P Sumathy
Professor, Kasturba Gandhi
Nursing College, Sri Balaji
Vidyapeeth, Puducherry, India

Priscilla Nithyakalyani
Professor, Kasturba Gandhi
Nursing College, Sri Balaji
Vidyapeeth, Puducherry, India

Effectiveness of video assisted teaching programme on knowledge and practice regarding junk food and its effects among adolescents in selected urban school at Puducherry

P Sumathy and Priscilla Nithyakalyani

Abstract
Objective: Globalization and urbanization have greatly affected one's eating habits and forced many people to consume fancy and high Calorie fast foods, popularly known as "Junk Foods". This study was conducted to identify the effectiveness of video assisted teaching program on knowledge and practice on consuming junk food among adolescents.
Material and Methods: A Quantitative Research approach of pre experimental research design with one group pretest posttest was chosen for the study. The study was conducted in a Private high school, Puducherry. The samples were the adolescents between 13-15years. A total of 100 samples were recruited for the study using non- probability convenient sampling technique. Descriptive and inferential statistics were used for the analysis.
Results: The paired t test revealed that there was a statistical significant difference between pre test and post test knowledge and practice of consuming junk food after the video assisted teaching programme at $p<0.001$ level.
Conclusion: As the junk food industry targets children, it is important to ban junk food from schools and places where children have easy access to these foods. Health professionals should play an active role in imparting health education regarding the ill effects of consuming junk food.

Keywords: Junk food, Globalisation, Urbanisation, adolescents

1. Introduction
"Children are the bridge to heaven.-Persian proverb"
Fast food refers to food that can be served ready to eat. The terms fast food and junk food are often used interchangeably. Junk food addiction is so high because of its simplicity. They are easy to prepare and are very tasty. Junk food is an informal term applied to some foods that are perceived to have little or no nutritional value, or to products with nutritional value but which also have ingredients considered unhealthy when regularly eaten, or to those considered unhealthy to consume at all [1]. The term was coined by Michael Jacobson, Director of the Center for Science in the Public Interest, in 1972 [2].
It seems to have engulfed every age; every race and the newest entrants on stage are children, school going in particular. Children find themselves amidst a complex society that is undergoing breath taking changes. Wafers, chips, colas, pizzas and burgers are suddenly the most attractive food items among children. Children rapidly seem to have stepped into a world of fast foods and vending machines, totally unaware of the havoc they are creating for themselves and the impact on their health. Good nutrition is of utmost priority in children for a steady growth and development [3].
Most of the time these junk foods are laced with colors which are often inedible, carcinogenic and harmful to the body. These foods and their colors can affect digestive systems, the effects of it emerging after many years. Studies have found that food coloring can cause hyperactivity and lapses of concentration in children. Children suffering from Learning Disabilities are often advised against eating food with artificial coloring. Chocolates, colas, flavored drinks and snack tit bits are full of artificial coloring [4].

Correspondence
P Sumathy
Professor, Kasturba Gandhi
Nursing College, Sri Balaji
Vidyapeeth, Puducherry, India

Not surprisingly, junk food not only has physiological repercussions, but also psychological ones - far reaching ones that affect the child's intellect and personalities. after a wholesome meal is absent.

India is no exception to this changing fast-food trend. India's fast-food industry is growing by 40 percent a year. Statistics place India in 10th place in fast food per capita spending figures with 2.1% of expenditure of annual total spending. As per a study conducted by the National Institute of Nutrition, Rs 800 crore worth junk food was consumed by Indians (2010). The problem is most common among adolescents. Part of it is because their parents bribe them with junk food, says K.S. Kumari, Professor, Department of Food Science and Technology, Pondicherry University [5].

Knowledge highlighting about the eating habits, Nutritional aspects, quality of unhealthy foods, their health impact and preventive measures should be given to create awareness and render health education for a change towards good eating practices. Therefore, the investigator felt that there is a strong need to enhance the knowledge among adolescents regarding the health hazards of junk foods, so that healthy eating food habits will be cultivated.

Research methodology
A Quantitative Research approach of pre experimental research design with one group pretest posttest was chosen for the study. The study was conducted in a Private high school, Puducherry. The samples were the adolescents between 13-15years. A total of 100 samples were recruited for the study using non- probability convenient sampling technique.
The instrument consisted of three parts:

Part A: The demographic data that consisted of 15 items seeking information about age, gender, education, economic status, family type, number of siblings, parent's occupation, etc.,

Part B: Structured questionnaire to assess the knowledge on junk food consumption
It consisted of 20 multiple choice questions regarding the junk food consumption and its effects.

Part C: A 5 – point Likert's scale was used to assess the practice of junk food consumption. It consisted of 15 statements regarding the practice of consuming junk food. There is no right or wrong answer; they have to mark it in the rating scale according to their practice pattern.

Data Collection Procedure
A formal permission was obtained from the School Principal. After obtaining informed consent from the parent and assent from the adolescents the standard questionnaire and the rating scale was administered. A pre-test was done to assess the knowledge level and practice of adolescents regarding junk food consumption and its effects. Following which a video assisted teaching programme was projected which dealt about the meaning of junk food, types of junk food, constituents and contents of junk food, its effects and health hazards of junk food for about forty five minutes. The adolescents were given opportunity to clarify their doubts after the teaching. The participants who came back after 7 days were given the post-test using the same Knowledge and Practice tool.

Statistical Analysis
The data was analysed using Statistical Package for Social sciences version 2016. Paired t test was computed to find out the difference in the level of knowledge and practice before and after the intervention.

Results
Socio- Demographic variables
Majority of the adolescents 52 (52%) were male and 48 (48%) were females. Regarding their standard of education 36 (36%) were in 8th standard, 38 (38%) were in 9th standard and 26 (26%) were in 10th standard. With regard to fathers and mothers educational status, many of them had undergone secondary and primary education respectively. Most of the adolescents were non-vegetarian and belonged to a nuclear family. Regarding their health status 85 (85%) were healthy, about 13 (13%) had worm infestations, 2 (2%) had ulcer. A large number of adolescents did not have any prior knowledge regarding junk food consumption and its effects and followed high practice of consuming junk food.

Table 1: Distribution of level of knowledge on junk food consumption and its effects during pre-test and post test N=100

Sl. No.	Level of Knowledge	Pretest		Post test	
		n	%	n	%
1.	Adequate knowledge (≥75%)	-	0	71	71
2.	Moderately adequate knowledge (50-<75%)	38	38	29	29
3.	Inadequate knowledge (<50%)	62	62	-	-

The above table indicates that out of 100 samples, most of them 62(62%) had inadequate knowledge, 38(38%) had moderately adequate knowledge, and none of them had adequate knowledge in pre-test before video assisted teaching programme but after the intervention 71(71%) gained adequate knowledge and 29% gained moderately adequate knowledge.
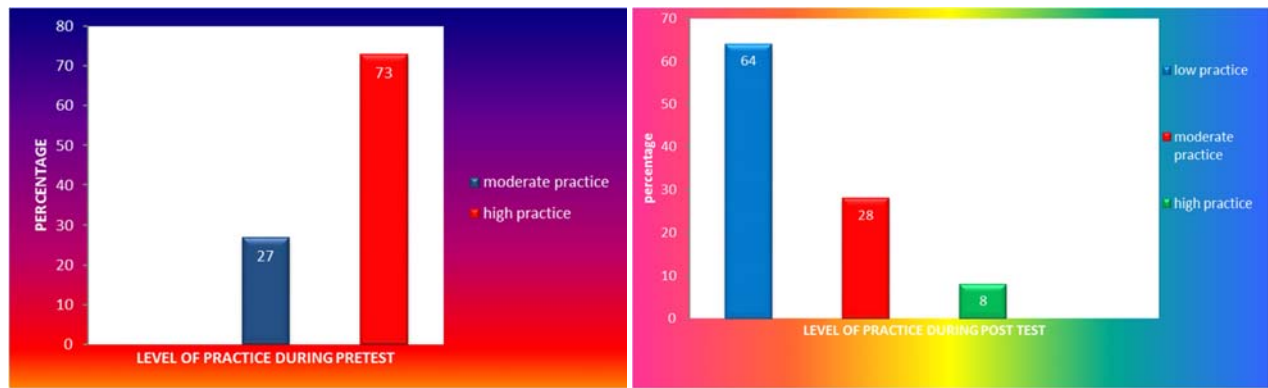
Fig 1: Distribution of level of practice on junk food consumption during pre-test and post-test.

The above figure shows that out of 100 samples most of them 73 (73%) had high practice of consuming junk food and the rest 27 (27%) had moderate practice and none of them had low practice of consuming junk food during pre-test. Whereas in post-test 64 (64%) samples had acquired a low practice of consuming junk food and 28 (28%) of them had moderate practice and 8 (8%) still had high practice of consuming junk food during post –test

Table 2: Effectiveness of Video Assisted Teaching Programme on Knowledge Regarding Junk Food Consumption Its Effects, N=100

Sl. No	Variables	Mean	Standard deviation	Mean difference	Paired 't' value	P value
1.	Pre test	1.38	0.488	99	12.3	0.000***
2.	Post test	2.29	0.456			

(***Highly Significant at *p<0.001* level)

The above table infers that the knowledge mean of 1.38 with standard deviation of 0.488 in the pre-test was increased to 2.29 in the post test after video assisted teaching programme. The difference was found statistically significant at *p<0.001* level

Table 3: Effectiveness of Video Assisted Teaching Programme on Practice Regarding Junk Food Consumption and Its Effects, N=100

Sl. no	Variables	Mean	Standard deviation	Mean difference	't' value	P value
1.	Pre test	1.44	0.641	99	21.179	.000***
2.	Post test	2.72	0.451			

(***Highly Significant at *p<0.001* level)

The above table shows the mean, standard deviation, mean difference and paired 't' value of the practice on junk food consumption and its effects among adolescents after video assisted teaching programme. The practice mean of 1.44 with standard deviation of 0.641 in the pre-test was increased to 2.72 in the post test after video assisted teaching programme. The difference was found statistically significant at *p<0.001* level

Discussion
The present study findings revealed that, out of 100 samples most of them 62 (62%) had inadequate knowledge, 38 (38%) had moderately adequate knowledge and none of them had adequate knowledge, Regarding practice 73 (73%) of samples had high practice and 27 (27%) had moderate practice of consuming junk food during pre-test before video assisted teaching programme.

It is therefore inferred that most of the children had inadequate knowledge and high practice of consuming junk food before video assisted teaching programme on junk food consumption and its effects. This may be due to lack of proper awareness regarding the ill-effects of junk food consumption and more influence of advertisements in the media regarding junk food.

The findings were supported by a study done in 2011 to assess the knowledge and practice of junk food consumption in a selected school at Kalapet, Puducherry. The target populations in the study were adolescents in the age group of 10 – 19 years, studying in selected school. Semi structured questionnaire were used to collect information regarding knowledge and practice of junk food consumption among adolescents. The results revealed that, among 360 samples 234 (65%) had inadequate knowledge 118 (32.78%) had moderately adequate knowledge and 8 (2.22%) had adequate knowledge. The level of practice on junk food consumption showed that 251 (69.72%) adolescents were moderately adoptive to junk food consumption [5].

The paired t value on comparison of pretest and post test scores of knowledge and practice within the group was found to be statistically significant at *p<0.001* level

This findings were supported by a study conducted to assess the knowledge and practices of high school students with respect to healthy diets before and after a nutrition education programme. Information on knowledge and attitude on healthy eating and dietary practices was collected before and after the nutrition education intervention using a questionnaire. Differences in knowledge, attitude and practice of students on healthy diet were measured using the X^2 test with the level of significance *p<0.05*. Following the nutrition education programme, satisfactory dietary knowledge significantly improved from 37% to 67% (*p<0.001*). Similarly, students showing a positive attitude towards healthy diet increased from 18% to 40% (*p<0.001*).

The proportion of students taking soft drinks reduced from 20% to 10% ($p<0.01$) and ingestion of fast food items through fast food restaurants reduced significantly. This short-term nutrition education programme brought significant improvements in dietary knowledge and reductions in soft drinks and fast foods consumption [6].
Hence it can be inferred that the health teaching programme was an effective teaching strategy for improve knowledge and changing the practice.

Conclusion
As the junk food industry targets children, it is important to ban junk food from schools and places where children have easy access to these foods. Health professionals should play an active role in imparting health education regarding the ill effects of consuming junk food. Apart from this Government should also start awareness campaign to increase awareness of consumers about the ill health effects of regularly consuming junk foods.

Conflict of Interest: None

References
1. Jaya Shankar Kaushik, Manish Narang, Ankit Parakh. Fast food consumption in children Indian Pediatrics, 2011, 48.
2. www.wikepedia.com
3. Chandana Teens N. junk food an unhealthy fascination 2002 [cited 2013 March 22] available from http://healthyeating.sfgate.com/junk-food-affectschildren-5985 html Teens & Junk food
4. Sharma Adolescent''s V. knowledge regarding harmful effects of junk food. IOSR journal of Nursing and Health Sciences. 2013; 1(6):01-04.
5. Leena Leon, Kumari S. Fast food consumption among adolescents in Ernakulam, 2008. www.google.com
6. Gengammal. A study to assess the knowledge and practice of junk food consumption in a selected school at Kalapet, Puducherry, 2011. www.google.com
7. Anita Rani. A study to assess the knowledge and practices of high school students with respect to healthy diets before and after a nutrition education programme (Pub Med) indexed for MEDLINE) 2008.