

## Research Article

### IMPACT OF TRAINING PROGRAMME ON HEALTH HAZARDS OF FAST-FOOD CONSUMPTION IN DEGREE STUDENTS AT TUMKUR, KARNATAKA

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#### ABSTRACT

**INTRODUCTION:** Fast food is a quick preparing and serving food item which is enjoyed by all the age group Peoples are craving to have this kind of fast food due to its color, taste and attraction. In Children fast-food consumption ratio is very high Particularly 25 below age groups continues and long-term eating of fast-food consumption leads to many health hazards such as obesity, nutritional deficiency, hypertension, diabetes mellites and many more complications. So as to give awareness of ill effects of fast-food consumption is very important especially in the young generation due to their addiction for fast food

**OBJECTIVES AND METHODOLOGY:** To assess the level of knowledge regarding selected health hazards of fast-food consumption among degree students. To evaluate the effectiveness of planned teaching program on knowledge regarding selected health hazards of fast-food consumption among degree students. To determine the association between post-test knowledge on health hazards of fast-food Consumption among degree students with their selected social demographic variables methodology A quantitative research approach was used. The data collected from the Degree students by using A pre- experimental one group pre- test post-test design was used and a convenient sampling technique was used to select 60 students of degree college for the study. **RESULT:** The study reveals that pre-test mean knowledge score was found to be 18.28 (52.24%) with standard deviation of 3.724 which indicates that the degree students had moderate knowledge regarding effects of fast food consumption in the pre-test after the administration of planned teaching programme, the mean post-test knowledge score were 28.88 (82.52%) with standard deviation of 3.783 which shows the enhancement in the knowledge level of degree students regarding health hazards of fast food consumption. It is evident that the mean enhancement of knowledge score was 30.4 and "t" value 14.979 is greater than the table value both at 0.005 level of significance. therefore "t" value is found to be significant. Hence it is inferred that there is significant difference between the pre-test and post-test knowledge level of degree student regarding health hazards of fast-food consumption. **CONCLUSION:** This Study concluded that there is inadequate knowledge regarding selected health hazards of fast-food consumption among Degree college students in selected college at Tumkur.

**Keywords:** Effectiveness, Planned Teaching Program (PTP); Knowledge, Degree Students, Effects of Fast-Food Consumption, Health Hazards.

#### INTRODUCTION

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 a substance, usually composed of carbohydrates, fats, proteins and water that can be eaten or drunk by an animal or human for nutrition or pleasure.<sup>1</sup>

Fast food is the term given to food that can be prepared and served very quickly, Globalization and urbanization have greatly affected one's eating habits and forced many people to consume fancy and high calorie fast foods. The term "fast food" was recognized in a dictionary by Merriam-Webster in 1951. Fast food is any food that is quick, convenient, and usually inexpensive. It's delicious, its filling, is really affordable, and readily available just any time of the day.<sup>1</sup> Fast food is a term for food containing high levels of calories, sugar, fat with little protein vitamins. the term fast food is junk food it was started early in 1950 although it has been reported that it was coined in 1972 by MICHAEL, FJOCOBSON<sup>2</sup>

#### NEED FOR THE STUDY

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 fast foods which has several adverse effects on health. Lifestyle changes have compelled us so much that one has so little.<sup>3</sup>

According to WHO report in 2019, 40,000 deaths occur per year in world wide due to excessive intake of junk food, it has been found that India's over weight rates increase by 20% now India is in the grip of an obesity epidemic worlds adolescent population is 1200 million percent in 15-20 years of age or about 19% of the total population series of nutritional challenges<sup>16</sup>

Obesity accounts for 300,000 deaths in the U.S. alone. Research into junk food and fast-food restaurants have found that there is a direct relationship between the number of fast-food restaurants located within the local area and obesity rates According to a survey by the Institute of Food Technologists, 75% of Americans are eating their dinners at home, nearly half those meals are fast foods, delivered, or taken out from restaurants or grocery shops. The way in which we eat, and what we eat, is of vital importance to our state of health. With the global spread of food uniformity, its rapid growth is occurring in the developing world. It has radically changed the way people eat all over the world.<sup>10</sup>

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## Objectives

- ✓ To assess the level of knowledge regarding selected health hazards of fast-food consumption among degree students.
- ✓ To evaluate the effectiveness of planned teaching program on knowledge regarding selected health hazards of fast-food consumption among degree students.
- ✓ To identify the association between post-test knowledge on health hazards of fast-food Consumption among degree students with their selected social demographic variables

## Hypotheses

- **H1:** there will be significant difference between the mean pre-test and posttest knowledge scores among degree students regarding selected health hazards of fast-food consumption
- **H2:** there will be significant association between post-test knowledge scores regarding health hazards of fast-food consumption among degree students with their selected demographic variables

## REVIEW OF LITERATURE

A review of related literature given an insight into various aspects of the problem under study. The review serves as an integrated function that facilitates the accumulation of knowledge. Hence review of literature is important to research in order to know what has been established and documented. The investigator carried out an extensive review of literature on the research topic in order to gain deeper insight into the problem and to collect maximum relevant information for building the foundation for the study.<sup>6</sup>

A study was conducted to estimate the prevalence of fast-food consumption and to assess its association with abdominal and general obesity among 300 samples in 2021 at Qom universities students were selected randomly from two largest universities in Qom, center of Iran, the prevalence of both fast-food consumption and overweight/obesity has been increased. It concludes that, 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 and with 44.4%, pizza 39.7%, and fried chicken 13.8%, The obesity prevalence based on BMI and (waist-hip ratio) 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).<sup>7</sup>

A study was conducted to assess the consumption patterns and health consequences of junk foods among students of medical university Karachi, Pakistan among 370 in November 2017 the students in a Public Sector University, Karachi from Medical undergraduate's student, of both gender with conveniently selected. The average age of the medical students was 18 to 24 years, out of total 370 participants, 91.4% had the knowledge about the risk and strong connection between weight gain and obesity. Despite of this, 92% participants were consuming junk food. One out of every Three students (34.9%) reported hygiene problems, (95%) gastrointestinal issues and (20%) complained about dental problems. It concludes that A significant association of junk food consumption with feeling drowsiness/lethargic this study concludes that, though awareness regarding health hazards of the junk food was found higher among medical students, its consumption is highly prevalent.<sup>6</sup>

A cross-sectional study was conducted to assess the Association between junk food consumption and cardio metabolic risk factors in a

national sample of Iranian children and adolescent's population in 11 October 2018 A total of 14,400 students were selected from 30 provinces of Iran using multistage, stratified cluster sampling method. Information about student's lifestyle, health behaviors and health status were obtained through a validated questionnaire. Blood pressure was measured and anthropometric indices were calculated. Blood samples were drawn from 3,303 students for biochemical tests, sugar- sweetened beverages, salty snacks, sweets and fast foods were considered as junk foods. The mean age of participants was 12.42±2.97 years. Those with metabolic syndrome were more likely to live in urban areas (P=0.004) and have higher BMI (P <0.0001). Junk food intake was not related to metabolic syndrome; however, it was associated with increased odds of high BP (OR1.23,95%CI1.09,1.39), high SBP (OR1.38,95%CI1.09,1.75), overweight (OR 1.22, 95% CI 1.08, 1.39) and excess weight (OR 1.14, 95% CI 1.04, 1.25). It concludes that Junk food consumption plays an important role in childhood overweight and is related to high blood pressure in this population.<sup>8</sup>

Across-sectional study was conducted to assess to evaluate the relationship between the consumption of ultra-processed foods and obesity indicators in 2020 among Brazilian adults and adolescents in 30,243 individuals aged ≥10 years from the 2018-2022 Brazilian Dietary Survey Food consumption data were collected through 24-h food records Ultra- processed foods represented 30% of the total energy intake. Those in the highest quintile of consumption of ultra-processed foods had significantly higher body-mass-index (0.94kg/m(2); 95%CI:0.42,1.47) and higher odds of being obese (OR=1.98; 95% CI: 1.26, 3.12) and excess weight (OR=1.26;95%CI:0.95,1.69) compared with those in the lowest quintile of consumption the findings reveals that support the role of ultra-processed foods in the obesity epidemic in Brazil it concludes that consumption of ultra-processed food and obesity is correlate.<sup>7</sup>

A cross-sectional study was conducted to investigate the relationship between the consumption of fast foods and asthma/ wheeze and other allergic diseases in 2018 among 1326 participants it includes 13 cross-sectional studies and 3 case-control studies Two studies were undertaken in multi- centers and others were conducted in Colombia, Canada, Japan, China (Mainland and Taiwan), The quality scores were 5.33 ± 1.16 in case-control studies and 5.69 ± 1.55 in cross-sectional studies. Adjusted odds ratios (aOR) with 95% confidence interval (CI) were pooled. Sixteen studies (13 cross-sectional and 3 case-control studies) were included. The consumption of fast foods was significantly related to current asthma (aOR:1.58; 95% CI:1.17–2.13 for case-control study and aOR:

1.58;95% CI:1.10–2.26 for cross-sectional studies), severe asthma (aOR:1.34;95% CI:1.23–1.46), asthma ever (aOR:1.36; 95% CI:1.06–1.75),1.13–1.92),severe eczema (aOR:1.51;95%CI:1.16–1.96), severe rhino-conjunctivitis (aOR: 1.54; 95%CI: 1.18–2.00) and rhino-conjunctivitis (aOR: 1.21; 95% CI: 1.15– 1.27). The consumption of fast foods, especially hamburgers, ≥3 times/week, was more likely to be associated with severe asthma and current wheeze compared with the consumption of 1–2 times/week (both P <0.001). it concludes the consumption of fast foods, particularly hamburgers, correlates to asthma in a dose-response pattern. <sup>9</sup>

## METHODOLOGY

Pre experimental one group pre-test post design was selected for the study and non-probability convenient sampling technique was used to selected60-degree college students were selected at Tumkur. Data was collected by using self-administered structured knowledge questionnaire prepared data was analysis by using descriptive

statistics such as mean percentage and standard deviation and inferential statistics such as chi-square test, paired t test was used.

## RESULTS

**Table -1 Frequency and Percentage Distribution of Socio-Demographic Variables.**

SI No	Socio-demographic variables	Frequency (f)	Percentage (%)
1	Age in years.	55	91.67
	18-20 years	5	8.33
	21-23 years		
2	Gender	30	50
	Male Female	30	50
3	Religion	42	70.00
	Hindu	11	18.33
	Muslim Christians	7	11.67
4	Type of family		
	Nuclear family	48	80.00
	Extended family Joint family	5 7	8.33 11.67
5	Family income per month	25	41.67
	Below Rs.10,000	24	40.00
	Rs.10,001-Rs,20,000 Rs.20,001-Rs,30,000	11	18.33
6	Education status of parents	20	33.33
	Primary education	29	48.33
	SSLC/Higher secondary education	11	18.33
	PUC		
7	Place of residence	34	56.67
	Commercial area	25	41.67
	Rural area	1	1.67
	Urban area		
8	Type of diet	14	
	Vegetarian	46	23.33
	Mixed		76.67
9	Habits of junk food consumption		
	No habit	19	31.67
	Occasionally Daily	28 13	46.67 21.67
10	Sources of information about hazards of junk consumption		
	Social media	16	26.67
	Friends Parents /relatives	31 13	51.67 21.67

Table 1 depicts that the Socio-Demographic Variables of the subjects which shows that the majority of subjects were from 18-20 years that is 91.67% and 70% subjects were from Hindu religion, 80.00% of them belongs to nuclear family and 46.67 % subjects were occasionally consuming fast food.

**Table 2: Mean, mean percentage, median and standard deviation of pre-test Knowledge scores of degree students**

Knowledge aspects	No. of Items	Max. Score	Mean	Mean%	Median	SD
Pre-test	60	35	18.28	52.24%	19.01	3.724

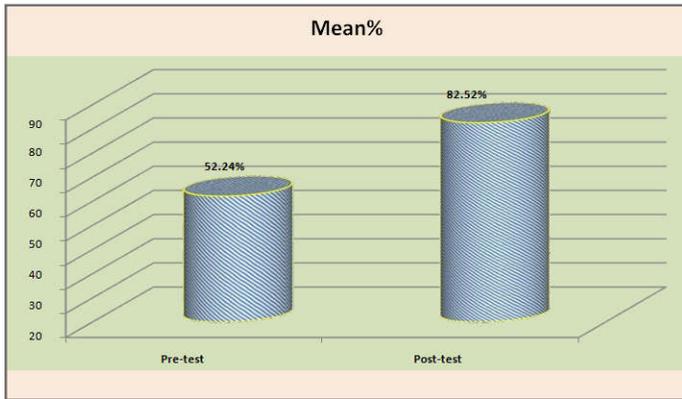
The table 2 Depicts that the pre-test mean percentage of knowledge score is 52.24% The median score was 19.01 The standard deviation (SD) of 3.783 suggests a moderate spread of scores among participants indicating varying levels of knowledge before the test.

**Table - 3: Comparison of knowledge score of degree students**

Comparison of knowledge score of late adolescents	Mean	Mean%	SD	Mean Enhancement	t-test	df	p-value	Inference
a) Pre-test	18.28	52.24	3.724					
b) Post-test	28.88	82.52	3.783	30.28	14.979	59	0.005*	HS

The table 3 shows that the mean percentage of pre-test was (52.24%) with a standard deviation (SD) of 3.724, while the post-test means % score increased to 82.52 with an SD of 3.724. The mean enhancement in scores between the pre-test and post-test was 30.28. A paired t-test was conducted, yielding a t-value of 14.979 with 59 degrees of freedom (df). The p-value was 0.005, indicating that the improvement in knowledge scores was statistically significant. Hence the hypothesis H1: There is a significant difference in the pre- test and post-test knowledge scores of degree students regarding health hazards of fast-food consumption was accepted

**Impact of Pre and Post Health Hazards consumption of Fast Food**



**Table - 4: ASSOCIATION BETWEEN POST TEST KNOWLEDGE OF DEGREE STUDENT AND THE SELECTED DEMOGRAPHIC VARIABLES**

**association between post-test knowledge of degree students and selected socio Demographic variables**

Demographic parameters	Mean	SD	Chi-Square test	Df	p-value
<b>Age (in years)</b>					
18-20years	1.08	0.279	41.667	1	0.154
21.23 years					
<b>Gender</b>					
Male	1.50	0.504	0.038	1	0.086
Female					
<b>Religion</b>					
Hindu					
Muslim	1.42	0.696	36.700	2	0.049*
Christianity					
<b>Type of family</b>					
Nuclear					
Extended family	1.32	0.676	58.900	2	0.001*
Joint family					
<b>Family income per month</b>					
BelowRs10,000					
Rs 10,001 -Rs 20, 000	1.77	0.745	6.100	2	0.047*
Rs 20,001 -Rs 30,000					
<b>Education status of Parents</b>					
Primary					
SSLC/Higher secondary	1.85	0.709	8.100	2	0.017*
PUC					
<b>Place of residence</b>					
Commercial area					
Rural area	1.45	0.534	29.100	2	0.001*
Urban area					
<b>Type of Diet</b>					
Vegetarian	2.53	0.853	17.067	1	0.001*
Mixed					
<b>Habits of junk food consumption</b>					
No habit					
Occasionally	1.90	0.730	5.700	2	0.058
Daily					

**Sources of information about hazards of junk food consumption**

Social media					
Friends	1.95	0.699	9.300	2	0.010*
Parents/relatives					

\*Significance (p-value≤0.05)

In table 11 depicts that demographic parameters using a Chi-Square test, focusing on 60 individuals. The results showed significant associations between demographic parameters like Religion, Type of Family, Family Income, Education status of Parents, Place of residence, Type of Diet, and Sources of Information about junk food hazards with the subjects' characteristics. Thus, it is inferred that there is significant association between post- test knowledge score of degree students with their selected demographic variables, Hence the hypothesis H2 is accepted.

**DISCUSSION**

The Study was on Impact of fast-food consumption in degree college students. A total of 60 students were chosen for the study. The results shows that degree college students had Moderate Knowledge on health hazards of fast-food consumption with 52.24% and Mean 18.28 and SD 3.724 in pretest However, the degree college students need continuous training on health hazards of fast-food consumption The Hypothesis H1: there will be significant difference between the mean pre-test and posttest knowledge scores among degree college students regarding selected health hazards of fast-food consumption That shows Mean Enhancement of Knowledge was 30.28 and t-value is 4.979 df-59 at 0.005\*.

**RECOMMENDATIONS**

On the basis of findings of the present study the following recommendations were made: A descriptive study can be conducted to assess the knowledge regarding effects of fast-food consumption on larger sample size, An observational study can be conducted regarding awareness on effects of fast food, An Experimental study can be undertaken with control group A Similar study can be conducted using other strategies like SIM, VAT, booklets and pamphlets., Same study can be conducted on larger sample to validate and for better generalization of the findings In this chapter, the researcher has tried to explain the findings and ways that can be adopted in the future to improve the knowledge regarding effects of fast food consumption among degree student and prevent the incidence of health risk among them.

**CONCLUSION**

the study has concluded that there is inadequate knowledge in selected degree college students those who have consuming fast-food. However progressive training programme in schools and colleges may bring changes in practice and attitude of the children, and young adults. So that we can bring down the morbidity rate due to fast food consumption.

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