ASSESS THE KNOWLEDGE ON ILL EFFECTS OF JUNK FOODS AMONG ADOLESCENTS IN PRE-UNIVERSITY COLLEGE

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ABSTRACT
Background: The transition emerging in the society due to economic growth and new lifestyle choices has led to the change in food consumption and dietary patterns. The healthier food like fruits, vegetables, pulses is replaced by junk food like French fries, burgers, pizza and donuts. **Objectives:** To assess the knowledge of ill effect of junk food among adolescents and to find out the association between selected demographic variables with knowledge scores of adolescents. With a view to develop and distribute information guide sheet on ill effects of junk foods. **Methods:** The study was conducted at Government PU College, R.T. Nagar, Bangalore-45. Descriptive research design was adopted for the study. Samples of 30 were collected using simple random sampling technique. Data were collected, analyzed using descriptive and inferential statistics. **Results:** It shows that 55% Adolescents have inadequate knowledge. Thus, the adolescents should be educated regarding the ill effects of junk foods. There was no association found between the knowledge of the adolescents to selected demographic variables. **Conclusion:** The researcher concluded that the majority of the adolescence studying in PU college had inadequate knowledge regarding ill effects of junk food. Hence, the information guide sheet teaching was given to the adolescents to enhance their knowledge regarding meaning, causes, types, complications, ill effects and measurement o control the ill effects of junk food.

KEYWORDS
Ill effects, Junk foods, Knowledge, Adolescents and Information booklet.

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INTRODUCTION
"Our food should be our medicine and our medicine should be our food" -Hippocrates.

Food plays an integral part in the human life. A well-balanced diet not only helps in nurturing the whole body but also prevents from many illnesses.

In today's fast-moving world, people hardly take time to think whether they consume proper food.

This transition emerging in the society due to economic growth and new life style choices has led to the change in food consumption and dietary patterns. The healthier food like fruits, vegetables, pulses etc is replaced by junk food like French fries, burgers, pizza and donuts etc.

The consumption of junk food is increasing day by day. Even all groups have a desire to binge and cravings. The consumption of junk food not only, eats to improper eating habits and imbalanced diet, but also leads to serious illness in their future.

Adolescents, as a group, are at risk for nutritional problem both from a physiological and a psychosocial standpoint. The dramatic increase in physical growth and development creates a high demand for nutrients and energy. Psychosocial changes, such as the adolescent's search for independence and identity, concern for appearance, and active lifestyle, can have a strong impact on nutrient intake and food choices.

Studies have frequently found adolescents to have poor dietary habits often, nutrition and health educators find that developing education programs to promote healthy eating patterns and to change dietary behaviour among this age group is challenging, but frustrating.

The consumption of fast foods has been increased around the world over last 50 years. Foods such as French fries, hamburgers and chips, which constitutes huge amount of fat and salt, are harmful for health. Some people believe that increasing the level of awareness of society about deterioration of this group of foods can decrease the consumption of them.

A report by "RESEARCH ON INDIA" has found that traditionally, the Indian consumers have been eating at road side eating points, Dhaba's and stalls which still occupy a major share of the unorganized sector, where fast food has been eaten traditionally.

A report by PR news on "Fast Food Marker in India 2015 -2020" has provided a detailed analysis of the factors that led to the growth of fast-food market in India the food category has been covered in this report.

About 10% of the fast-food market in India is organised. NOVONOUS (offers business research report) estimates that the organised fast-food market in India is expected to grow at a CAGR of 18% by 2020.

Millions of people eat ethnic fast food every day from Pani-puri to Vadapav to dosa.

Ethnic fast-food market in India is projected to grow at a CAGR of 31-95% by 2019-20.

NEED FOR STUDY

Adolescence is the only time following infancy when the rate of growth actually increases this sudden growth spurt is associated with hormonal, cognitive and emotional changes that make adolescence an especially vulnerable period of life nutritionally.

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Indian fast-food market is expected at a CAGR (Compound Annual Growth Rate) of 18% by 2020 due to consumer changing behaviour & demography. Fast food market in India is expected to be worth $27.57 billion by 2020.

About 10% of the fast-food market in India is organised. NOVONOUS (offers business research report) estimates that the organised fast-food market in India is expected to grow at a CAGR of 18% by 2020.

Vegetarian fast food constitutes of around 45% of the whole fast-food market in India and is expected to grow at a CAGR of 18% by 2020.

Millions of people eat ethnic fast food every day from pani-puri to vadapav to dosa.

Ethnic fast-food market in India is projected to grow at a CAGR of 31-95% by 2019-20.

PROBLEM STATEMENT

Assess the knowledge on ill effects of junk foods among adolescents in selected PU College,

Bangalore with a view to develop information guide sheet.

OBJECTIVES OF THE STUDY
To assess the knowledge of ill effect of junk food among adolescents.
To find out the association between selected demographic variables with knowledge scores of adolescents.
To develop and distribute information guide sheet.

HYPOTHESSIS
There will be association between knowledge on ill effects of junk food among adolescents with selected variables.

OPERATIONAL DEFINITION
Assess
In this study, it refers to evaluate or analyse the knowledge regarding ill effects junk food.
Knowledge
In this study, it is the information and understanding about the ill effects of junk foods.
Junk food
In this study, it refers to the food that is high in calories but low in nutritional content.
Adolescents
In this study, it refers to the teenagers in the age group 16 to 18 years old. 5) Information booklet: In this study, it refers to the sheet that gives information regarding ill effects of junk food.

DELIMITATION
This study is delimited to,
Government PU College, R.T. Nagar, Bangalore-45.
Sample size of 30 adolescents

CONCEPTUAL FRAMEWORK
The conceptual framework for the present study is based on "Modified Pender's health promotion model 1980", which is reframed by Saddle River, N.J Pentile Hall in 2002.
Pender's model consists of 3 concepts, Individual characteristics and Experience, Behaviour specific cognition, Affect and Behaviour outcome.

RESEARCH APPROACH
In this present study, by viewing the nature of the problem and objectives, the researcher adopted a quantitative approach because it involves the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a firm and rigid fashion.

RESEARCH DESIGN
The selection of design depends upon the purpose or the objectives as well as the hypothesis framed for the study. Descriptive research design was used to assess the level of knowledge regarding ill effects of junk food and its management among adolescents at PU College, R.T. Nagar, Bangalore-45 with a view to develop information booklet.

VARIABLES
Independent Variable
Information guide sheet on ill effects of junk foods
Dependent variable
Level of knowledge regarding ill-effects of junk foods among adolescents (16- 18) yrs.
Socio-demographic variable
Age of adolescents, religion, place of residence, educational status of adolescents, occupation of parents, monthly family income and type of family.

SETTING OF STUDY
The study was conducted at Govt. PU College, R.T. Nagar, Bangalore-45. This setting is selected because of more availability and feasibility to conduct the study under ethical clearance.

POPULATION
Target population
The target population of this study is adolescents (16-18) yrs
Accessible population
Accessible population of the study is adolescents available for the study in PU College, R.T. Nagar, Bangalore-45.

SAMPLING TECHNIQUE
Sampling refers to the process of selecting a portion of population to represent the entire population. In

this study, "Simple Random Sampling Technique" is used to select the sample based on inclusion and exclusion criteria.

Sample

Sample consists of subset of a population selected to participate in a research study. In this study, the sample consists of 30 adolescents who fulfil the inclusion criteria.

Sample size

Sample size consists of 30 adolescents at PU College, R.T. Nagar, Bangalore-45.

CRITERIA FOR SELECTION OF SAMPLES

Sampling criteria specifies the characteristics that the sample in population must possess to be included in the study or excluded from the study.

Inclusion criteria

Adolescents studying in government PU College, R.T. Nagar, Bangalore.

Adolescents who are able to read and speak in Kannada/English -Both male and female students.

Exclusion criteria

Adolescents who are not available during data collection.

Adolescents who are not willing to participate.

DEVELOPMENT OF TOOL

After an extensive review of literature and discussion with expert, the structured knowledge questionnaire was prepared to assess the level of knowledge on ill effects of junk food among adolescents at PU College, R.T. Nagar, Bangalore-45.

The tool comprises of two sections:

Section A: Socio-demographic variable

It consists of 11 items including age of adolescent, gender of adolescent, education status of parents, place of residency, occupation of parents, type of family, family income, no. of children in the family, frequency of consumption of junk food.

Section B: Knowledge questionnaire

It consists of 30 items on ill-effects of junk food. The items were developed to cover different areas such as introduction, meaning, types, causes, ill-effects, complication, and management.

SCORING KEY

Section A

Socio-demographic variable.

Section B

The structured knowledge questionnaire consists of multiple-choice questions in which one correct response and three incorrect responses were given. For each correct response a score of 1 was given. The maximum scores of the tool are 30.

To interpret, the score was categorised.

Inadequate Knowledge: (1-50%)

Moderate Knowledge: (51-75%)

Adequate Knowledge: (76-100%)

CONTENT VALIDITY

The content validity of the tool was obtained from the Principal, HOD and teachers of various departments and Kannada translation is done by language expert. It consists of socio-demographic data and knowledge structured questionnaire.

PROCEDURE FOR DATA COLLECTION

The data collection was carried out by simple random sampling technique in the month of August. The written permission letter was obtained from the authorities concerned. The purpose of the study was explained to the respondents and oral consent was obtained. Then the knowledge questionnaire was distributed to assess the knowledge of adolescents on ill effects of Junk foods.

PLAN FOR DATA ANALYSIS

The data collected will be analysed by means of descriptive and inferential statistics.

Descriptive statistics

Mean, Standard Deviation, Frequency, percentage distribution will be used to analyse the socio demographic variables and level of knowledge of adolescents on ill effects of junk foods.

Inferential statistics

Chi-square test was used to analyse the association between the selected socio- demographic variables and level of knowledge of adolescents on ill effects of junk foods.

CONCEPTUAL FRAMEWORK

The conceptual framework for the present study is based on "Modified Pender's health promotion model 1980", which is reframed by Saddle River, N.J Pentile Hall in 2002.

Presentation of Data

The analysis of data is organized and presented under the following section.

Section A: Description of demographic variables.

Section B: Knowledge status of adolescents

Overall assessment of knowledge level on ill effects of junk food.

Aspect wise assessment of knowledge score on ill effects of junk food.

Section A: Description of Demographic variables of Adolescents.

Overall assessment of level of knowledge of Adolescents regarding Ill effects of junk foods.

This section deals with knowledge of Adolescents regarding Ill effects of junk food.

Figure No.1: Frequency and percentage distribution of overall assessment of level of knowledge of Adolescents regarding the Ill effects of junk foods. n=60.

The Table No.3 represents the statistical outcomes of association between knowledge scores with selected demographic variables. In order to examine the association between these variables the chisquare test was worked out. No any association was found between the level of knowledge and demographic variables at the significance of 0.05%.

IMPLICATIONS

The implication from the present study in various branches of Nursing profession are Nursing education, Nursing practice and Nursing administration.

NURSING PRACTICE

Nurse should emphasize the activities which promotes health and prevention behaviour among the people.

Health education session should be organized to the adolescence regarding ill effects of junk food

Paediatric Nurse can educate ill effects of junk food whenever it is necessary to make the adolescence aware of it.

NURSING EDUCATION

One of the important functions of the Nursing is to provide health education in an affected and efficient way. This study emphasizes need for developing good teaching skills in student nurses.

Educational programs should be planned according to the needs and level of understanding of beneficiaries. The necessary in service education should be provided to the nursing personnel at various levels.

NURSING ADMINISTRATION

Adequate time, material and other resources should be provided to the nurses for giving health education.

Educational program regarding ill effects of junk food should be organized in school and community level to enhance the knowledge of adolescence.

LIMITATIONS OF THE STUDY

Study is limited to adolescence of Akshaya Pu college, RT Nagar

Adolescence who can write and read English and Kannada

RECOMMENDATION

Based on present study, it is recommended that; The present study can be replicated using a large sample and wider area for wider generalization.

The present study can be done to evaluate the effectiveness of information guide sheet on level of knowledge among adolescence regarding ill effects of junk food.

A survey can be conducted in selected colleges and community areas to study the actual implementation of ill effects of junk food by the Nurses.

SUMMARY

The major findings of the study are summarized as follows

Majority (i.e. 38.3%) of adolescence belongs to 18 years of age. 53.3% are females

Out of 60 adolescents, 48.3% adolescents are second children.

With regard to educational status of father, 15% are having no formal education, 28.3% are having primary education, 31.6% are having higher secondary education, 20% are graduates and 0.5% are post graduates.

With regard to educational status of mother, 11.6% are having no formal education, 26.6% are having primary education, 43.3% are having higher secondary education, 15% are graduates and 3.3% are post graduates.

63.3% off adolescents are residing in urban area, 1.6% in semi-urban and 35% in rural area.

With regard to occupation of father, 15% are Govt. Employee, 46.6% are self-employee, 30% are private employee and 8.3% are unemployed.

With regard to occupation of mother, 6.6% are Govt. employee, 15% are self-employee, 13.3% are private employee and 65% are unemployed.

With regard to type of family, 83.3% are nuclear and 16.6% are joint families.

56.6% of families have income between 10,000-20,000, 25% have income between 21,00030,000, 18.3% have income 31,000 and above.

Table No.1: Percentage and frequency distribution of Adolescents according to personal characteristics

S.No	Characteristics		Frequency	Percentage (%)
1	Age of Adolescent	16 years	17	28.30%
		17 years	20	33.30%
		18 years	23	38.30%
2	Gender	Male	28	46.60%
		Female	32	53.30%
3	Education of Father	No formal education	9	15%
		Primary education	17	28.30%
		HSE	19	31.60%
		Graduate	12	20%
		PG	3	0.50%
4	Education of Mother	No formal education	7	11.60%
		Primary education	16	26.60%
		HSE	26	43.30%
		Graduate	9	15%
		PG	2	3.30%
5	Residential Area	Rural	21	35%
		Urban	38	63.30%
		Semi-urban	1	1.60%
6	Occupation of Father	Govt. employee	9	15%
		Self-employee	28	46.60%
		Private employee	18	30%
		Unemployed	5	8.30%
7	Occupation of Mother	Govt. employee	4	6.60%
		Self-employee	9	15%
		Private employee	8	13.30%
		Unemployed	39	65%
8	Type of Family	Nuclear	50	83.30%
		Joint	10	16.60%

		Extended	0	0%
9	Income of Family	10,000 - 20,000	34	56.60%
		21,000 - 30,000	15	25%
		31,000 and above	11	18.30%
10	No. of Children in Family	One	5	8.30%
		Two	29	48.30%
		More than two	26	43.30%
11	Frequency of Consumption of JF	Three times a day	9	15%
		Two times a day	17	28.30%
		Once in a day	34	56.60%
12	Previous Knowledge	No	32	53.30%
		Yes	28	46.60%

Section-B: Level of knowledge of adolescents
Table No.2: Aspects wise assessment of the level of knowledge scores of Adolescents regarding Ill effects of Junk Foods n=60

S.No	Knowledge	No. of items	Mean	S.D	Mean%
1	Introduction	3	28.50	11.27	47.50%
2	Definition	1			
3	Types	2	39	17	65%
4	Causes	3	31.33	12.96	52.21%
5	Ill effects	13	29	12.66	48.33%
6	Complications	5	34.8	12.79	58%
7	Management	3	31.33	8.80	52.21%
8	Grand Total	30	193.96	75.48	-

Section-C: Association of knowledge scores with selected demographic variables n=60
Table No.3: Represents the statistical outcomes of association between knowledge scores with selected demographic variables

S.No	Characteristics		Overall, Knowledge			DF	Chi Square
			Frequency	Below Mean	Median and Above Median		
1	Age	16	17	9	8	2	3.069
		17	20	7	13		
		18	23	6	17		
2	Gender	Male	28	13	14	1	2.73
		Female	32	9	24		
3	Education Level of Father	No formal education	9	6	5	4	2.72
		Primary education	17	6	10		
		HSE	19	7	14		
		Graduate	12	3	8		
		PG	3	0	1		
4	Education Level of	No formal education	7	3	5	4	2.356

	Mother	Primary education	16	8	9		
		HSE	26	10	15		
		Graduate	9	2	6		
		PG	2	0	2		
5	Residential Area	Rural	21	10	10	2	2.79
		Urban	38	12	27		
		Semi-urban	1	0	1		
6	Occupation of Father	Govt. employee	9	0	9	3	7.28
		Self- employee	28	11	17		
		Private employee	18	9	9		
		Unemployed	5	2	3		
7	Occupation of Mother	Govt. employee	4	0	4	3	13.53^{NS}
		Self- employee	9	2	7		
		Private employee	8	2	6		
		Unemployed	39	18	20		
8	Types of Family	Nuclear	50	19	32	2	0.0462
		Joint	10	3	6		
		Extended	0	0	0		
9	Income of Family	Rs. 10,000 - 20,000	34	7	25	2	6.61
		Rs. 21,000 - 30,000	15	9	7		
		Rs. 31,000 and above	11	6	6		
10	No. of Children in the Family	One	5	3	2	2	4.4
		Two	29	7	21		
		> Two	26	12	15		
11	Frequency of Consumption of Junk Food	Three times a day	9	6	3	2	6.08
		Two times a day	17	3	15		
		Once in a day	34	13	20		
12	Previous Knowledge	No	32	12	17	1	0.227
		Yes	28	11	20		

Note: *Significant
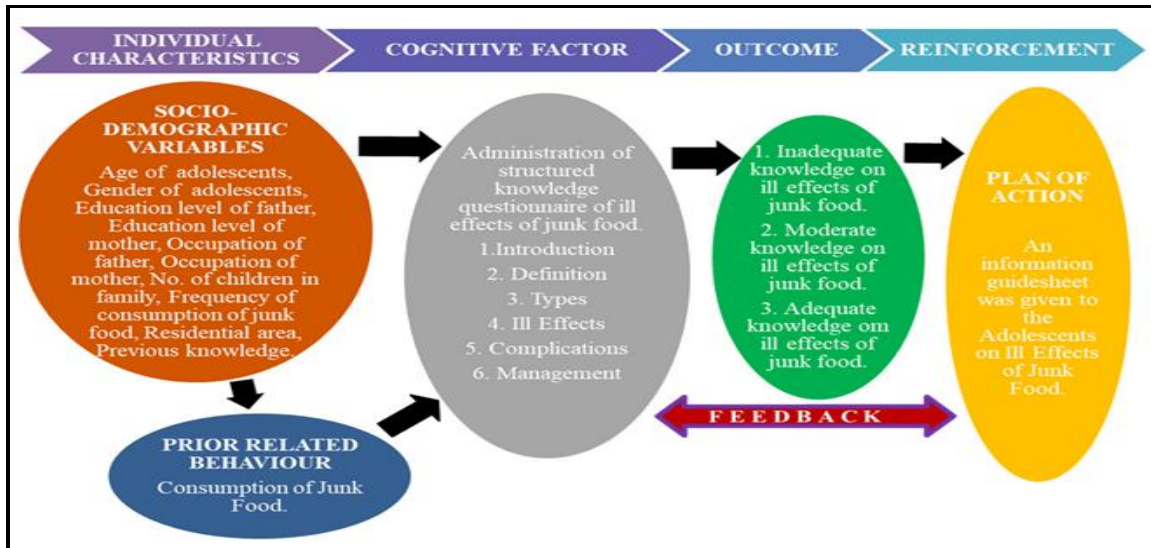$^{NS-}$ Not significant
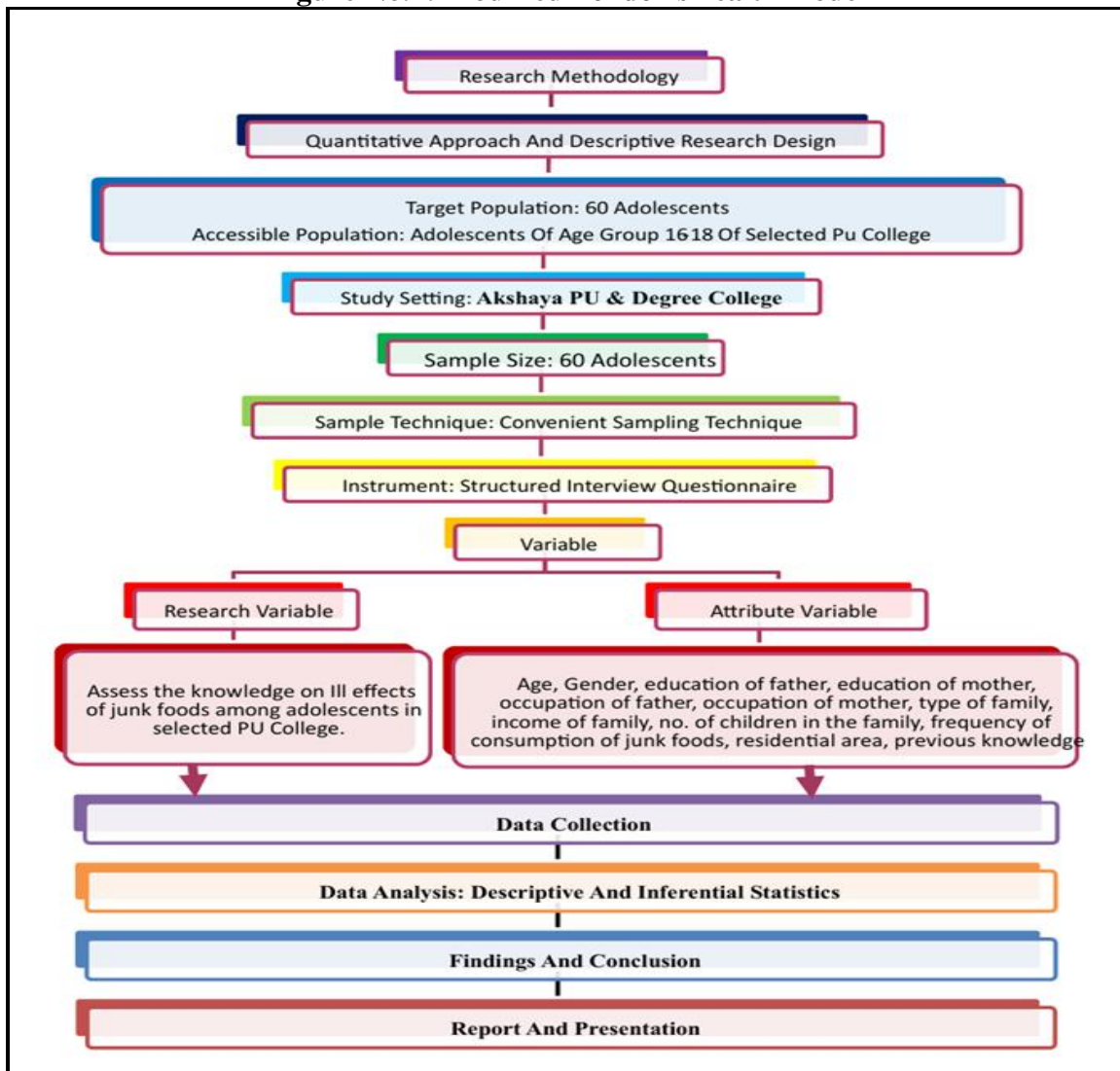
Figure No.1: Modified Pender's health model

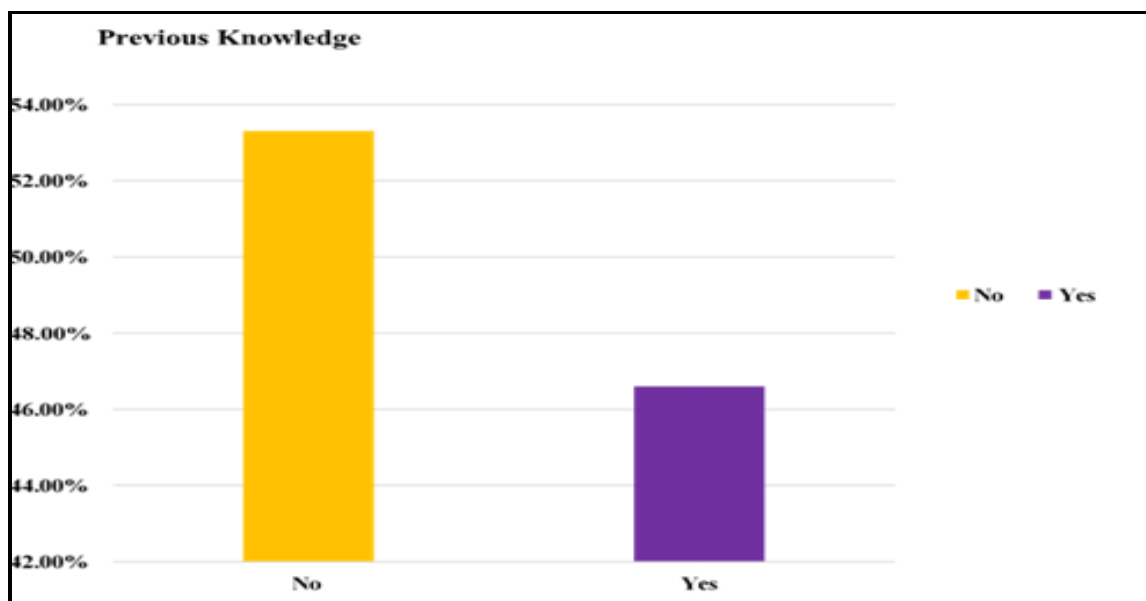**Figure No.2: Schematic presentation of research design**

Figure No.3: Cylindrical diagram shows the percentage of overall assessment of knowledge of Adolescents regarding ill effects of Junk foods

CONCLUSION

The chapter deals with the calculation of the study "Assess the knowledge on ill effects of junk foods among adolescence in selected PU college, Bangalore with a view to develop information guide sheet".

The study assesses the level of knowledge of adolescence regarding ill effects of junk food and the study showed that 55% adolescents have inadequate knowledge (i.e. 33), 41.66% have moderate knowledge (i.e. 25) and 3.33% have adequate knowledge (i.e. 2).

The researcher concluded that most of the adolescence who were the students of Akshaya PU college had inadequate knowledge regarding ill effects of junk food. Hence, the information guide sheet teaching was given to the adolescents to enhance their knowledge regarding meaning, causes, types, complications, ill effects and measurement o control the ill effects of junk food.

ACKNOWLEDGMENT

CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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