequate. While considering the attitude scores it was revealed that 32% had unfavorable attitude, 54% had moderate and 14% had favorable attitude towards prevention of obesity. In the post test none of the adolescent girls had inadequate knowledge and 68% had adequate knowledge and 42 % had moderate level knowledge. There was improvement in the attitude level by 73% had favorable attitude and 37 had moderately favorable attitude scores after post test. The statistical association was calculated for knowledge score as well as attitude scores with selected demographic variables of adolescent girls and both were found to be non-significant. The study concluded that there is a need for teaching strategies for adolescent population to improve their knowledge and attitude level regarding life style diseases

### **KEYWORDS**

obesity, adolescents, knowledge, attitude, Self Instructional Module

#### INTRODUCTION

Lifestyle and behavior choices are important factors in influencing health status of individual. Unhealthy diets and physical inactivity are major risk factors for overweight and obesity as well as a number of chronic health conditions.

Childhood obesity should give special attention as it is associated with serious health problems and the risk of premature illness and death later in life. Childhood obesity is a major public health crisis nationally and internationally.

Approximately 22 million children under five are estimated to be overweight worldwide. Overweight and obesity are the fifth leading risk for global deaths. At least 2.8 million adults die each year as a result of being overweight or obese. In addition, 44% of the diabetes burden, 23% of the ischemic heart disease burden and between 7% and 41% of certain cancer burdens are attributable to overweight and obesity. Overweight and obesity are linked to more deaths worldwide than underweight.

The prevention of obesity in children is through life style modification. Prevention is better than cure is much applicable in this also, obese child has more chance to be an obese adult with chronic life style diseases. Among the adolescent children girl child is more prone to this life style disease hence the researcher felt the need to assess the status of information the adolescent girls have in this issue.

#### **OBJECTIVES**

- To assess the pretest level of knowledge on prevention of obesity among adolescent girls.
- To assess the pretest level of attitude on prevention of obesity among adolescent girls
- To evaluate the effectiveness of self instructional module on knowledge and practice of adolescent girls regarding prevention of obesity
- To explore the association between knowledge score with their selected demographic variables.
- To explore the association between attitude scores with their selected demographic variables

#### **HYPOTHESIS**

 $\mathbf{H}_1$ : There is a significant difference between pre test and post test knowledge scores among adolescent girls regarding prevention of obesity.

**H**<sub>2</sub>: There is a significant difference between pre test and post test attitude scores among adolescent girls regarding prevention of obesity.

- **H**<sub>3.</sub> There is a significant association between the knowledge scores of adolescent girls with their selected demographical variables.
- $\mathbf{H}_{\star}$  There is a significant association between the attitude scores of adolescent girls with their selected demographical variables.

#### MATERIALAND METHODS USED

**Research design:**- pre experimental one group pretest post test design was used in this study.

Research approach: Evaluative research approach was used in this study.

**Setting of the study:** - In this research study the setting was Maharana Pratap Inter College Mandhana, Kanpur, Uttar Pradesh.

**Population:** - The population for the present study were adolescent girls.

**Sampling and sample size** - In this research study, sample size compromised 100 adolescent girls selected through non probability convenient sampling technique.

#### Variables

**Dependent variable:** - Adolescent girls knowledge and attitude regarding prevention of obesity were the dependent variables of the present study.

**Independent variable:** Self instructional module regarding prevention of obesity

**Demographic variable:** - Age, Religion, Residence, Type of family, Educational status, dietary pattern, Family monthly income and source of information

#### Sampling criteria Inclusion criteria

Adolescent girls who were:

- Willing to participate in the study.
- Able to write and speak English or Hindi.

#### **Exclusion criteria**

Adolescent girls who were:

- Not present during the time of data collection.
- below 13 and above 18 year of age.

## **Development of tools**

Section - A Consists of Socio - demographic data such as age,

religion, area of residence, dietary pattern, educational status, monthly income, type of family, source of information.

*Section- B-* Structured knowledge Questionnaire containing 20 items regarding prevention of obesity.

Section – C-Attitude scale containing 24 items regarding prevention of obesity

#### Data collection procedure

The data collection was scheduled in the months of August 2019. Before the data collection the investigator obtained the formal permission from the principal to conduct study on adolescent girls. The samples were 100 adolescent girls from 8<sup>th</sup>,9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> standard . Before the data collection written permission was obtained from the adolescent girls and data collection tool consisting of demographic variables and structured knowledge questionnaire and attitude scale was provided class wise.30-40 minutes were provided for answering the questionnaire and attitude scale . After this pretest self instructional module was distributed and post test done after lweek of pretest.

#### Plan for data analysis

The collected data were analyzed on the basis of objectives and hypothesis of study. Before analysis the data was entered in coding sheet and data was analyzed by using descriptive and inferential statistics such as percentage, mean and chi square test.

#### Data analysis and major findings of the study:-Section-A Description of demographic variables of the adolescent girls.

- Highest percentage of subjects 37% were between 13-14years of
- All most all girls 100% were belonging to Hindu religion.
- Most of the girls belong to rural area 78%
- Highest percentage of monthly income 70% were <5000.
- Highest Percentage 65%were nuclear family.
- Higher percentage of subjects were vegetarian 95%.
- Highest Percentage 50% were getting information from TV and internet

Section – B Analysis of knowledge and attitude of adolescent girls regarding prevention of obesity in pretest and post test

Table-1: Pre Test and Post test Knowledge level of adolescent girls

						11-100
	Pretest			Post test		
		frequency	percenta	Level of	frequency	percenta
NO.	knowledge		ge	knowledge		ge
1	Poor	58	58%	Poor	0	0%
2	Average	37	37%	Average	42	42%
3	Good	5	5%	Good	68	68%

Table-2: Comparison of pre test and post test Mean and Standard Deviation According To Knowledge Score Of Adolescent girls.

		N=100
Pretest	Mean	SD
	9.51	3.58
Post test	16.6	2.52

 Mean knowledge was 9.51 for the adolescent girls and standard deviation score of adolescent girls were 3.58. In post test mean was 16.6 and SD was 2.52.

Table -3: Pre test Attitude regarding obesity among adolescent girls

			N=100
Level of attitude	Range of score	frequency	percentage
Un favourable	0-32	32	32%
Moderately favourable	33-64	54	54%
favourable	64-96	14	14%

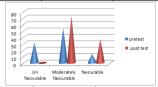


Fig 1.Comparison of pre test and post test attitude scores of adolescent girls

In pre test only 14% adolescent girls had favorable attitude towards prevention of obesity while post test it was improved to 73% and 37% moderately favorable attitude and none of them had unfavorable attitude regarding obesity prevention.

# Section C-Analysis of Effectiveness of SIM on prevention of obesity.

The t value was calculated for knowledge scores as well as attitude scores. The t value for knowledge sore was 22.65 which was more than t table value at a significance of 0.05 level .The t value for attitude score was 32.4 which was also more than the t table value. Hence the intervention was proved to be effective in improving the knowledge and attitude of adolescent girls. Hence hypothesis  $H_1$  and  $H_2$  were accepted.

# Section D-Analysis of Association of knowledge score of adolescent girls and demographic variables.

 No Significant association was found between knowledge scores and attitude scores with selected demographic variables of adolescent girls. Hence the H<sub>3</sub>and H<sub>4</sub> was rejected.

#### RECOMMENDATIONS

- A similar study can be done to compare the knowledge and practice among adolescent girlsA study with true experimental research design can be done with control groups.
- A similar study can be replicated in adults in community.

#### CONCLUSION

The findings of the study it can be concluded that most of the subject were in the age group 13-14 years. Most of them were from rural area and believed in Hindu religion. It was found that overall level of knowledge regarding prevention of obesity among the adolescent girls were inadequate. When considering the attitude of adolescent unfavorable attitude and moderate favorable attitude regarding prevention of obesity were 32% and 54% respectively, while those had favourable attitude were less which was 14. After the administration of SIM the improvement in both knowledge and attitude was significant. On the basis of findings, the investigators concluded that there is a need of health education among adolescent girls about obesity.

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