

Effectiveness of Educational Interventional Package On Practice Regarding Ill Effects of Fast Food Habits On Health Among Early Adolescent Studying in Selected School at Lucknow, Uttar Pradesh

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Abstract

Introduction: Fast food consumption has become a widespread habit globally, particularly among adolescents, driven by its convenience and palatability. However, the high caloric content, excessive fats, sugars, and salts in these foods contribute to serious health issues. Regular intake of fast food is linked to obesity, diabetes, cardiovascular diseases, and other metabolic disorders. These health effects are compounded by the low nutritional value of fast foods, which lack essential vitamins, minerals, and fiber. Addressing the ill effects of fast food habits on health, especially among young populations, is crucial for promoting healthier dietary choices and preventing long-term health complications. This study was conducted to assess the impact of an educational intervention package designed to enhance positive practice about the ill effects of fast food consumption among early adolescent in a tender heart school in Lucknow, Uttar Pradesh. By evaluating the effectiveness of this intervention,

Materials and Methods: The methodology for this study employed an evaluative approach targeting early adolescent in a selected school in Lucknow, Uttar Pradesh. Utilizing a pre-experimental single-group pre-test post-test design, the study assessed the effectiveness of an educational intervention package on practice related to the ill effects of fast food habits on health. Early adolescents studying in selected schools in Lucknow, Uttar Pradesh. A convenience sample of 30 early adolescents was selected. Setting of the study were Selected School at Lucknow, Uttar Pradesh

Results: The findings revealed substantial increase insights into the effectiveness of an educational intervention on early adolescents' dietary practices regarding the ill effects of fast food. Table 4 highlights a significant improvement in practice scores post-intervention, with a mean increase of 24.28 points and a 24.5% gain, confirmed by a paired t-value of 24.463 and a p-value less than 0.001. This indicates the educational intervention's success in altering dietary behaviors. In contrast, Table 5 examines the relationship between practice scores and socio-demographic variables such as age, gender, and occupation. While most variables showed no significant association with practice scores, a notable exception was 'occupation' (Chi-square = 8.215, $p < 0.05$), suggesting that the occupational status of parents or guardians significantly influences adolescents' dietary behaviors, indicating that socio-economic factors play a role in shaping these practices.

Conclusions: The study concluded that the educational intervention was significantly effective in enhancing the change in behavior of early adolescent about the health risks associated with fast food consumption. Additionally, there was significant association between post-test practice scores and selected socio-demographic variables, highlighting the broad applicability and effectiveness of the educational intervention across different demographic groups.

Keywords: Experimental study, awareness intervention program, practice, female feticides, early adolescent

Introduction

Coming to Indian junk food, locally called “chat”, these mostly include the Samosas, Kachoris, Panipuris /golgappas are fried items with various filling within an outer layer made of refined flour. India even Chinese food sold in road side stalls is Junk food, because they contain high amount of Monosodium Glutamate (MSG) which is a flavour enhancer & this MSG is recognized as a health hazard if taken in larger quantities because it causes headache, nausea, weakness, wheezing, oedema, change in heart rate, burning sensation & difficulty in breathing.¹

Calcium and magnesium depleted fast food are responsible for osteoporosis. Diets rich in free sugars may lead to increased risk of dental caries also. Very often fast food restaurants and habit of fast food consumption are becoming issue of criticism in the media of India due to adulteration of food items with food colors, other hazardous chemicals, microbial safety and hygiene of the restaurants. The coloring agents in the foods are regarded as carcinogens.²

Depending on a diet high in red and processed meat, but low in fruits and vegetables, have increased risk for myocardial infarction. Similarly, individuals with a diet low in antioxidants (vitamins A, C and E) and carrying are more prone to obesity. While those having a high-fat diet and carrying the more likely to suffer from insulin resistance and type 2 diabetes. Celiac disease is a chronic and immune – mediated intestinal disorder that is caused by intolerance to ingested gluten (gluten intolerance).³ According to World Health Organization (WHO) estimates, by 2030 67 percent of all deaths in India will be due to such causes on people suffering from non-communicable diseases like diabetes and cardiovascular diseases⁴

Poor nutrition during this stage can have lasting consequences on an adolescent's cognitive development, resulting in decreased learning ability, poor concentration, and impaired school performance. Eating junk food has become a trend. The children hate homemade healthy food. Junk food is injurious to health. Eating Burger and Pizza increases cholesterol in human body. The fat in human body increases. The increase fat is dangerous for heart. Drinking soft drinks adds dangerous toxins

in human body. It affects the bone, skin and kidney.⁵

Objectives

1. To assess the practice regarding ill effects of fast food habits on health, among early adolescence in selected school in term of pre-test score.
2. To evaluate the effectiveness of educational interventional package regarding ill effects of fast food habit on health among adolescence in selected school in term of post test score.
3. To find out the association between pre-test level of practice regarding ill effects of fast food habit with the selected socio-demographic variables of adolescent in school.

Hypothesis:

H₁ : There is a significant difference between the pre and post test practice score of early adolescents regarding ill effects of fast food habits on health in selected school Lucknow $p > 0.05$ level of significance

H₂ : There is a significant association between pre-test scores on the levels of practice regarding ill effects of fast food habit on health in selected school with their selected socio-demographic variable at $p < 0.05$ level of significance.

Operational Definitions

Evaluate: In this study, evaluating refers to systematically measuring the changes in behavior among early adolescents regarding the health risks associated with fast food consumption using pre- and post-intervention assessments.

Effectiveness: Effectiveness in this context is defined as the extent to which the educational interventional package successfully increases the adolescents' understanding and modifies their eating behaviors concerning the ill effects of fast food.

Educational Interventional Package: This refers to a structured 25-minute educational session that utilizes audio-visual aids to deliver content on the adverse effects of fast food. The package includes information on the definition, types, ingredients of fast food, its health consequences, and preventive strategies against its hazards.

Practice : In this study, "practice" refers to the observable dietary behaviors of early adolescents, specifically their frequency and type of fast food

consumption. This allows for measuring changes in these behaviors as a result of the educational intervention.

Fast Food: Operationally defined as any food high in fats, sugars, salts, and calories but low in nutritional value, typically prepared and served quickly in fast food establishments.

Ill Effects of Fast Food Habit: This term is operationally defined as the negative health outcomes associated with the regular consumption of fast food, which may include but are not limited to obesity, cardiovascular diseases, diabetes, and other metabolic syndromes.

Early Adolescents: For the purposes of this study, early adolescents are individuals aged between 10 to 14 years who are currently enrolled in the Tender Heart School, Lucknow, Uttar Pradesh.

Private School: In this study, a private school refers to an educational institution not administered by governmental bodies but operated and primarily funded through tuition fees paid by the students' families and managed by private entities.

Materials and Methods

Research Approach: The methodology for this study employed an evaluative approach targeting early adolescent in a selected school in Lucknow, Uttar Pradesh.

Results

Table 1: Distribution of early adolescent according to their demographic variables N=30

Demographic variables	Frequency (n=30)	Percentage(%)
A.Age in years		
10-11 Years	9	30.00%
11-12 Years	6	20.00%
12-13 Years	8	26.66%
13-14 Years	7	23.33%
B. Gender		
Male	16	53.33%
Female	14	46.66%
C. Religion		
Hindu	20	66.66%
Muslim	6	20.00%
Christian	4	13.33%
Other	0	0

Research Design: Utilizing a pre-experimental single-group pre-test post-test design, the study assessed the effectiveness of an educational intervention package on practice related to the ill effects of fast food habits on health.

Population: Early adolescents studying in selected schools in Lucknow, Uttar Pradesh.

Sampling Techniques: A convenience sample of 30 early adolescents was selected.

Sample Size: 30

Setting of the study: Selected School at Lucknow, Uttar Pradesh

Data Collection: Data were collected using a structured questionnaire that included socio-demographic information and questions on fast food-related practice. The intervention comprised interactive sessions, informative materials, and practical activities. Statistical analysis involved descriptive statistics (frequency, percentage, mean, standard deviation) and inferential statistics (paired t-test, Chi-square test) to measure changes pre and post-intervention. Ethical standards, including participant anonymity and confidentiality, were rigorously maintained, with informed consent obtained from all participants. This approach enabled a thorough evaluation of the educational intervention's impact on students' positive practice.

C.Occupation		
Un-employed	0	0
Self-employee	14	46.66
	6	20.00%
Private employee	10	33.33%
D. Monthly Income		
	9	30.00%
10001 – 20000	15	50.00%
20001 – 30000	4	13.33%
30000 and Above	2	6.66%
E. Type of family		
Nuclear Family	24	80.00%
Joint Family	4	13.33%
Extended	2	6.66%
F. No. of siblings		
One	11	36.66%
Two	7	23.33%
Three	8	26.66%
More than three	4	13.33%
D.SourceOf Information		
Television/Social media	12	40.00%
Parents	8	26.66%
Friends/relatives	4	13.33%
Teachers	6	20.00%

Table2:-Distribution of early adolescent according to pre-test and post-test level of practice regarding ill effect of fast food on health. N=30

Sl. No.	Level of practice	Pre test		Posttest	
		Frequency	Percentage	Frequency	Percentage
1.	Poor (<50%)	22	73.3	-	-
2.	Average(50-75%)	08	26.6	27	90.0
3.	Good(>75%)	-	-	3	10.0
4	Over all	30	100	30	100

Table3.-Range, Mean, SD and Mean % of pre-test and post-test practice regarding ill effect of fast food on health among early adolescent. N=30

Sl.No	Practice	Max Score	Range	Mean	SD	Mean%
1.	Pre-test	88	33 -60	45.05	6.42	59.19
2.	Post-test	88	55 -80	69.33	4.07	78.78

Table-4 :Pairedt-testanalysisforthesignificanceofpre-testandpost-testpracticeregardingill effect of fast food on health among early adolescent. **N=30**

Sl. No	Variable	Max score	Preandpost-testpracticdifference			Pairedt-value	P-value
			Meandiffere nce	SD of difference	%ofincrease		
1.	Practice	88	24.28	7.68	24.5	24.463*	P<0.001

Table-5:Association between practice scores of early adolescent on ill effect of fast food on health and selected socio demographic variable (N=30)

Demographic variable	Number (n=30)	Practice		Chi square value p-value	P- value
		Moderate	Adequate		
A.Ageinyears				0.882, df=3,NS	P>0.05
10-11 Years	9	5	4		
11-12 Years	6	3	3		
12-13 Years	8	5	3		
13-14 Years	7	4	3		
B. Gender				2.292, df=1,NS	P>0.05
Male	16	12	4		
Female	14	9	5		
C. Religion				2.284, df=3,NS	P>0.05
Hindu	20	15	5		
Muslim	6	4	2		
Christian	4	3	1		
Other	0	0	0		
D.Occupation				8.215, df=3,S	P<0.05
Un-employed	0	0	0		
Self-employee	14	10	4		
Government – employee	6	4	2		
Private employee	10	7	3		
E. Monthly Income				3.579, df=3,NS	p>0.05
= 10000	9	6	3		
10001 – 20000	15	13	2		
20001 – 30000	4	3	1		
30000 and Above	2	1	1		
F. Type of family				0.869, df=2,NS	p>0.05
Nuclear Family	24	19	5		
Joint Family	4	3	1		
Extended	2	1	1		

G. No. of siblings				1.245, df=3,NS	p>0.05
One	11	9	2		
Two	7	5	2		
Three	8	5	3		
More than three	4	3	1		
H.SourceOf Information				2.248, df=3,NS	p>0.05
Television/Social media	12	8	4		
Parents	8	6	2		
Friends/relatives	4	3	1		
Teachers	6	4	2		

Nursing Implication: The study assessing the effectiveness of an educational intervention on the dietary practices of early adolescents at Tender Heart School in Lucknow provides important implications across various facets of nursing, including practice, education, administration, and research:

Nursing Practice:

- Nurses can use the findings to enhance health promotion activities, particularly in school health programs. They can incorporate tailored educational interventions to educate adolescents about the risks associated with unhealthy dietary choices and the benefits of healthy eating habits.
- Nurses working in pediatric and community health settings can also develop and implement similar educational packages to address various health issues prevalent among adolescents.

Nursing Education:

- This study highlights the need for nursing curricula to emphasize the role of nurses in preventive health care and health education among children and adolescents.
- Educators can integrate case studies and findings from such studies into lectures or practical sessions to teach nursing students how to design, implement, and evaluate health education programs effectively.

Nursing Administration:

- Nursing administrators in school and community health settings can advocate for and allocate resources to support the implementation of health promotion programs similar to the educational intervention tested in this study.
- They can also facilitate interprofessional collaboration by involving dietitians, physicians, and educators in the development and delivery of comprehensive health education programs.

Nursing Research:

- The study provides a basis for further research into the long-term effects of educational interventions on dietary habits and health outcomes. Future studies could explore different educational strategies or expand the research to different age groups or settings.
- Researchers can also investigate the barriers to and facilitators of effective health education in schools, providing data that can enhance the scalability and impact of health promotion initiatives.

Conclusions

The study conducted at Tender Heart School in Lucknow demonstrates that a targeted educational intervention significantly improved the practices of early adolescents regarding the ill effects of fast food

on their health. The statistically significant findings from the pre-test and post-test assessments, as evidenced by the paired t-test results, confirm the effectiveness of the educational package in enhancing the adolescents' awareness and altering their dietary behaviors towards healthier choices. This outcome highlights the potential of structured, school-based health education programs in mitigating the risks associated with unhealthy eating habits and underscores the importance of incorporating such educational initiatives into regular school curricula to foster a healthier future generation.

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