A PRE EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME REGARDING EFFECTS OF JUNK FOODS ON HEALTH AMONG ADOLESCENTS OF SELECTED SENIOR SECONDARY SCHOOL OF JANDIALA GURU, AMRITSAR (PUNJAB)".

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CHAPTER – I

BACKGROUND OF THE STUDY

INTRODUCTION

"We are living in a world today where lemonade is made from artificial flavours and furniture polish is made from real lemons"

- Alfresh E Newman

In today's world scenario, junk food has become a prominent feature of diet for adolescents. The rapidly changing food consumption patterns and diet transition emerging in the society due to economic growth and new lifestyle choices it demands variety food products .It is clear that fast food is generally unhealthy. Many research studies shows that consuming fast food is a nutritional hazard and it only provides empty calories. This kind of food has no vitamins and minerals. Fast food is loaded with saturated fat and high calories, and its low in fiber and nutrients. When these types of foods are eaten, the body is forced to produce its own enzymes to convert the empty calories into usable energy. From this it is clear that fast food will cause obesity and associated health hazards.[1]

Junk food generally refers to foods that contribute lots of calories but little nutritional value. Of course, what's considered "junk food" depends on whom you ask. Some might say pizza is junk food, for example. But I personally don't think so, since it contributes real food with nutrients, like cheese and tomato sauce. Add whole-wheat or part whole-wheat crust, plus veggies as a topping, and I'd say pizza completely exits the junk food category.[2]

One problem with junk foods is that they're low in satiation value -- that is, people don't tend to feel as full when they eat them -- which can lead to overeating. Another problem is that junk food tends to replace other, more nutritious foods. When people drink lots of soda, for example, they are usually not getting plenty of low-fat dairy or other healthful beverages like green tea or orange juice. When they're snacking on chips and cookies, they're usually not loading up on fruits and vegetables[3].

Most "junk food" falls into the categories of either "snack food" or "fast food." And then there are things like breakfast cereals. They seem innocent enough, but some of them could definitely be considered "junk food," as they mostly contain sugar or high-fructose corn syrup and white flour or milled corn. Calories From Snack Foods:-Popular snack foods are usually commercially prepared and packaged, like chips, cheese puffs, candy bars, snack cakes, and cookies.[4]

Fast Food and Overeating:- Of course, junk food is also readily available at restaurant chains across the country in the form of French fries, chicken nuggets, shakes, soda, etc. Not only are most fast foods not terribly healthy, one study indicates that there may be something about fast food that actually encourages gorging.[5]

In the study, from the Children's Hospital in Boston, teens age 13-17 were given three types of fast-food meals (all including chicken nuggets, French fries, and cola). In one meal, the teens were served a lot of food at once. In another, a lot of food was served at the same time, but in smaller portions. And in the third test meal, a lot of food was served, but in smaller portions over 15-minute intervals.[6]

The researchers found that it didn't seem to matter how much food was served -- the teens still took in about half of their daily calorie needs in that one meal. The researchers suggested that certain factors inherent to fast food might promote overeating:

- It's low in fiber.
- It's high in palatability (that is, it tastes good).
- It offers a high number of calories in a small volume.
- It's high in fat.
- It's high in sugar in liquid form.[7]

Eating frequent fast food causes teens and young adults to gain more weight and they face an increased risk of developing obesity. The incidence of child obesity has more than tripled in the past 30 years. The prevalence of obesity among adolescents aged between 12 to 19 years has been increased from 5.0% to 18.1%. Obesity is the result of caloric imbalance and it is mediated by genetic, behavioral, and environmental factors. Childhood obesity has both immediate and long-term health impacts.[8]

Body mass index (BMI) is acceptable for determining obesity for children. The normal range for BMI in children varies with age and sex. The first problems to occur in obese children are usually emotional or psychological. Childhood obesity however can also lead to life-threatening conditions including diabetes, high blood pressure, heart disease, stroke, several types of cancer, and osteoarthritis and other disorders.[3] Children and adolescents who are obese are at greater risk for bone and joint problems, sleep apnea, and social and psychological problems such as stigmatization and poor self-esteem. Some of the other disorders would include liver disease, early puberty or menarche, menstrual disorders, eating disorders such as anorexia nervosa and bulimia, skin infections, asthma and other respiratory problems. Studies have shown that overweight children are more likely to grow up to be overweight adults. Obesity during adolescence has been found to increase mortality rates during adulthood. The diet modification is the main prevalent measure. Thus, the modification should take place at least during the adulthood. The dietary habits are determined by familial and cultural factors rooted in childhood and adolescents.[9]

Healthy nutritious foods have been replaced by the new food mantra - Junk food comprises of anything that is quick tasty convenient and fashionable. It seems to have engulfed every age, every race and the newest entrants are children. Wafers, colas, pizzas and burgers are suddenly the most important things. The commonest scenario is a child who returns from school and plonks himself in front of the television, faithfully accompanied by a bowl of wafers a can of coal. Children suddenly seem to have stepped into a world of fast food and vending machines ,totally unaware of havoc they are creating for themselves. For children who have less vision of heart disease, high blood pressure or diabetes that might befall them decades later, the tentacles of a junk food environment are virtually t inescapable . Studies reveals that as early as the age 30, arteries could beginning clogging and lay the groundwork for future heart attacks. What children eat from puberty affects their risks of prostate and breast cancer. Osteoporosis and hypertension are other diseases that appear to have their earliest roots

in children when life long eating habits are being formed. Children are especially vulnerable. Poor diets can slow growth, decay new teeth, promote obesity and sow the seeds of infirmity and debilitating disease that ultimately leads to incurable disease and death or worse make life insufferable.[10]

10 reasons for junk food is bad for your health includes- junk food be reason behind your fatigue, it impair digestion, it causes fluctuation in blood sugar level, it effect the brain function, it increases the risk of heart disease, it can cause kidney disease, it can damage your liver, it can cause type 2 diabetes mellitus, it increases the risk of cancer development and junk food can also lead to depression in teenagers

NEED OF THE STUDY

Food is an important part of a balanced diet. It is something everyone needs every day. Life can be sustained only with adequate nourishment. Man needs food for growth development and to lead an active and healthy life. Food is an substance, usually composed of carbohydrates, fats , proteins and water can be eaten or drunk by an animal or human for nutrition or pleasure.

Fast food affinity is equated with bad eating habits. Today's school children learned that fast foods are easily available and affordable. But the health hazards considerably outweigh those benefits. Meals at home are usually healthier with more fruits, vegetables, less fat, more calcium, and milk. In assessing the preventable causes of death, poor diet and physical activities accounts about 3, 00,000 deaths per year globally. For proper growth and development and to prevent health problems young people should begin healthy eating habits early in life. Food is an important part of a balanced diet. It is something everyone needs, every day. Life can be sustained only with adequate nourishment. Man needs food for growth, development and to lead an active and healthy life.[11]

Fast food operations are now an important part of modern catering practice largely through the growth of international franchise chains. Fast foods are available in places sells food and snacks. Vending machines, drive-thru restaurants, and 24 hour convenience stores are probably the most common places to find fast food. Fast food is inexpensive because it is usually made with cheaper ingredients such as high fat meat, refined grains, and added sugar and fats, instead of nutritious foods such as lean meats, fresh fruits, and vegetables.[12]

Adolescence is a transitional period between childhood and adulthood, which begins from the earliest signs of secondary sexual characteristics development and ends when a person has achieved adult status (WHO, 1995).Hence, dramatic changes and development of the physical, emotional and cognitive functions occur during adolescence. In order to achieve optimal growth and development during adolescence, the nutritional requirements are the highest across the life span. Practicing healthy eating behavior is one of the important factors to meet the nutritional needs of adolescents. Adolescent period is characterized by heavy demands of calorie and proteins. The appetite of the child increases and he tends to consume more carbohydrate foods. Intake of vitamin C and vitamin A may be low due to improper habits of eating snacks.[13]

Consumption of junk food has increased rapidly since the 1970s among adolescents from all socioeconomic and racial/ethnic groups across the "United States," the authors provide as background information in the article. "An estimated 75 percent of adolescents eat fast food one or more times per week. The increase in fast food consumption parallels the escalating obesity epidemic, raising the possibility that these 2 trends are causally related," the authors suggest. "Characteristics of fast food previously linked to excess energy intake [overeating] or adiposity [fat] includes enormous portion size, high energy density, and palatability, excessive amounts of refined starch and added sugars, high fat content and low levels of dietary fiber.[14]

The most common fast foods available in India are burggers, pizzas, wraps and rolls, mini-meals, chips, samosa, pao bhaji, panipoori, pakodas, Chinese food like gobi manchoori, noodles, Beverages like soft drinks, coffee, shakes etc. In India alone the fast food industry is growing by 40% a year. Eating at home remains very much ingrained in Indian culture and changes in eating habits are very slow moving with barriers to eating out entrenched in certain sectors of Indian Society. The growth in nuclear families, particularly in urban India, exposure to global media and Western cuisine and an increasing number of women joining the work face have had an impact on eating out trends. Adolescent is the age group of enjoyment with friends especially in fast food corners.[15]

Fast food is kind of addictive; you get hooked on to it and continue consuming it in an uncontrolled way in spite of knowing that it is unhealthy. The more you consume, the more difficult it is for you to opt for healthy foods.[16]

According to the Massachusetts Medical Society Committee on Nutrition, fast food is especially high in fat content, and studies have found associations between junk food intake and increased body mass index (BMI) and weight gain junk food comprises a growing portion of food eaten outside the home. In 1953, fast food accounted for 4% of total sales of food outside the home; by 1997, it accounted for 34%. As a percentage of discretionary food expenditure, fast food doubled from 20% in the 1970s to 40% by 1995. Finally, as a percentage of total energy intake, fast food quintupled from 2% in the 1970s to 10% in 1995.One-third of US adults report having eaten at a fast food outlet on any given day; 7% of Americans eat at a fast food restaurant daily. Our brain is the organ in affecting how we think and move. Fast food and junk food are very low in nutrients; instead they are full with colorings, flavors and preservatives. Researchers have shown that junk food might cause dyslexia, ADHD (attention deficit hyperactivity disorder) and worse is autism. An individual's mood and attention are highly influenced by the food taken, which means it will affect the concentration.[17]

The effects of junk food include nutritional deficiencies, obesity, increased cholesterol levels, cardiac problems and many other threatening health hazards. Most of these quick and convenient meals contain high amount of sodium, which increases and aggravates the risks of high blood pressure. According to the recommendations of the National Research Council of the National Academy of Sciences 1,200 - 1,500 mg of sodium is the daily sodium requirement for adults. Although the body requires minimum quantities of sodium, too much sodium contributes to high blood pressure. Sodium

can also lead to building-up of fluids in case of people who are suffering from people with congestive heart failure, cirrhosis, or kidney disease.[18]

Fast food is loaded with calories from refined sugar and fats (especially, the artery-clogging saturated and hydrogenated fats, which are repeatedly reheated to high temperatures for frying purposes). Another issue in the fast food industry is the health hazards that fast food chains are prone to. A particular hazard is the E-coli bacteria that meat products are susceptible to. Because of the long supply chain through which fast food chains operate in, the handling and sourcing of the meat is very hard to monitor.[19]

Eating fast food and leading a sedentary lifestyle leads to obesity. Obesity leads to other complications like increase in the cholesterol level, blocking of the arteries, the increased risk of coronary diseases, in addition to the general physical discomfort posed by the extra weight. Fast food is also addictive and hence it is very difficult to give up on their greasy and fatty foods and carbonated drinks and switch to healthier options.[20]

Structured teaching programme is one among the methods of health education. It helps the adolescents to get adequate knowledge regarding the ill or harmful effects of fast foods. If they get adequate knowledge it helps them to overcome the harmful effects in a prior stage. In turn it will help them or encourage them to seek appropriate and timely medical advice. Though many studies are conducted in the field of harmful effects of fast foods on health, the researcher could not find any valid study to assess the effectiveness of structured teaching programme on knowledge of adolescents regarding the harmful effects of fast food on health. Hence the researcher felt the need for a study to find the effectiveness of structured teaching programme on knowledge regarding the harmful effects of fast food on health among adolescents in selected PU College of Raichur.

PROBLEM STATEMENT

A Pre experimental study to assess the effectiveness of planned teaching programme regarding effects of junk foods on health among adolescents of selected Senior secondary school of Jandiala Guru, Amritsar (Punjab)".

AIM OF STUDY

The present study aims to assess the effectiveness of planned teaching programme on knowledge regarding effects of junk foods on health among adolescents of selected Senior secondary school of Jandiala Guru, Amritsar

OBJECTIVES OF STUDY

1. To assess the existing level of knowledge regarding the effects of junk foods on health among adolescents in selected schools.

2. To implement planned teaching programme regarding effects of junk foods on health among adolescents.

3. To analyze the effectiveness of planned teaching programme on knowledge regarding effects of junk foods on health among adolescents before and after implementation.

4. To find the association between the knowledge regarding effects of junk foods on health among adolescents with selected socio demographic variables.

OPERATIONAL DEFINITIONS

Effectiveness: Determines the extent to which the structured teaching programme has achieved the desired effect in improving the knowledge of adolescents regarding effects of junk food on health .

Structured teaching programme: It refers to the type of teaching prepared by the Investigator on the effects of junk food on health to enhance the awareness of adolescents.

Knowledge: It refers to the level of understanding of the adolescents regarding the effects of fast food on health.

Fast food: A type of food that is often pre-prepared and served quickly.

Effects: It refers to the various hazards created by the junk food over the adolescent's normal health.

Adolescents: It refers to the children in the age group of 12-18.

HYPOTHESES

H_1. There will be significant difference between the pre-test and post-test Knowledge scores regarding the effects of fast food on the health of adolescents.

H_2. There will be significant relationship between the knowledge regarding the effects of fast foods on the health of adolescents with selected demographic variables.

DELIMITATIONS

1. The study was delimited to adolescents in age group of 12-18 years.
2. The study was delimited to selected senior secondary schools, Jandiala guru, Amritsar

CONCEPTUAL FRAMEWORK

A conceptual framework is the processor of a theory. It provides broad perspectives for nursing research, practice and education. Conceptual framework plays several inter related roles in the progress of science. In nursing , conceptual model identify concepts and describe their relationships to the phenomena of central concern to the discipline. It helps to conceptualize plan and care. Their overall purpose is to make scientific findings meaningful and generalizable.

Polit and Beck (2008) states that conceptual framework deals with abstraction/ concepts that are assembled by virtue of their relevance to common theme. Conceptual framework is a theoretical approach to the study problems that are scientifically based, which emphasized the selection, arrangement and classification of its concepts.
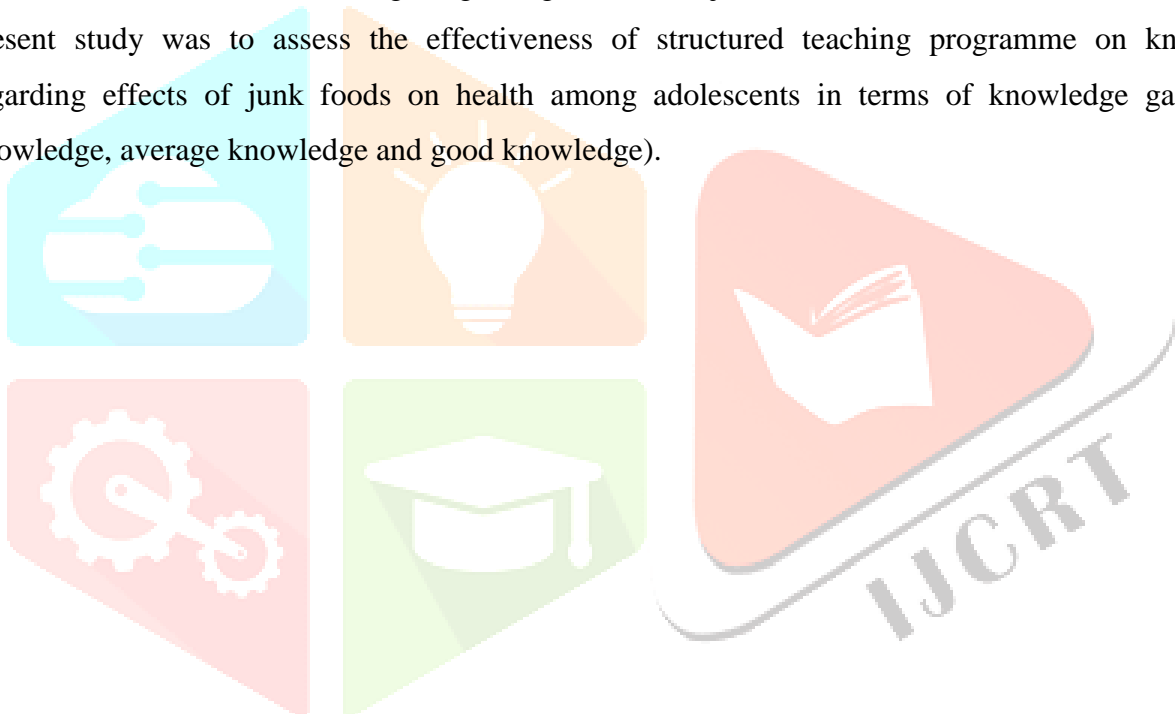
Coceptual framework means "interrelated concepts or abstractions that are assembled together in some rational scheme by virtue of their relevance to a common theme''

General System's Model developed by **Ludwing Von Bertalanffy in 1968** treats its subject matter as consisting of component parts and their interrelationships. The focus is on the discrete parts and their relationship which makes up and describe the whole (i.e. the system)

Input: A system imports products in a process known as input. In this study, input refers to assessment of demographic characteristics of adolescents such as age, sex, religion, monthly family income, dietary pattern, area of residence and source of information on effects of junk foods on health and pre-test assessment of level of knowledge regarding effects of junk foods on health among adolescents.

Throughput: A system transport, creates and organize the process known as throughput which results in reorganization of input. In this study through put refers to structured teaching programme on effects of junk foods on health was given to the adolescents which includes meaning, junk food items, content in junk food, effects of eating junk food, signs and symptoms, avoid junk food and healthy eating habits.

Output: A system exports product on a process known as output. Output is the post-test assessment of level of knowledge regarding effects of junk foods on health. The outcome of the present study was to assess the effectiveness of structured teaching programme on knowledge regarding effects of junk foods on health among adolescents in terms of knowledge gain (poor knowledge, average knowledge and good knowledge).
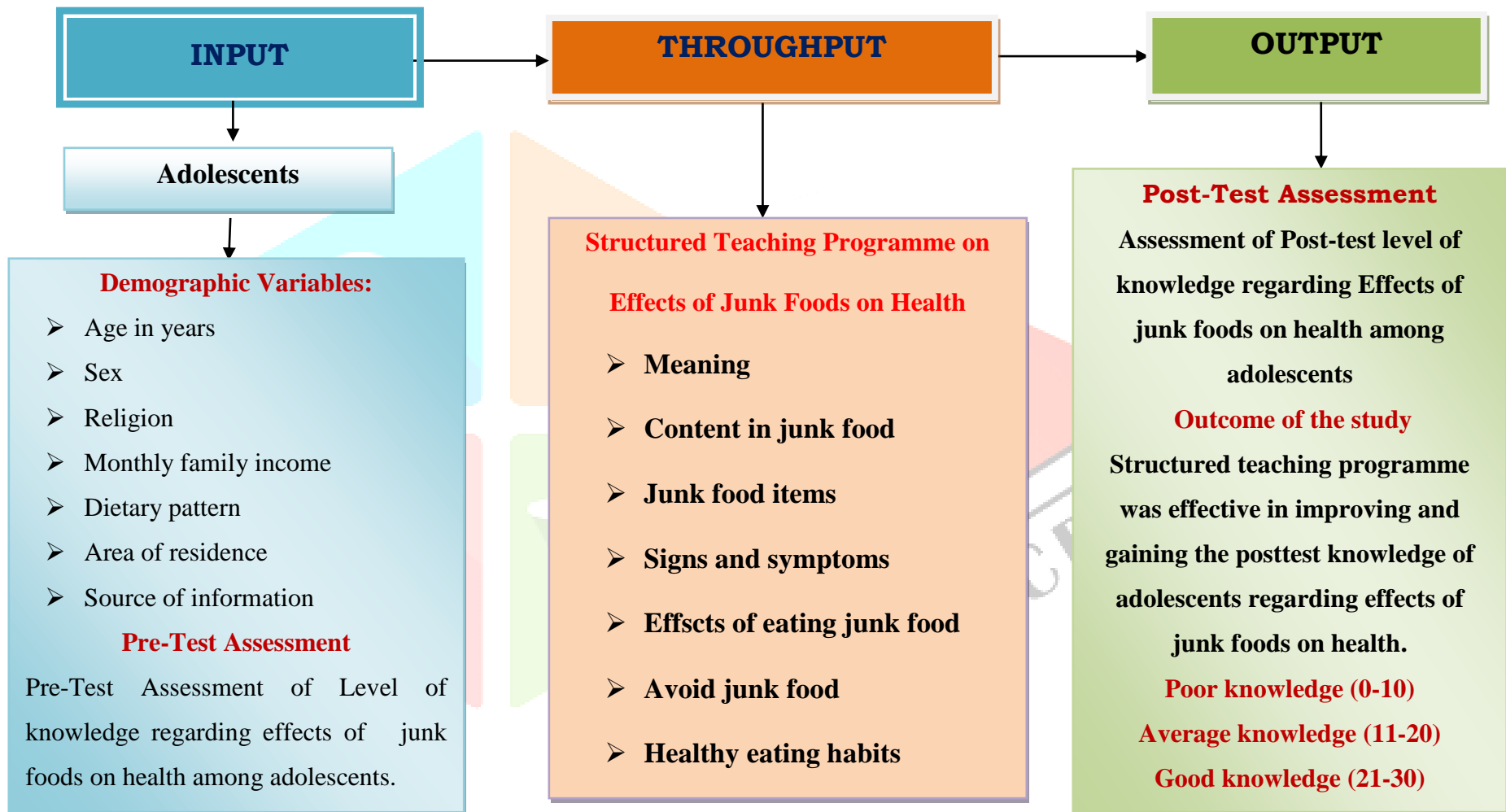
INPUT

THROUGHPUT

OUTPUT

Adolescents

Demographic Variables:

➢ Age in years

➢ Sex

➢ Religion

➢ Monthly family income

➢ Dietary pattern

➢ Area of residence

➢ Source of information

Pre-Test Assessment

Pre-Test Assessment of Level of knowledge regarding effects of junk foods on health among adolescents.

Structured Teaching Programme on

Effects of Junk Foods on Health

➢ **Meaning**

➢ **Content in junk food**

➢ **Junk food items**

➢ **Signs and symptoms**

➢ **Effscts of eating junk food**

➢ **Avoid junk food**

➢ **Healthy eating habits**

Post-Test Assessment

Assessment of Post-test level of knowledge regarding Effects of junk foods on health among adolescents

Outcome of the study

Structured teaching programme was effective in improving and gaining the posttest knowledge of adolescents regarding effects of junk foods on health.

Poor knowledge (0-10)

Average knowledge (11-20)

Good knowledge (21-30)

FIG 1 Conceptual Framework Based on General System's Model By Ludwing Von Bertalanffy (1968)

CHAPTER – II

REVIEW OF LITERATURE

Review of literature is a key step in research process. It refers to extensive, exhaustive and systemic examination of publications relevant to the research project. The researcher analyses existing knowledge before delving into a new area of study while conducting a study, when interpreting the results of the study, and when making judgments about application of a new knowledge on nursing practice. The review of literature is defined as a broad, comprehensive in depth, systematic and critical review of scholarly publications, unpublished scholarly print materials, audio visual materials and personal communication.

The purpose of reviewing the literature is to convey the readers about the work already done and the knowledge and ideas that have been already established on a particular topic of research. As a piece of writing, the literature review must be defined by a guiding concept (e.g., research objective, the problem or issue are discussing or your argumentative thesis). It is not just a descriptive list of the material available, or a set of summaries. It may be written as a stand-alone paper or to provide a theoretical framework and rationale for a research study (such as a thesis or dissertation).

The studies has been organized as follows

1. Studies related to prevalence of junk food and its effects on health
2. Studies related to effectiveness of teaching programme on knowledge regarding effects of junk foods on health.

STUDIES RELATED TO PREVALENCE OF JUNK FOOD AND ITS EFFECTS ON HEALTH.

Vijay Shree, R. R. Prasad, Sanjay Kumar, Setu Sinha (2018)[21] study was undertaken with objectives to figure out the prevalence of fast food consumption among medical students, to study the fast food consumption pattern by the medical students and to explore various factors contributing to fast food consumption pattern by the medical students and to explore various factors contributing to fast food consumption by the students. A cross sectional study was done among 120 undergraduate medical students of IGIMS, Patna for a period of 6 months. Data collection was done using pre-tested structured questionnaire and was analysed using SPSS latest version. Results: The study showed that all the respondents consume fast food sometime or the other and the knowledge of fast food was almost universal among the medical students. Most of the students (48.3%) were taking fast food as an alternative to dinner, 32 (26.6%) as evening snack and 26 (21.6%) as an alternative to lunch. Most preferred beverage was carbonated drinks (56.6%) while most preferred fast food was pizza (45%). 75.6% students were taking fast food 1-2 times a week. Reasons for consumption of fast food were mainly- eating in company (58.3%) and taste factor (55%).

Kumar Ahirw, Priya Prabhu Vijay, Basappa Dhange, Vrindha PariSun, Kumar Sumit (2018)[22] Study was conducted and prepared in an industrial fashion. Vitamins, minerals, fibre and amino acids are low or lacking in fast food but has high energy (calories).The present study was done to assess the knowledge and practice of fast food consumption among Pre-University College students The study design adopted was cross-sectional. Semi-structured self-administered questionnaire were

used to collect the data. Time bound enumeration was used to recruit the participants and total 160 Pre-University students were included in the study. About 51(31.87%) of the participants had inadequate knowledge, 67(41.88%) of the participants had moderate knowledge and 42(26.25%) of the participants had adequate knowledge about the effect of fast food consumption. The majority of the respondents 116 (72.5%) reported that the main reason for their consumption is a delicious fast food.

Sam Abraham, Manuel Martinez (2018)[23] The purpose of the current study was to explore college students' perceptions of the health effects of fast food consumption and their eating habits. The consequences of increased fast food consumption among college students is rising health problems, which include obesity, diabetes, and metabolic syndrome. The problem was explored in a quantitative survey using a cross-sectional approach with a descriptive design. A sample size of 120 college students among a 2000 student-body population in the Midwestern United States participated in the survey. On a 4-point Linker-type scale of strongly disagree (1) to strongly agree (4), the strongest agreement for the perception statement was: "Obesity is linked to increased fast food consumption" (M=3.54; SD=0.57). However, in the habit category, the students claimed, "I go to fast food restaurants more often, in the evenings, when hanging out with friends" (M=3.08; SD=0.73). The students were aware of the risks associated with fast food consumption on health; however, their eating habits did not indicate they practiced what they knew could be harmful to their health, especially when they were socializing with friends. Hopefully, this study will help attract attention to evils of food choices and its effects on health.

A. Mohammadbeigi, a. Asgarian (2018)[24] This study aimed to estimate the prevalence of fast food consumption and to assess its association with abdominal and general obesity. In an analytical cross-sectional study, 300 students were selected randomly from two largest universities in Qom, center of Iran, studying in medical and basic sciences fields in 2015. Data collection was conducted by a modified version of NELSON's fast food questionnaire and anthropometric measures including Waist-Hip Ratio (WHR) and Body Mass Index (BMI). Chi-square, independent t-test, and multivariate logistic regression were used for statistical analysis. According to our results, 72.4% (67.4% in females vs 80.7% in males) had at least one type of fast food consumption in the recent month including sandwich 44.4%, pizza 39.7%, and fried chicken 13.8%, The obesity prevalence based on BMI and WHR was 21.3% (95% CI: 19.4, 23.2%) and 33.2% (95% CI: 0.7, 35.7), respectively. Fast food consumption was related to abdominal obesity as WHR (OR: 1.46, 95% CI: 1.11, 2.26), but was not related to general obesity as BMI (OR: 0.97, 95% CI: 0.63, 1.52). The prevalence of fast food consumption and obesity/overweight in Iranian student is high. Fast food consumption was associated with abdominal obesity based WHR, but did not related to general obesity based on BMI.

Shubha Devi Sapkota, Seema Neupam (2018)[25] This study was conducted to assess the junk food consumption and patterns of consumed junk food among secondary level students. Material and Methods: This was a descriptive cross-sectional research. Hundred forty-two respondents were drawn by using cluster sampling method. Self-administered semi-structured questionnaire in Nepali Version was used and the collected data was entered and analysed in Epi-data and SPSS Version 20 by using

simple statistical methods. Results: The findings revealed that more girls (53.5%) consumed junk food than boys (79.6%) and those respondents were aware of the meaning of junk food. Majority of respondents (90.1%) preferred junk food for taste, is faster to prepare (44.4%), preferred as influenced by TV advertisements (15.5%), because of peer influences (31.7%) and some (29.6%) respondents preferred junk food because nothing else was available. Concerning patterns of consumed junk food all respondents (100%) consumed 'chat-pat' and noodles, panipuri (97.2%), doughnuts (93%), chocolates (92.3%), biscuits (95.8%), ice cream (65.5%) and cold drinks (65.5%). Only 54.2% of respondents were aware of risks associated with poor eating habits. Conclusion: Adolescents consumed a greater amount of junk food which led to a majority of ill effects later on. It is recommended that the school and community conduct and implement awareness programme on junk food consumption.

Pankaj Kumar Sahu, Bishnu Ram Das (2018)[26] To study the consumption pattern and knowledge about ill effects of junk food in school children of Jorhat urban. A cross-sectional descriptive study was undertaken in schools of urban area of Jorhat district of Assam over a period of one year from June 2016 to May 2017. Results: Among the study participants who consumed junk food frequently (≥5 days), consumption ranges between 5.6% to 24.1% while those who had the practice of taking junk food infrequently (1-4 days), we found that their habit ranges from 49.4% to 70.8% in different junk food products. Expenditure pattern of pocket money revealed that 33.3% (majority) of the adolescents spend their pocket money to pay vehicle rent, 16% use it to buy chips, 13.5% spend their pocket money to buy ice cream while 6.9% of the adolescents spend it on chocolate. Knowledge on ill effects of junk food revealed that 51.5% (majority) pointed out stomach problem and 16.8 % mentioned obesity as ill effect of junk food consumption while 22.4% of the participants do not know the ill effect of junk food consumption

Giovanni Sogari, Miguel Gomez (2018)[27] An explorative study was to use a qualitative research design to analyze the factors (barriers and enablers) that US college students perceived as influencing healthy eating behaviors. A group of Cornell University students ($n = 35$) participated in six semi-structured focus groups. A qualitative software, CAQDAS Nvivo11 Plus, was used to create codes that categorized the group discussions while using an Ecological Model. Common barriers to healthy eating were time constraints, unhealthy snacking, convenience high-calorie food, stress, high prices of healthy food, and easy access to junk food. Conversely, enablers to healthy behavior were improved food knowledge and education, meal planning, involvement in food preparation, and being physically active. Parental food behavior and friends' social pressure were considered to have both positive and negative influences on individual eating habits. The study highlighted the importance of consulting college students when developing healthy eating interventions across the campus (e.g., labeling healthy food options and information campaigns) and considering individual-level factors and socio-ecological aspects in the analysis.

Priya Keshari, C.P Mishra (2016)[28] This Study was conducted to introspect about fast food consumption. There are enough scientific evidences in India to substantiate that fast food have become integral component of diet in all section of society. High consumption of fast food has been reported in

school going children and this is quite substantial in college and university students - in spite of the fact that a significant proportion of population are aware about adverse consequences of fast food consumption. Children of pregnant and lactating women eating fast foods are more prone to obesity. High fat and high sugar diet leads to change in fetal brain reward pathway altering food preferences. Fast food consumption is rising in India across all income categories and this is contributing significantly to rising trend of non-communicable diseases (NCDs) in this country. Regulation of marketing and nutritional labeling is not up to mark in India. Growing menace of fast food consumption needs to be restricted by adopting legal, service and education approaches for promoting healthy dietary practices.

Joymati Oinam (2016)[29] Study was conducted in ten higher secondary schools in Imphal to determine the prevalence of fast food consumption using questionnaire method. Stratified two - stage cluster sampling with probability proportionate to size was used to select a representative sample of 708 students. Data were analyzed using descriptive statistics such as mean (SD) and percentages. Chi square test was used for test of significance. P value of <0.05 was taken as statistically significant. Prevalence of regular fast food consumption was found to be 36% among the students and more among class XI (p=0.01) and overweight/obese students (p=0.04). Non-regular fast food consumer tend to check for the nutritive value of the food compared to the regular fast food consumer (p=0.02).

Arif Habib. (2016)[30] Study was conducted to the determinants and the consequences of fast food intake among the students of college of applied medical sciences and college of nursing, khamis-mushait. Focus has been given on awareness about fast food consumption and its adverse effects on their health. A cross-sectional study conducted by self-administered questionnaire which was used to collect the data. It was calculated that point prevalence of fast food intake is 89%. There were no significant results (p ≤ 0.05) between the socio-demographic variables and body mass index that had been taken into account during this study. Furthermore, there is significant relation (p ≤ 0.05) between the frequent consumption of fast food intake and BMI as we were in view that increasing frequency of fast food consumption excludes body mass index. There is sufficient evidence (p ≤ 0.05), despite having the awareness of health hazards of fast food consumption, students don't hesitate to consume the fast food. Results from this study highlight that an urgent need for college-based nutrition interventions must be organized that consider the trends of fast food consumption and targeted eating behaviors of students.

Hala Al-Otaibi, Amany Mohamed (2015)[31] The aims of this study to examine the pattern of fast food consumption among university students and to determine the association between fast food consumption and body weight status. A total 276 volunteer female students aged 18 to 25 years old and usually ate fast food from different college in King Faisal University, constituted the sample of the study. The prevalence of obesity/overweight was 29.7%. A total 130 (47.1%) students reported eating fast food two or more per week, and the main reasons for the consumption were lack of cooking skills. Eighty percent of the students never read the nutritional information at the fast food restaurant and only

5% they ordering healthier items always or most of the time. A significant correlation between BMI and frequency of consumption (r=0.125; p=0.05) was observed, and the Logistic Regression model found obesity/overweight to be significantly associated with frequency of fast food consumption for students going two or more times per week (OR 3.072; 95% CI 1.107 – 8.523). Increase awareness about healthy choices of fast food by health education programs are recommended to promote healthy lifestyles and dietary habits among university students. Key words: Fast food, university students, obesity/overweight, consumption habits.

Shalini Prushothaman (2015)[32] The aim of the present study was to assess the predilection for junk food consumption among 15-year-old schoolchildren in North Chennai. This was a descriptive cross-sectional study conducted among the schools in North Chennai, India. Cluster sampling methodology was used to recruit the subjects for the study. A questionnaire was used to collect the data. A total of 427, 15-year-old schoolchildren participated in the study. Pearson's chi-square test was performed to determine the significance. All the participants reported that they liked all types of junk food, and were aware that chemicals were present in the junk food. Nearly 58.3% of the students knew that junk foods caused diseases. All the participants told that their parents were aware about their junk food consumption habits. Nearly 98.1% of students reported that the presence of junk food outlets in and around their school influenced them to consume more junk food, which, as reported by all the students, was increasing day by day. The study concluded that the predilection for junk food is high and the consumption is increasing day- by day among schoolchildren because of various influential factors.

Nora A. Al faris (2015)[33] conducted a cross-sectional survey, 127 adolescent Saudi girls (13–18 years) and 69 young adult Saudi girls (19–29 years) were randomly recruited to participate in this study. Weight, height, waist circumference, and hip circumference were measured using standardized methods. Twenty-four-hour diet recall and a face-to-face interview food questionnaire were performed. Most of the participants had adequate intake of protein, riboflavin, iron, and sodium, but exhibited low intake for several other nutrients. Among study participants, 95.4% consume restaurants' fast food and 79.1% eat fast food at least once weekly. Burgers and carbonated soft drinks were the main kinds of fast food meals and beverages usually eaten by girls. Adolescent girls who usually ate large portion sizes of fast food had significantly higher mean waist circumference and hip circumference. Participants eat fast food primarily for enjoying the delicious taste, followed by convenience. Restaurants' hygiene and safety standards were the main concern regarding fast food for 62.2% of girls. Finally, international restaurants were preferable by participants to buy fast food compared with local restaurants (70.9% vs. 29.1%).

Latetia V. Moore, Ana V. Diez Roux (2009)[34] The authors examined associations among fast-food consumption, diet, and neighborhood fast-food exposure by using 2000–2002 Multi-Ethnic Study of Atherosclerosis data. US participants ($n = 5,633$; aged 45–84 years) reported usual fast-food consumption (never, <1 time/week, or ≥1 times/week) and consumption near home (yes/no). Healthy diet was defined as scoring in the top quintile of the Alternate Healthy Eating Index or bottom quintile of a Western-type dietary pattern. Neighborhood fast-food exposure was measured by densities of fast-

food outlets, participant report, and informant report. Those never eating fast food had a 2–3-times higher odds of having a healthy diet versus those eating fast food ≥1 times/week, depending on the dietary measure. For every standard deviation increase in fast-food exposure, the odds of consuming fast food near home increased 11%–61% and the odds of a healthy diet decreased 3%–17%, depending on the model. Results show that fast-food consumption and neighborhood fast-food exposure are associated with poorer diet. Interventions that reduce exposure to fast food and/or promote individual behaviour change may be helpful.

STUDIES RELATED TO EFFECTIVENESS OF TEACHING PROGRAMME ON KNOWLEDGE REGARDING EFFECTS OF JUNK FOODS ON HEALTH.

Vanitha P., Suganthra Devi S. (2019)[35] A pre-experimental study was conducted to assess the effectiveness of health teaching on knowledge regarding hazards of junk food among adolescents in selected school at cuddalore district, Tamilnadu. 50 adolescents were selected for the study by using convenient sampling technique. Structured knowledge questionnaire was used to collect the data. The study findings showed that before teaching 65% had average knowledge and 35% had poor knowledge and after health teaching 78% had good knowledge and 22% had average knowledge regarding hazards of junk food. The study findings concluded that There was a statistically significant increase in knowledge regarding hazards of junk food after health teaching programme and suggested to continue health teaching to school children on hazards of junk food prevention.

Amoldeep, Priyanka Kumari (2017)[36] A pre-experimental study was conducted to assess the effectiveness of Planned Teaching Program on Knowledge Regarding Harmful Effects of Junk Food among Adolescents at Selected School of Kala Amb. study comprised of adolescents who are studied in 9th, 10th, 11th and 12th classes. 100 adolescents both boys and girls were selected for the study. Non-probability convenient sampling technique was used for selecting sample Structured knowledge questionnaire was used to assess the knowledge of adolescents regarding harmful effects of junk food. Pre test was taken on first day followed by planned teaching programme to group and then post test was taken after seven days. In pre test majority adolescents (65%) had average level of knowledge but in post test majority adolescents (55%) had good level of knowledge. There was significant difference between the mean pre test and post test knowledge score (t = 9.590, p = 0.0001) at p<0.05 level. There were significant association of the selected socio demographic variables age and educational status. Planned teaching program was highly effective in enhancing the knowledge of adolescents regarding harmful effects of junk food.

Chanda Shrestha, Sanju Bhattaria, Asmita Gyawali (2018)[37] A pre-experimental study was conducted to assess the effectiveness of teaching programme on knowledge regarding the health hazards of junk foods on health among the adolescent at Tilingatar Secondary School, Kathmandu. 170 adolescent students were selected for the study using Non probability purposive sampling technique. The result showed that before teaching 1.20% of the respondents had inadequate knowledge, 67.10% % had moderate knowledge and 31.80% of respondents had adequate knowledge in pre-test. Whereas, in

post-test majority (95.30%) of the respondents had adequate knowledge on health hazards of junk food. Teaching programme was effective to increase the overall knowledge of junk food among the adolescents. The study concluded that education plays an important role in increasing awareness and knowledge on prevention of health hazards of junk food.

Beula Daniel (2017)[38] A pre-experimental study was conducted to assess the effectiveness of computer assisted teaching on the level of knowledge regarding the effects of junk foods on health among the adolescent children at Kongu Kalvi Nilayam Matriculation Higher Secondary School, Erode Tamilnadu. 60 adolescent students were included in this study. Structured knowledge questionnaire was used for data collection. The result revealed that in pre-test 91.6% had inadequate knowledge and 8.4% had moderate knowledge where as in post-test 20% had moderate knowledge and 80% had adequate knowledge regarding effects of junk food. The study concluded that computer assisted teaching was effective in improving the knowledge of adolescent children regarding effects of junk foods on health.

Vandhana Sharma. (2016)[39] A Pre-experimental study was conducted to assess the effectiveness of structured teaching program on knowledge regarding harmful effects of Junk food among adolescents. This study was conducted in 3 selected schools at District Jalandhar, Punjab. Total 60 adolescents those who met the inclusion and exclusion criteria were selected by non probability convenience sampling technique. The pre-test was taken by using self structured questionnaire followed by structured teaching programme. After 7 days post- test was taken. The mean percentage of the knowledge score of post test (22.88) was higher than pre test (12.96). The 't' value for total pre test and post test was 16.76.The difference between pre-test knowledge score and post test knowledge scores was 9.92. It means the knowledge score increased after structured teaching programme. The findings of study reveals that the education had a vital role in improving the knowledge of adolescents regarding harmful effects of Junk food.

Fancy, Vijay, Pushpakala (2019)[40] A descriptive study was conducted to assess the existing knowledge of adolescents regarding the health hazards of junk foods at selected schools, Chettinad, tamilnadu. The population of the present study includes adolescents aged about 18 to 20 years who fulfill Sampling Criteria. The sample size was 50 selected by Simple Random Sampling Technique. The tool consists of structured questionnaire to collect the data. The result showed that 6% of the adolescents were having adequate knowledge on ill effects of Junk food. 52% of them having moderately adequate knowledge and 42% having inadequate knowledge. The study concluded to provide the pamphlet regarding ill effects of junk food and the information regarding healthy food practice and issued to all the participants.

Brijesh Patel, Smruti, Chirag Jain (2018)[41] A Descriptive Study to Assess the Knowledge Regarding Ill Effects of Junk Foods among Students in Selected Constituents of charusat, Changa. 60 students who are selected by Non probability sampling convenience sampling technique. Data collection is carried out through administering the self structured questionnaire. Major finding of study was the finding revealed that 51.7% (31) of students had good knowledge regarding ill effects of junk foods, 43.3% (26) of students had average knowledge, and 5% (3) had poor knowledge regarding ill

effects of junk foods. The finding reveals that the variables age, gender, income, previous source of information about junk foods, and residence are in no relation with the knowledge regarding ill effect of junk foods (p value <0.05).

Sushma Marita Dsouza et al (2018)[42] A cross sectional study to assess the knowledge and practice of fast food consumption among Pre-University students in Udupi Taluk, Karnataka, India. A total 160 Pre-University students were included in the study. Semi-structured self-administered questionnaire were used to collect the data. About 51(31.87%) of the participants had inadequate knowledge, 67(41.88%) of the participants had moderate knowledge and 42(26.25%) of the participants had adequate knowledge about the effect of fast food consumption. The majority of the respondents 116 (72.5%) reported that the main reason for their consumption is a delicious taste of fast food. The study concluded that Though fast foods are tasty they have low nutritive value and high calories. Nutrition counselling regarding the significance of a balanced diet and harmful effects of fast foods may help to curb the fast food addiction.

Ujwala R. More (2016)[43] A descriptive study was conducted to assess the knowledge regarding health hazards of junk food among adolescents at selected college, Maharashtra. A sample of 115 engineering students selected for the study by using non probability convenience sampling technique. Majority of study subjects 69.56% samples had Average knowledge while 24.35% samples having Good knowledge, & 6.08 % samples having Poor knowledge regarding the health hazards of junk foods. There is a significant association between expense of junk food and knowledge regarding health hazards of junk food.

Avinash H. Salunkhe, V. R. Mohite. (2015)[44] A descriptive study was conducted to assess the existing knowledge of adolescents regarding the health hazards of junk foods in Shrimati Premlatai Chavan Polytechnic College of Karad. 150 adolescent students were selected by using non probability convenience sampling technique and data was collected with structured questionnaire. Majority of the samples (35.65%) belong to age group 18 years, in terms of gender 69(60%) subjects were females. Majority of study subjects 59% had Average knowledge, 19% had Good knowledge and 22% had Poor knowledge regarding the health hazards of junk foods. The study concluded that the adolescents have average knowledge regarding junk food and its hazards. Most of the students had not undergone any teaching program regarding the hazards of junk food.

Kavita Sharma. (2013)[45] A descriptive study was conducted to assess the knowledge of school children regarding the health hazards at selected school, nalkonda. 100 school children from class 10 and 12th were selected for the study by convenience sampling technique. structured knowledge questionnaire was administered to collect the data. The results of the study shows that 25% had poor knowledge, 64% had average knowledge and 11% had good knowledge regarding health hazards of junk food. Educational status of parents had found association with level of knowledge among children. The study findings concludes that junk food to be banned from the school to the children and awareness to be created among children regarding the ill effects of junk food.

Wilcox Tucker. (2012)[46] A cross sectional study was conducted to assess knowledge of consumption of junk food and its health hazards at selected rural area, Indonesia. Non-experimental, descriptive study was conducted with sample 50 children. Findings revealed that the number children having moderate knowledge was 28(56%), Inadequate knowledge was 14(28%) and adequate knowledge was 8(16%). The mean value of the adequate knowledge of children is (17.25) and standard deviation (SD) (1.09), Moderate knowledge of children is (12.03) and standard deviation (SD) (1.14) and The Mean value of Inadequate knowledge of under children (7.85) and standard deviation (SD) (2.1). Overall Mean knowledge score found to be (11.7) and Mean% (23.4%) with standard deviation (SD) (3.36). The maximum score of the knowledge was moderate level 28(56%). The study concludes that educational programmes to be implemented to improve the knowledge of children in rural areas regarding junk food consumption and its harmful effects on health.

CHAPTER – III
RESEARCH METHODOLOGY

Research methodology is a systemic way to solve the research problem. The Research methodology includes the strategies to be used to collect and analyze the data to accomplish the research objectives. Methodology of research indicates the general pattern for organizing the procedure for gathering, valid and reliable data for the problem under investigation. This chapter deals with the brief description of methodology adopted for the study. It includes description of research approach, research design, study setting, population, sample and sampling technique, inclusion and exclusion criteria, selection and development of tools, pilot study, data collection procedure, ethical consideration and plan for data analysis.

RESEARCH APPROACH

A research approach is a vehicle for hypothesis testing or answering research questions. It tells researcher as to what data is to be collected and how it is to be analyzed; it also suggests possible conclusions to be drawn from the data.

For the present study, quantitative approach was adopted to assess the effectiveness of structured teaching program on knowledge regarding effects of junk foods on health among adolescents at selected senior secondary schools of Jandiala guru, Amritsar, Punjab.

RESEARCH DESIGN

The term research design refers to the plan and the procedure for research that span the decisions from broad assumptions to detailed methods of data collection and analysis. The central purpose of research design is to maximize the amount of control. The investigator has control over the research situation and variables. For the present study, Pre-experimental study design is utilized to achieve the objectives of the study.

Group	Assessment of pre test	Structured teaching programme	Assessment of post test
E	01	X (Intervention)	O2

VARIABLES UNDER STUDY

Independent variables:

Structured teaching programme on effects of junk foods on health.

Dependent variables:

Knowledge of adolescents regarding effects of junk foods on health.

Demographic variables

The demographic variables under the study are age in years, sex, religion, monthly family income, dietary pattern, area of residence and source of information.

RESEARCH SETTING

The setting is the physical location and the condition in which data collection takes place in the study. The selection of appropriate set up is very important as set can influence the way people behave or feel and how they respond. The researcher needs to decide where the data will be collected according to the availability of subject and seeking approval and expectations of cooperation.

The present study was conducted at selected Senior Secondary schools, Jandiala guru, Amritsar.

POPULATION

Population is the entire aggregation of cases in which a researcher is interested. It is the set of individual having some common characteristics and is interested to the researcher."

For the present study, population was adolescents in 12-18 years of age.

SAMPLING TECHNIQUE

Sample is used in research when it is not feasible to study the whole population from which it is drawn. The process of sampling makes it possible to accept a generalization to the intended population based on careful observation of variables, within a relatively small proportion of population.

In the present study convenience sampling technique was used to select the adolescents from schools.

SAMPLE AND SAMPLE SIZE

A sample is a small portion of population selected for observation and analysis." Sampling refers to the process of selecting a portion of population to represent the entire population.

The sample and sample size of present study was 60 adolescents who meet the inclusion criteria of the study.

SAMPLING CRITERIA:

Inclusion criteria:

- Adolescents who are willing to participate in the study.
- Adolescents who are cooperative.
- Adolescents who can read/understand English or Punjabi language.

Exclusion criteria:

- Adolescents who are not cooperative.
- Adolescents who are not present at the time of data collection.
- Adolescents who are not willing to participate in the study.

SELECTION AND DEVELOPMENT OF TOOL

The tool was developed by keeping in mind the objectives of the study and prepared after extensive review of literature, internet sources and through discussion with guide, co-guide and opinions of various experts in the field of child health nursing. The suggestions and opinions were considered to prepare and finalize the tool.

DESCRIPTION OF TOOL

The tool consists of 2 parts:-

Part A: Socio-Demographic variables:

It consist of items for obtaining information from adolescents such as age in years, sex, religion, monthly family income, dietary pattern, area of residence and source of information..

Part B: Self structured knowledge questionnaire on effects of junk foods on health. The questions are related to meaning, junk food items, content in junk food, signs and symptoms, effects of eating junk food and healthy eating habits.

Scoring Criteria:

For each correct response 1 mark will be given and 0 mark for incorrect answer.

- ➢ Scores ranging from 0-10 would be considered poor knowledge
- ➢ Scores ranging from 11-20 would be considered average knowledge
- ➢ Scores ranging from 21-30 would be considered good knowledge

DESCRIPTION OF INTERVENTION

The intervention was prepared after extensive review of literature, books and internet sources and was finalized by obtaining suggestions and opinion from guide, co-guide and various experts in the field of child health nursing. The intervention for the present study was structured teaching programme on effects of junk foods on health. The content consists of meaning, junk food items, content in junk food, signs and symptoms, effects of eating junk food, avoid junk food and healthy eating habits.

VALIDITY OF TOOL

Validity refers to the degree to which an instrument actually measures what it is intended to measure."

To ensure content validity of tools it was submitted to various experts in the child health nursing. Experts were requested to judge the tool for clarity, relevance, appropriateness, relatedness and

meaningfulness for the purpose of study and to give their opinion and suggestions on the content, its coverage, organization, presentation, language and feasibility. Necessary modifications were made as per expert's advice.

RELIABILITY OF TOOL

Reliability is the degree of consistency or dependability with which an instrument measures the attribute it is design to measure."

The reliability of the tool was assessed by Guttmann method (r=.729). The tool was found to be reliable.

PILOT STUDY

A pilot study is a small scale version or trial run of the major study. The function of the study is to obtain information and assess feasibility of the study for improving and to decide the plan for data analysis."

The pilot study was carried out at selected senior secondary schools, Jandiala Guru, Amritsar on 10 adolescents to assess the feasibility for conducting main research study and to assess the relevancy of the tool. Their was no problems faced during the study and to assess the sample to collect the data.

ETHICAL CONSIDERATION

According to **Polit and Beck (2008),** "a system of moral values that is concerned with the degree to which the research procedure adhere to professional, legal and social obligations to the study participants is to be considered."

➢ Approval from ethical committee of GTB college of Nursing, Jandiala Guru, amritsar was obtained for the research study.

➢ Prior to data collection, written permission was obtained from the concerned authority of selected senior secondary schools, amritsar.

➢ Anonymity and confidentiality of subjects was maintained.

➢ Informed consent was obtained from the subjects.

DATA COLLECTION PROCEDURE

The data collection was done in the month of march 2020 at selected Senior secondary schools, Jandiala guru, amritsar. 60 adolescents were selected for the study by using convenience sampling technique. Prior to data collection informed consent was obtained from the participants. The tool consists of demographic variables and structured knowledge questionnaire on effects of junk food on health was administered to adolescents to collect the data. The pre-test data was collected. Structured teaching programme was given to the adolescents and the post-test was assessed by using same questionnaire after 7 days.

PLAN FOR DATA ANALYSIS

The data analysis will be done according to study objectives by using descriptive and inferential statistics. The plan of data analysis would be as follows:

- Frequency, percentage, mean and standard deviation will be calculated.

- Paired t test will be used to test the hypothesis.

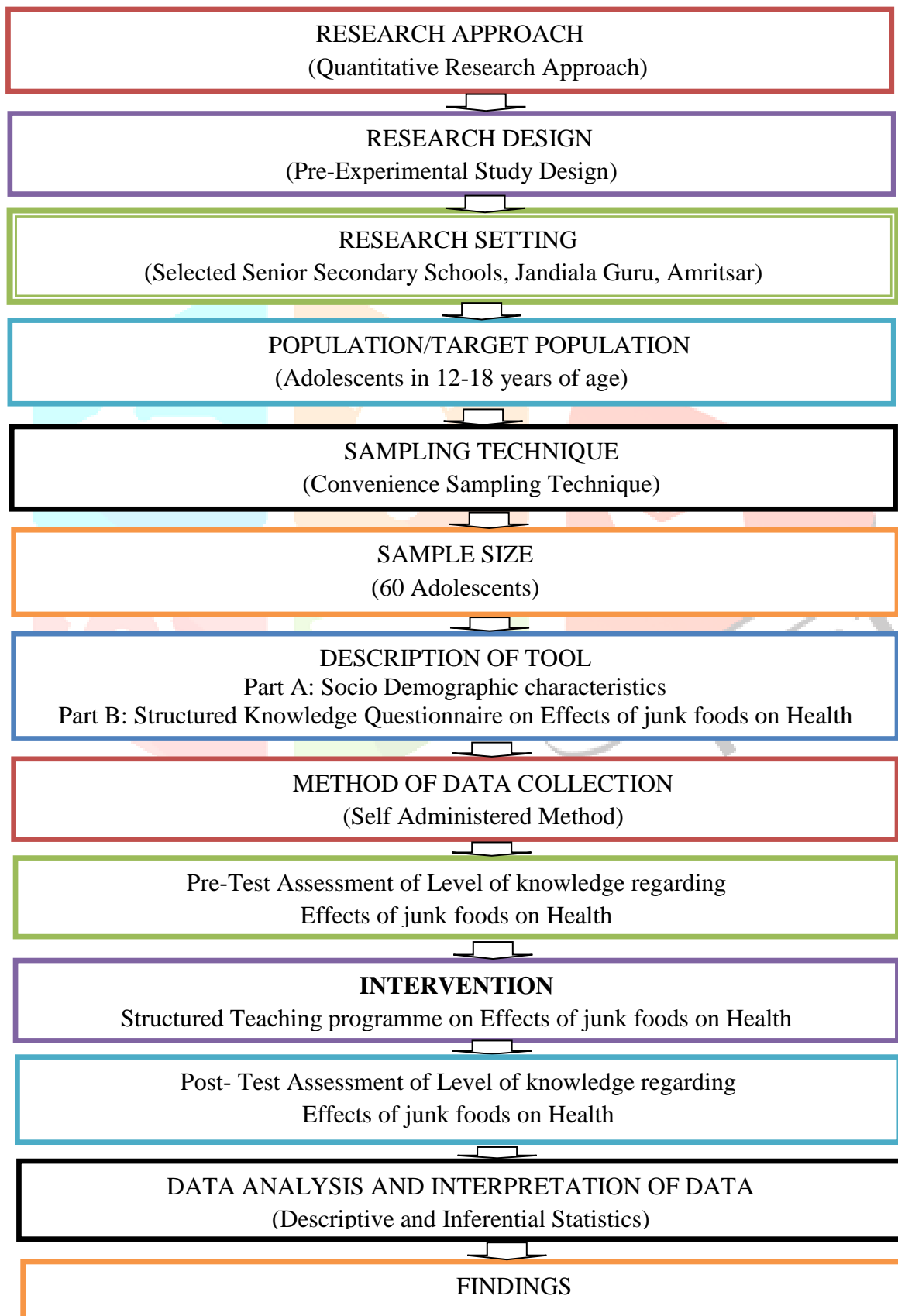- Chi-square test will be used for association.

RESEARCH APPROACH
(Quantitative Research Approach)

⬇

RESEARCH DESIGN
(Pre-Experimental Study Design)

⬇

RESEARCH SETTING
(Selected Senior Secondary Schools, Jandiala Guru, Amritsar)

⬇

POPULATION/TARGET POPULATION
(Adolescents in 12-18 years of age)

⬇

SAMPLING TECHNIQUE
(Convenience Sampling Technique)

⬇

SAMPLE SIZE
(60 Adolescents)

⬇

DESCRIPTION OF TOOL
Part A: Socio Demographic characteristics
Part B: Structured Knowledge Questionnaire on Effects of junk foods on Health

⬇

METHOD OF DATA COLLECTION
(Self Administered Method)

⬇

Pre-Test Assessment of Level of knowledge regarding
Effects of junk foods on Health

⬇

INTERVENTION
Structured Teaching programme on Effects of junk foods on Health

⬇

Post- Test Assessment of Level of knowledge regarding
Effects of junk foods on Health

⬇

DATA ANALYSIS AND INTERPRETATION OF DATA
(Descriptive and Inferential Statistics)

⬇

FINDINGS

FIG 2 SCHEMATIC REPRESENTATION OF RESEARCH DESIGN

CHAPTER – IV
ANALYSIS AND INTERPRETATION

According to **Polit and Hungler (1999),** "statistical analysis is a method of rendering quantitative information which is meaningful and intelligible statistical procedures enable the researcher to reduce, summarize, organize, evaluate, interpret and communicate numeric information."

Abdellah and Levine (1979) have also stated the interpretation of tabulated data can bring the real meaning of finding of study. The analysis and interpretation of the present study are based on data collected from 60 adolescents to assess the effectiveness of structured teaching programme on knowledge regarding effects of junk foods on health among adolescents at selected senior secondary schools, jandiala guru, amritsar, Punjab. Convenience sampling technique was used to select the samples. The tool consists of socio demographic variables and structured knowledge questionnaire on effects of junk foods on health was administered to collect the data. Post-test was conducted after 7 days of intervention. The data collected is analyzed using descriptive and inferential statistics and is arranged based on the objectives of the study.

OBJECTIVES OF STUDY

5. To assess the existing level of knowledge regarding the effects of junk foods on health among adolescents in selected schools.
6. To implement planned teaching programme regarding effects of junk foods on health among adolescents.
7. To analyze the effectiveness of planned teaching programme on knowledge regarding effects of junk foods on health among adolescents before and after implementation.
8. To find the association between the knowledge regarding effects of junk foods on health among adolescents with selected socio demographic variables.

HYPOTHESES

H_1. There will be significant difference between the pre-test and post-test Knowledge scores regarding the effects of fast food on the health of adolescents.

H_2. There will be significant relationship between the knowledge regarding the effects of fast foods on the health of adolescents with selected demographic variables.

Organization and presentation of data:

The obtained data has been analyzed and organized as follows

Section I:

Frequency and percentage distribution of demographic variables of adolescents

Section II:

Pre-test and post-test level of knowledge regarding effects of junk foods on health among adolescents.

Section III:

Effectiveness of structured teaching programme on knowledge regarding effects of junk foods on health among adolescents.

Section IV:

Association between pretest knowledge regarding effects of junk foods on health among adolescents with selected demographic variables.

Association between pretest knowledge regarding effects of junk foods on health among adolescents with selected demographic variables.

SECTION – I

Table 1: Frequency and percentage distribution of demographic variables of adolescents

S.No	Demographic Variable	Frequency (f)	Percentage (%)
1.	Age in years		
	a. 12-13	5	8.3
	b. 14-15	8	13.3
	c. 16-17	21	35
	d. 17-18	26	43.4
2	Sex		
	a. Male	32	53.3
	b. Female	28	46.7
3	Religion		
	a. Sikh	37	61.7
	b. Hindu	15	25
	c. Christian	5	8.3
	d. Muslim	3	5
4	Monthly family income (Rs)		
	a. <10000	5	8.3
	b. 10001-20000	14	23.3
	c. 20001-30000	28	46.7
	d. >30000	13	21.7
5	Dietary pattern		
	a. Vegetarian	43	71.7
	b. Non vegetarian	17	28.3
6	Area of residence		
	a. Urban	39	65
	b. Rural	21	35
7	Source of information		
	a. Internet	7	11.7
	b. Friends	22	36.7
	c. Parents	5	8.3
	d. Social media	26	43.3

Table 1 shows the frequency and percentage distribution of demographic variables of adolescents. According to their age, majority 26(43.3%) were 17-18 years of age, followed by 21(35%) were in 16-17 years of age, 8(13.3%) were in 14-15 years of age and 5(8.3%) were 12-13 years of age.

The data on sex of adolescents reveals that majority 32(53.3%) of adolescents were male and 28(46.7%) of adolescents were female.

According to religion of adolescents shows that majority 37(61.7%) belongs to sikh followed by 15(25%) belongs to hindu, 5(8.3%) belongs to christian and 3(5%) belongs to muslim.

According to monthly family income of adolescents reveals that majority 28(46.7%) had Rs.20001-30000, 14(23.3%) had Rs.10001-20000, 13(21.7%) had above Rs.30000 and 5(8.3%) had less than Rs.10000.

The data on dietary pattern of adolescents reveals that majority 43(71.7%) are vegetarian and 17(28.3%) are non vegetarian.

According to area of residence of adolescents, majority 39(65%) are from urban area and 21(35%) are from rural area.

The data on source of information of adolescents reveals that majority 26(43.3%) had information from social media, 22(36.7%) had from friends, 7(11.7%) had from internet and 5(8.3%) had from parents.
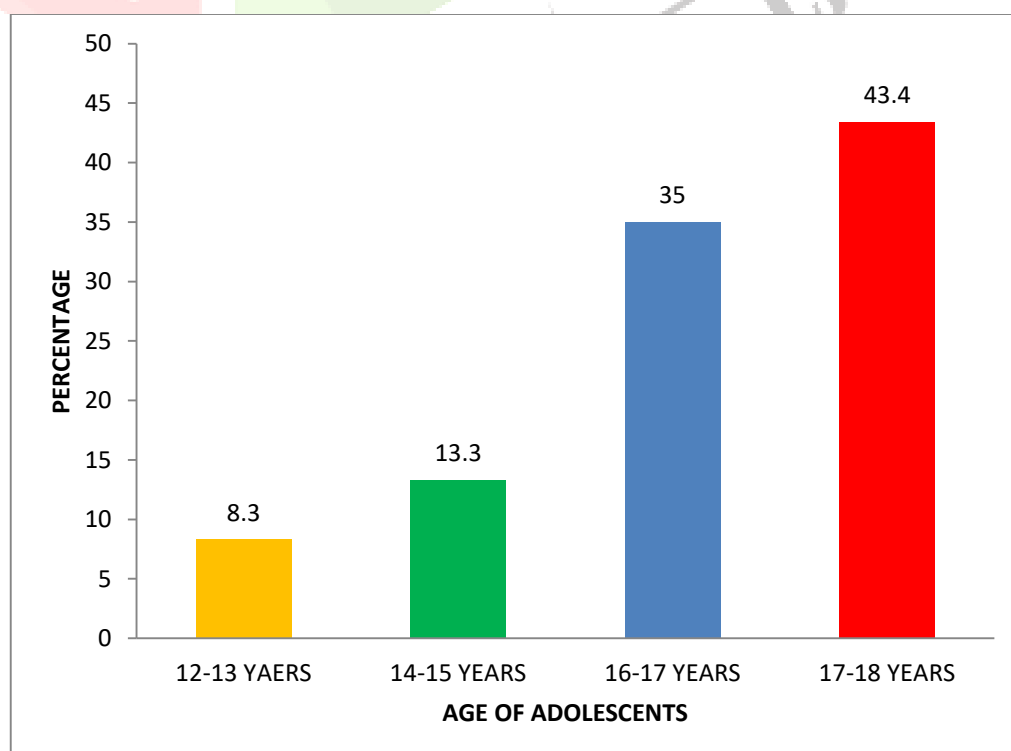

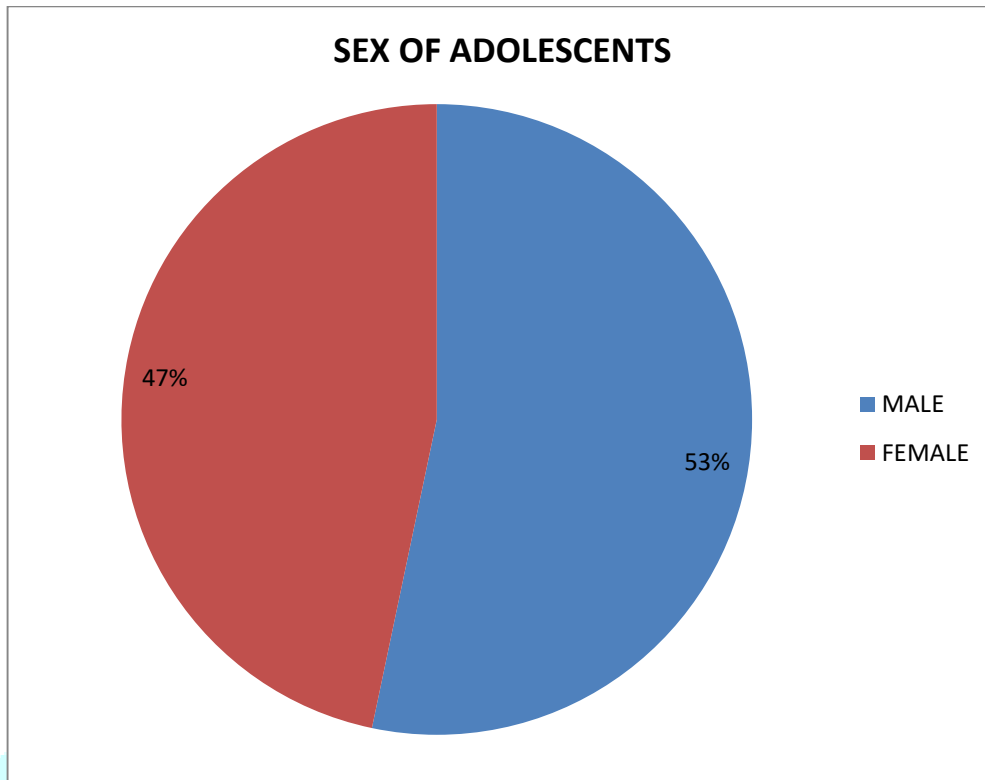**Fig 3: Distribution of age of adolescents**
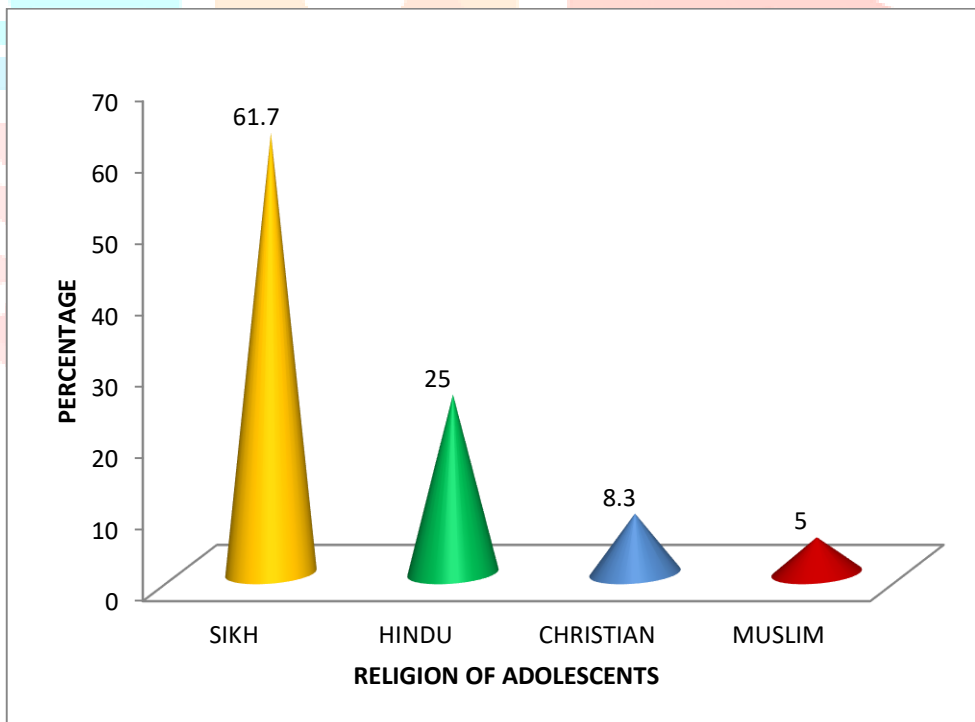
Fig 4: Distribution of sex of adolescents
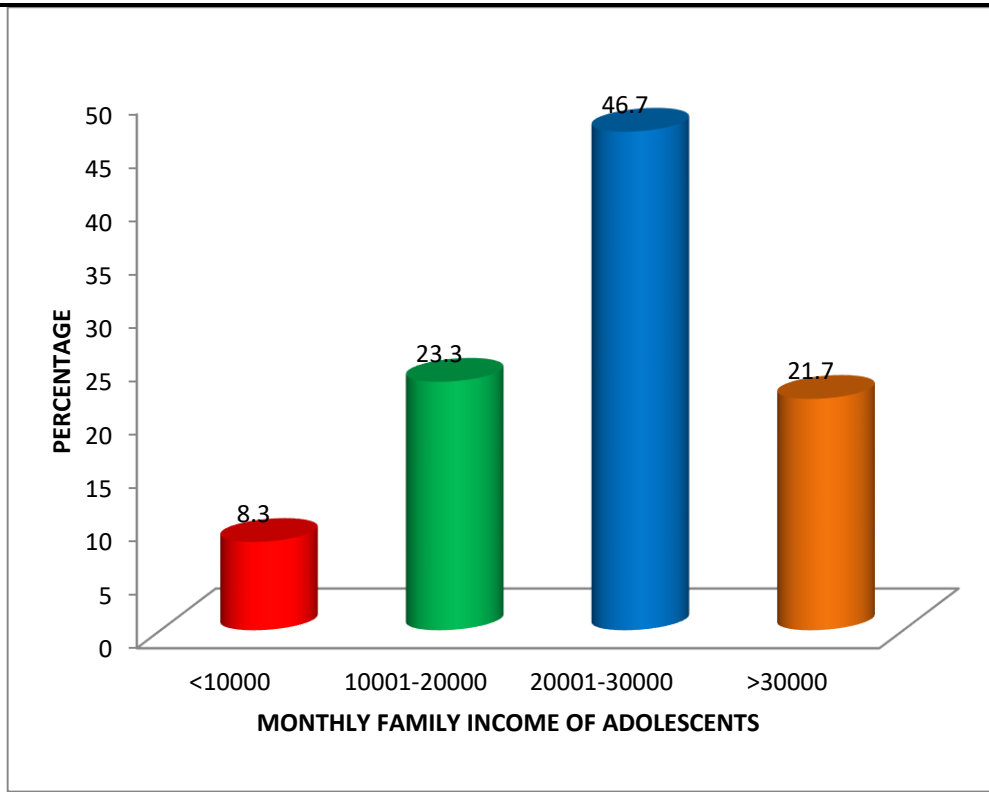

Fig 5: Distribution of religion of adolescents

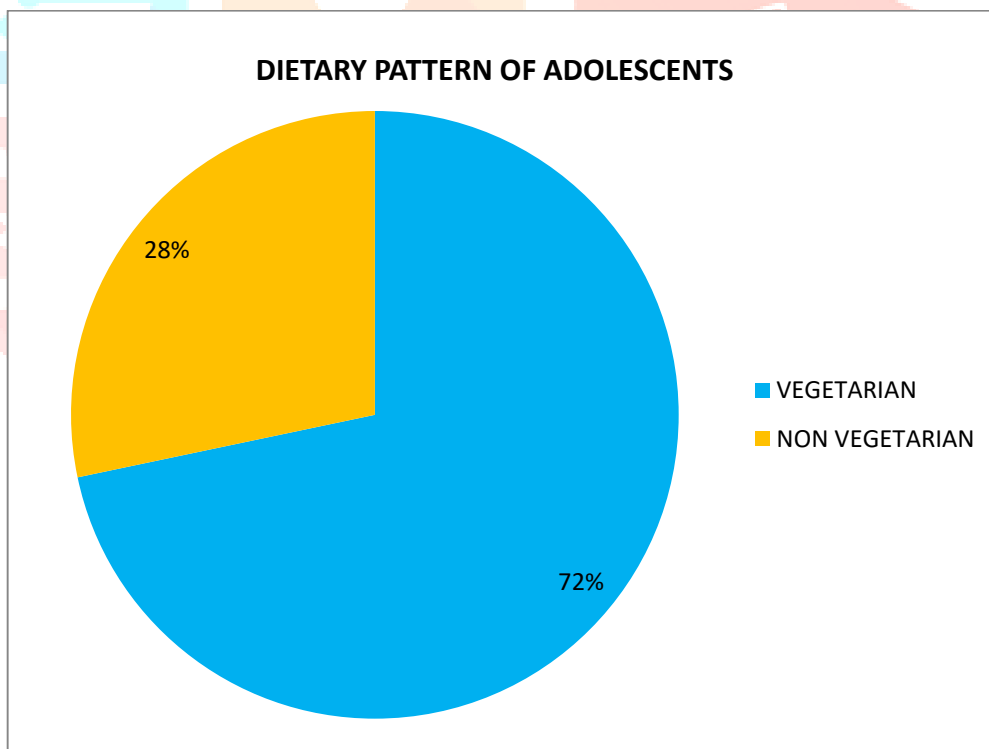**Fig 6: Distribution of monthly family income of adolescents**

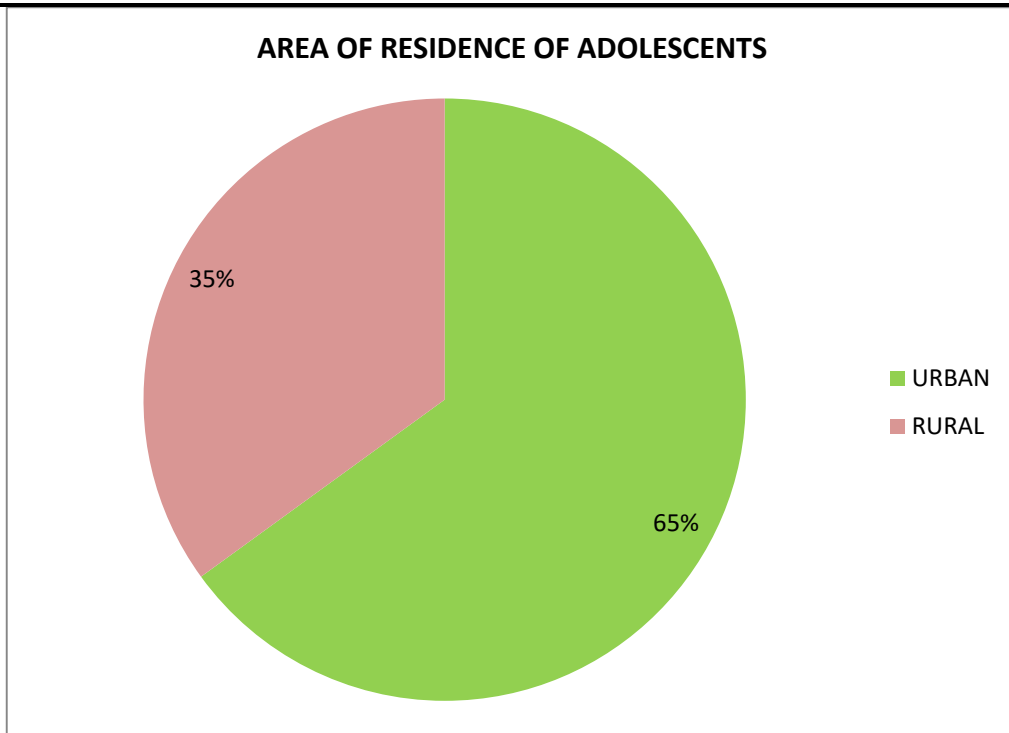**Fig 7: Distribution of dietary pattern of adolescents**

AREA OF RESIDENCE OF ADOLESCENTS

Fig 8: Distribution of area of residence of adolescents
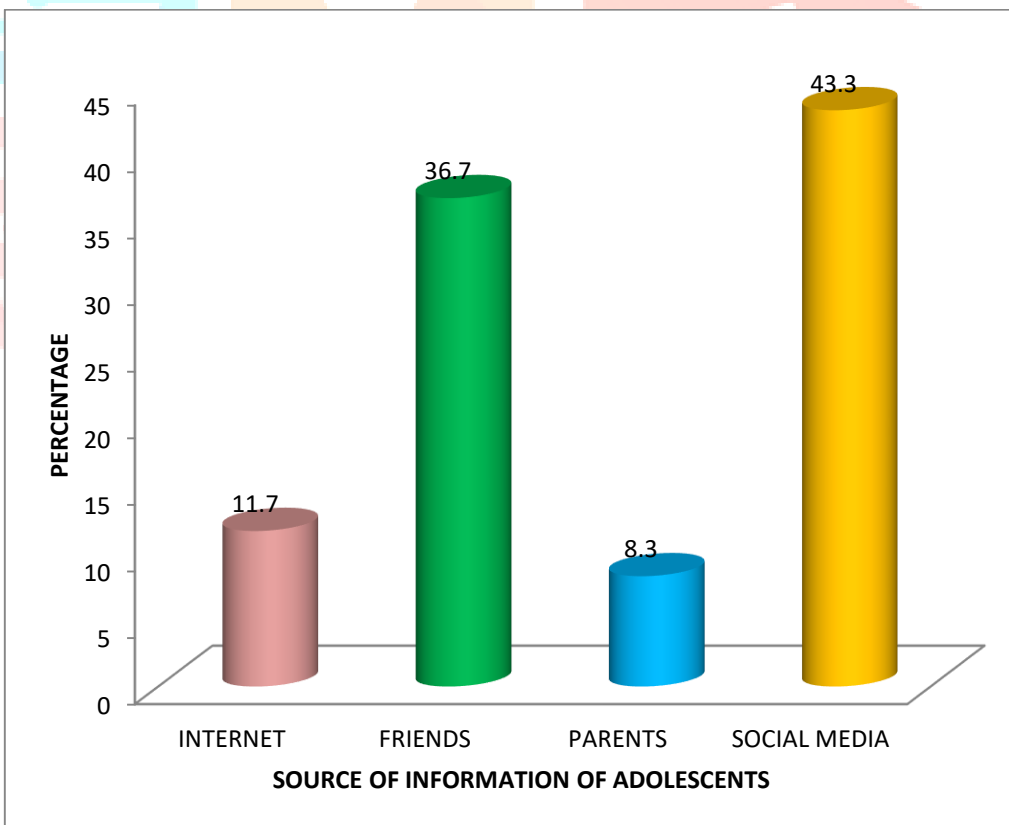

Fig 9: Distribution of source of information of adolescents

SECTION – II

Table 2: Pre-test and post-test level of knowledge regarding effects of junk foods on health among adolescents.

N=60

LEVEL OF KNOWLEDGE	Pre-test		Post-test	
	f	%	f	%
Poor knowledge (0-10)	24	40	0	0
Average knowledge (11-20)	33	55	15	25
Good knowledge (21-30)	3	5	45	75

Table 2 and fig 10 shows the pre-test and post-test level of knowledge regarding effects of junk foods on health among adolescents reveals that in pre-test majority 33(55%) had average knowledge, 24(40%) had poor knowledge and 3(5%) had good knowledge. In post-test majority 45(75%) had good knowledge and 15(25%) had average knowledge.
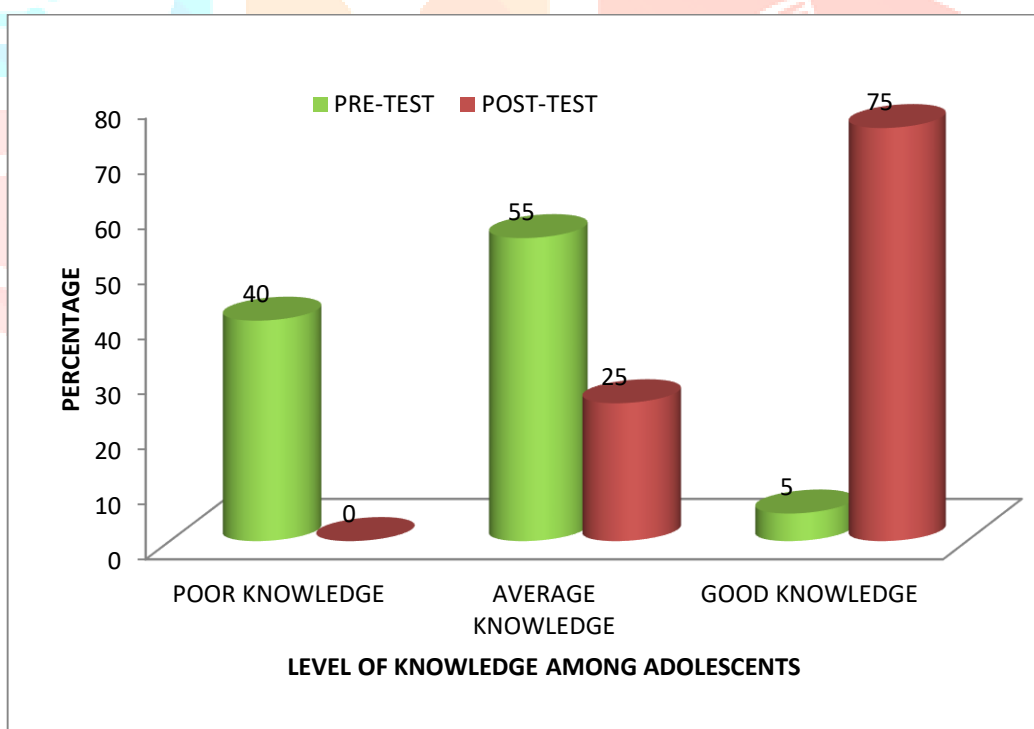

Fig 10: Distribution of pre-test and post-test level of knowledge regarding effects of junk foods on health among adolescents.
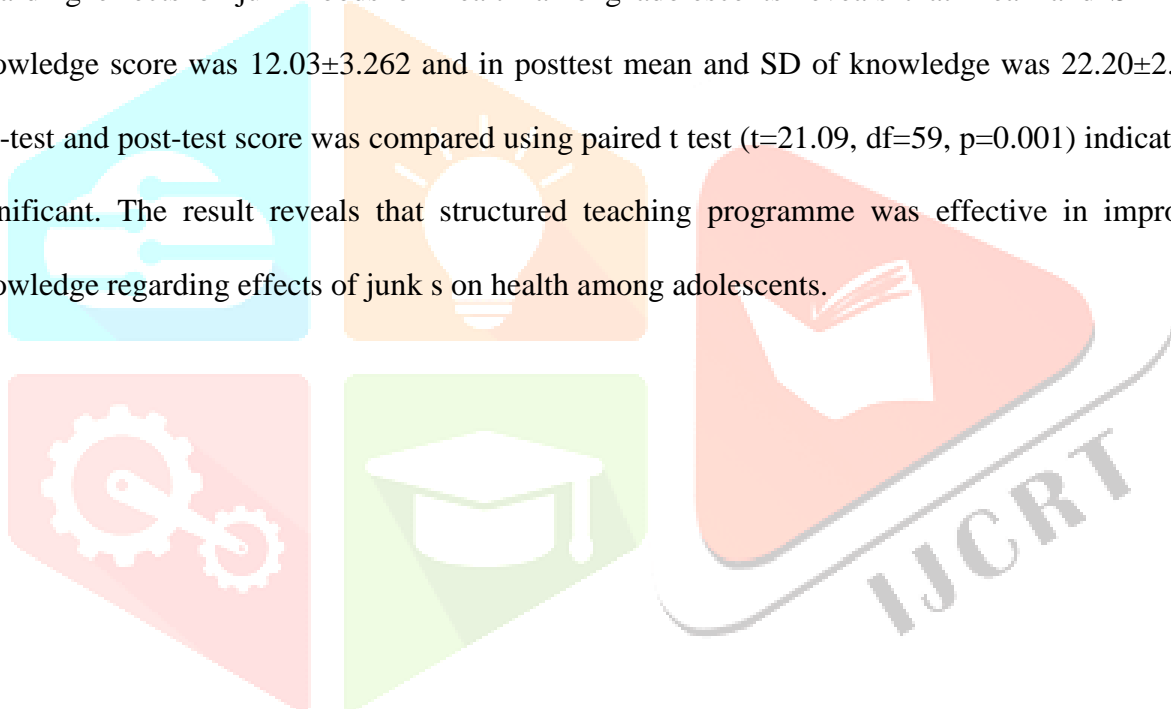
SECTIO N – III

Table 3: Effectiveness of structured teaching programme on knowledge regarding effects of junk foods on health among adolescents

N=60

Level of knowledge	Mean	SD	't' value	df	'p' value
Pre-test	12.03	3.262	21.09	59	0.001*
Post-test	22.20	2.791			

*0.05 level of significance

Table 4 and fig 11 shows the effectiveness of structured teaching programme on knowledge regarding effects of junk foods on health among adolescents reveals that mean and SD of pretest knowledge score was 12.03±3.262 and in posttest mean and SD of knowledge was 22.20±2.791. The pre-test and post-test score was compared using paired t test (t=21.09, df=59, p=0.001) indicated highly significant. The result reveals that structured teaching programme was effective in improving the knowledge regarding effects of junk s on health among adolescents.
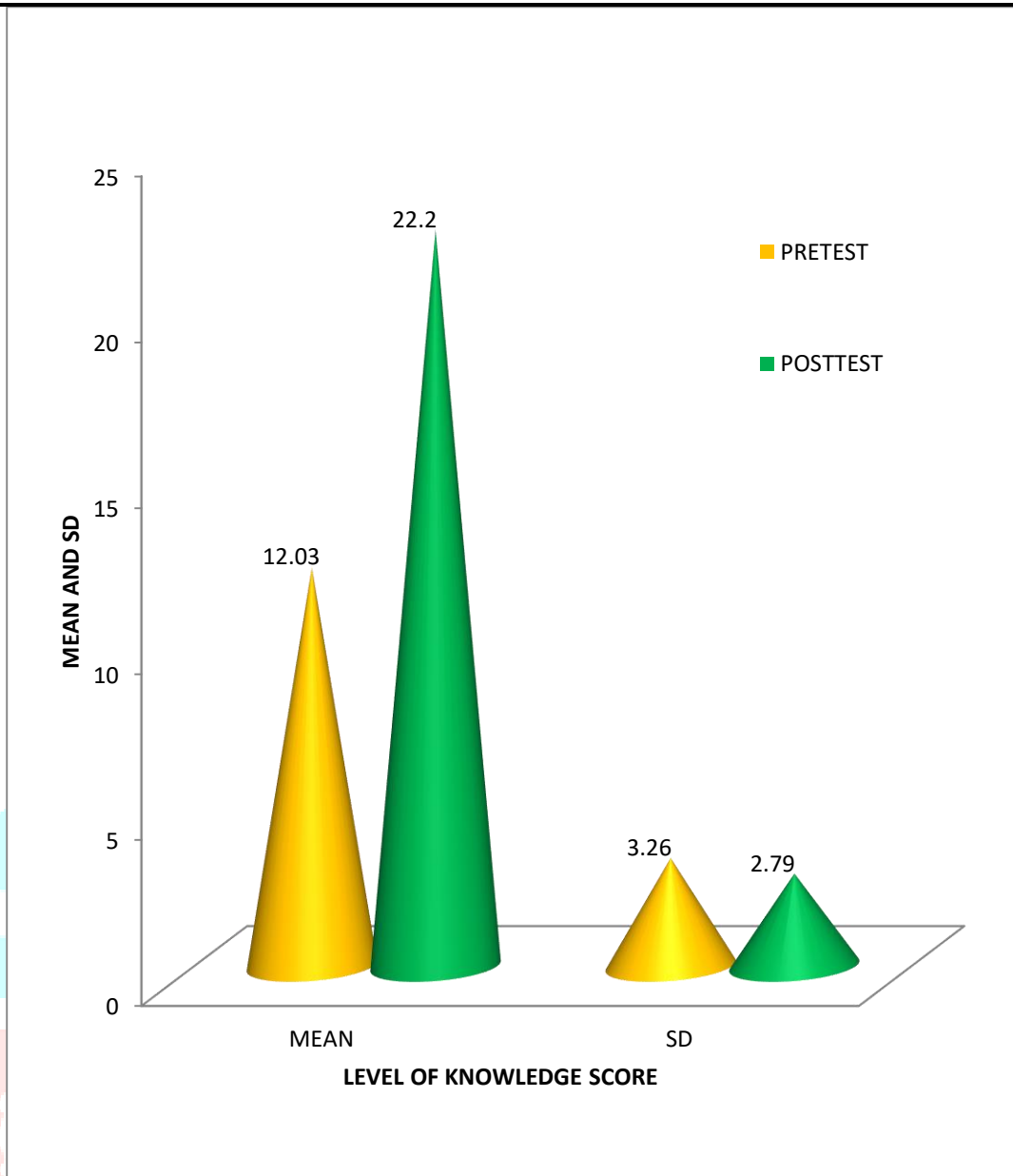
Fig 11: Distribution of mean and SD of pre-test and post-test knowledge score regarding effects of junk foods on health among adolescents

SECTION – IV

Table 4: Association between pre-test level of knowledge regarding effects of junk foods on health among adolescents with selected demographic variables.

N=60

S.No	Demographic Variable	Poor	Average	Good	χ² value df p value
1.	Age in years				18.83
	a. 12-13	5	0	0	
	b. 14-15	5	3	0	6
	c. 16-17	2	18	1	0.004*
	d. 17-18	12	12	2	
2	Sex				0.767
	a. Male	14	16	2	2
	b. Female	10	17	1	0.681 NS
3	Religion				
	a. Sikh	12	22	3	8.803
	b. Hindu	8	7	0	6
	c. Christian	4	1	0	0.185 NS
	d. Muslim	0	3	0	
4	Monthly family income (Rs)				
	a. <10000	4	1	0	6.727
	b. 10001-20000	5	8	1	6
	c. 20001-30000	12	14	2	0.347 NS
	d. >30000	3	10	0	
5	Dietary pattern				0.231
	a. Vegetarian	18	23	2	2
	b. Non vegetarian	6	10	1	0.891 NS
6	Area of residence				3.173
	a. Urban	13	23	3	2
	b. Rural	11	10	0	0.205 NS
7	Source of information				
	a. Internet	5	2	0	9.541
	b. Friends	9	12	1	6
	c. Parents	4	1	0	0.145 NS
	d. Social media	6	18	2	

*p<0.05 level of significance   NS-Non significant

Table 5: Association between post-test level of knowledge regarding effects of junk foods on health among adolescents with selected demographic variables.

N=60

S.No	Demographic Variable	Average	Good	χ^2 value df p value
1.	Age in years			
	a. 12-13	1	4	17.78
	b. 14-15	4	4	3
	c. 16-17	21	0	0.001*
	d. 17-18	19	7	
2	Sex			0.357
	a. Male	23	9	1
	b. Female	22	6	0.550 NS
3	Religion			
	a. Sikh	30	7	4.130
	b. Hindu	9	6	3
	c. Christian	3	2	0.248 NS
	d. Muslim	3	0	
4	Monthly family income (Rs)			
	a. <10000	3	2	1.527
	b. 10001-20000	11	3	3
	c. 20001-30000	20	8	0.676 NS
	d. >30000	22	2	
5	Dietary pattern			0.246
	a. Vegetarian	33	10	1
	b. Non vegetarian	12	5	0.620 NS
6	Area of residence			0.220
	a. Urban	30	9	1
	b. Rural	15	6	0.639 NS
7	Source of information			
	a. Internet	4	3	7.031
	b. Friends	16	6	3
	c. Parents	2	3	0.071 NS
	d. Social media	23	3	

*p<0.05 level of significance   NS-Non significant

Table 4 shows the association between pre-test level of knowledge regarding effects of junk foods on health among adolescents with selected demographic variables which was tested by using chi-square test. The result revealed that age of adolescents were found significant association with pre-test level of knowledge regarding effects of junk foods on health at p<0.05 level of significance. The other demographic variables such as sex, religion, monthly family income, dietary pattern, area of residence and source of information was found Non significant association with pre-test level of knowledge regarding effects of junk foods on health.

Table 5 shows the association between post-test level of knowledge regarding effects of junk foods on health among adolescents with selected demographic variables which was tested by using chi-square test. The result revealed that age of adolescents were found significant association with post-test level of knowledge regarding effects of junk foods on health at p<0.05 level of significance. The other demographic variables such as sex, religion, monthly family income, dietary pattern, area of residence and source of information was found Non significant association with post-test level of knowledge regarding effects of junk foods on health.

CHAPTER – V
DISCUSSION

This chapter deals with discussion of findings of the present study in accordance with objectives of the study and discussed with similar studies conducted by other researchers. The present aims to assess the effectiveness of structured teaching programme on knowledge regarding effects of junk foods on health among adolescents at selected senior secondary schools of jandiala guru, amritsar, Punjab. Convenience sampling technique was used to select the samples. 60 adolescents in 12-18 years of age were included in this study. The tool consists of socio demographic variables and structured knowledge questionnaire on effects of junk foods on health was administered to collect the data. Prior to data collection informed consent was obtained from all the participants after explaining the purpose of the study. The pretest knowledge was assessed by administering the questionnaire, structured teaching on effects of junk foods on health was given to the adolescents and posttest data was collected using same questionnaire. The data collected is analyzed using descriptive and inferential statistics and is arranged based on the objectives of the study.

The findings of present showed that in pre-test level of knowledge regarding effects of junk foods on health among adolescents reveals that majority 33(55%) had average knowledge, 24(40%) had poor knowledge and 3(5%) had good knowledge.

The post-test level of knowledge regarding effects of junk foods on health among adolescents reveals that majority 45(75%) had good knowledge and 15(25%) had average knowledge.
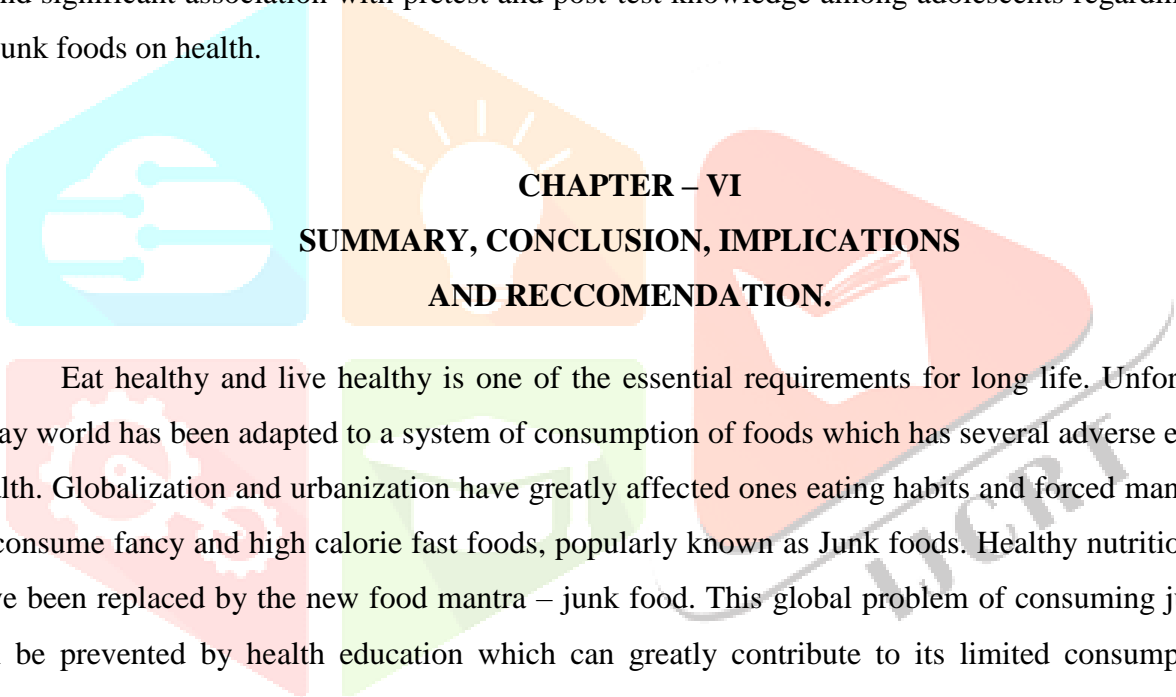
Similar study was conducted by **Syed Rehan, Jonson (2016)[47]** to assess the impact of junk food on health among adolescents at senior secondary school, guwahati, assam. The sample of 120 adolescents were selected for the study using convenience sampling technique. structured knowledge questionnaire was administered to collect the data. The result reveals that 48% had adequate knowledge, 27% had moderate knowledge and 25% had inadequate knowledge on impact of junk food on health.

Present study findings on effectiveness of structured teaching programme on knowledge regarding effects of junk foods on health among adolescents reveals that mean and SD of pretest knowledge score was 12.03±3.262 and in posttest mean and SD of knowledge was 22.20±2.791. The pre-test and post-test score was compared using paired t test (t=21.09, df=59, p=0.001) indicated highly

significant. The result reveals that structured teaching programme was effective in improving the knowledge regarding effects of junk foods on health among adolescents.

Rao Vijayapushpam, Subbo Rao, GM Sarma (2014)[48] conducted an experimental study to assess the effectiveness of educational programme on effects of junk food on health in adolescents students in Hyderabad india. 90 adolescents were included for the study. knowledge questionnaire was given to collect the data. The mean knowledge score before was 14.25 and post educational programme mean knowledge was 21.5. The mean scores was found to be statistically highly significant at ($p<0.05$). The study concluded that educational programme on effects of junk food on health was effective in improving the knowledge among adolescents.

Present study findings showed that age of adolescents was found significant association with pretest and post-test level of knowledge at ($P<0.05$). The other demographic variables such as sex, religion, monthly family income, dietary pattern, area of residence and source of information was not found significant association with pretest and post-test knowledge among adolescents regarding effects of junk foods on health.

CHAPTER – VI
SUMMARY, CONCLUSION, IMPLICATIONS
AND RECCOMENDATION.

Eat healthy and live healthy is one of the essential requirements for long life. Unfortunately, today world has been adapted to a system of consumption of foods which has several adverse effects on health. Globalization and urbanization have greatly affected ones eating habits and forced many people to consume fancy and high calorie fast foods, popularly known as Junk foods. Healthy nutritious foods have been replaced by the new food mantra – junk food. This global problem of consuming junk food can be prevented by health education which can greatly contribute to its limited consumption and switching over to healthy eating habits for the better living.

Adolescent is a period of rapid growth and personal development. The growth and development of adolescents depends to a large extent on their nutrition. Junk food is responsible for the development of many health problems in adolescents. If junk foods regularly replace other types of foods in the daily diet, obesity, vitamins and mineral deficiencies and other health problems will occur. Fast food affinity is equated with bad eating habits. Toda's school children learned that fast foods are easily available & affordable. Junk foods are typically ready to eat convenient foods containing high levels of saturated fats, or no other health benefits. Majority of junk foods are sold in the streets without any protection leads to many health problems in the adolescents. Now a day's many adolescents forgot the naturally available foods and got addicted to junk foods taste, and facing many health problems in early stages of life.

Adolescent's food habit should be changed and they must be provided with highly nutritious diet. Sound nutrition knowledge plays an important role in the prevention of health hazards of junk

foods like obesity, high blood pressure, cardio vascular diseases etc. Junk food has become a prominent feature of the diet of children throughout the World. Junk food pose health risks both because of what they contain and what they replace in diet.

The present aims to assess the effectiveness of structured teaching programme on knowledge regarding effects of junk foods on health among adolescents at selected senior secondary schools of Jandiala guru amritsar, Punjab. Convenience sampling technique was used to select the 60 adolescents. The tool consists of socio demographic variables and structured knowledge questionnaire on effects of junk foods on health was administered to collect the data. Prior to data collection informed consent was obtained from all the participants after explaining the purpose of the study. The pretest knowledge was assessed by administering the questionnaire, structured teaching on effects of junk food on health was given to the adolescents and posttest data was collected using same questionnaire. The conceptual framework applied for the study was based on General System's Model developed by **Ludwing Von Bertalanffy in 1968**. The data collected is analyzed using descriptive and inferential statistics and is arranged based on the objectives of the study.

MAJOR FINDINGS OF THE STUDY

The pre-test level of knowledge regarding effects of junk foods on health among adolescents reveals that majority 33(55%) had average knowledge, 24(40%) had poor knowledge and 3(5%) had good knowledge.

The post-test level of knowledge regarding effects of junk foods on heallth among adolescents reveals that majority 45(75%) had good knowledge and 15(25%) had average knowledge.

The comparison of pre-test and post-test score to assess the effectiveness of STP on knowledge regarding effects of junk foods on health among adolescents reveals that mean and SD of pretest knowledge score was 12.03±3.262 and in posttest mean and SD of knowledge was 22.20±2.791. The pre-test and post-test score was compared using paired t test (t=21.09, df=59, p=0.001) indicated highly significant. The result reveals that structured teaching programme was effective in improving the knowledge regarding effects of junk foods on health among adolescents.

Present study findings showed that age of adolescents was found significant association with pretest and post-test level of knowledge at (P<0.05). The other demographic variables such as sex, religion, monthly family income, dietary pattern, area of residence and source of information was not found significant association with pretest and post-test knowledge among adolescents regarding effects of junk foods on health

CONCLUSION

The findings of the study showed that in pretest majority 55% had average knowledge and in posttest 75% had good knowledge on effects of hunk foods on health among adolescents. The study concluded that structured teaching programme was effective in improving the knowledge among adolescents. Adolescents are more likely to eat junk food which is risk of developing many heal problems. The above study suggested that there is need to make awareness on health hazards of junk

foods among adolescents. it is necessary for adolescents to know about the harmful effects of Junk food so that they can control the disease conditions and improve their health status.

NURSING IMPLICATIONS:

The findings of the study have implication in the field of nursing profession in the areas of nursing practice, education administration and research. Nurse acts as an educator, leader, counselor and motivator. The present study emphasized on measures to improve the knowledge of adolescents on junk food and to motivate them to take healthy diet.

Nursing Practice

➢ The Expanded role of the professional nurse emphasizes those activities which promote health and modify bad eating habits among adolescents. So, by providing education about harmful effects of Junk food to people, the health diseases can be prevented.

➢ Nurses play a vital role to plan health education on diseases related to Junk food.

➢ Nurses should assess the health condition of the adolescents and their eating habits and prevent them from unhealthy dietary pattern.

Nursing Education

➢ Education is a key component in improving the knowledge of adolescents on health effects of junk food and to enhance their behavior to ear healthy food.

➢ Incorporate nutrition education lessons into the curriculum and expose students to healthful foods during nutrition education lessons. Junk food consumption tends to occurrence of many life-threatening diseases during adulthood and later future of life.

➢ School based educational programme might be effective in influencing adolescents to choose a healthier diet. The health teaching programme is an effective teaching strategy, which can be used for this purpose.

➢ Nurses should educate the adolescents on various other nutritional deficiencies which occurs due to consumption of junk food and other unhealthy diet.

Nursing Administration

➢ Nurse administrators are the backbone for providing facilities to improve knowledge on nutrition. Administrative policies should be formulated at the large scale to lessen the consumption of Junk food.

➢ School administration along with parents has a combined responsibility to educate children about avoiding junk foods in school premises.

➢ Nurse administrator can plan for healthy diet which can be served for adolescents in schools and to promote healthy dietary pattern in children and adolescents at schools.

Nursing Research

➢ The findings of the study can be implemented to enhance the knowledge of school children regarding health effects of junk food and to promote the utilization of research findings in managing the problems of junk food consumption.

➢ More research studies can be conducted to assess the junk food problems among school children which helps to prevent them from poor dietary habits.

LIMITATIONS:

➢ The present study was limited to 60 adolescents in 12-18 years of age.

➢ The present study was limited to selected senior secondary schools, Jandiala guru, amritsar

RECCOMMENDATIONS

The following recommendations are made on the basis of the study.

➢ A similar study can be conducted on large sample size

➢ A similar study can be conducted at different settings with other study designs

➢ A similar study can be conducted to assess the knowledge regarding junk food among urban and rural population.

➢ A study can be conducted to assess the problems related to junk food among school students at different settings.