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EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON LEVELS OF KNOWLEDGE REGARDING HEALTH HAZARD OF JUNK FOODS AMONG ADOLESCENTS AT GOVT HIGHER SECONDARY SCHOOL VILLAPAKKAM, ARCOT

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ABSTRACT

Background: Junk food consumption among adolescents is increasing due to taste, easy access, and media influence. These foods lack essential nutrients and lead to serious health issues like obesity and heart disease. Many adolescents are unaware of these long-term health hazard. Schools play a key role in educating students about healthy eating. This study evaluates the effectiveness of structured teaching programme to improve adolescents' knowledge on the risk of junk food. Aim: The aim of the study is to assess the effectiveness of structured teaching programme in improving the knowledge of adolescents regarding the health hazard of junk foods at Government Higher Secondary School, Villapakkam, Arcot. Methods: A pre-experimental one-group pre-test and post-test design was used. A total of 40 adolescents from Government Higher Secondary School, Villapakkam, Arcot were selected through purposive sampling. A structured knowledge questionnaire was used to assess participants' knowledge before and after the teaching programme. The data was analyzed using descriptive and inferential statistics. Results: The study revealed that the mean post-test knowledge score was significantly higher than the pre-test score, indicating an improvement in knowledge after the intervention. The findings revealed that prior to the intervention, a majority of students had inadequate (50%) to moderate (40%) knowledge, and only 10% had adequate knowledge about the health risks associated with junk food consumption. There was a marked improvement in knowledge levels, with 87.5% of students achieving adequate knowledge and only 12.5% remaining in the moderate category. The mean knowledge score increased significantly from 9.6 (pre-test) to 18.7 (post-test), and the difference was found to be statistically significant ($p < 0.05$). Conclusion: The findings suggest that structured teaching programme is effective tools in improving adolescents' knowledge regarding the harmful effects of junk food. Such educational interventions can play a crucial role in promoting healthy eating habits among school students

Key words: Junk food, Adolescents, Structured teaching programme, Health hazards, Knowledge, School health education.

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INTRODUCTION

Eat healthy to stay healthy

In today's world scenario, junk food has become a prominent feature of diet for Adolescents. The rapidly changing food consumption pattern and diet transition emerging in the Society due to economic growth and new life style choices. Growth and new life style choices. Food is an important part of a balanced diet. It is something

everyone needs, every day. Life can be sustained only with adequate nourishment. Fast food is any food that is quick, convenient, and usually junk meals. Though junk foods are tasty but it has low nutritive value and excessive calories, Junk ingredients came to be very oily and absence of nutritional fibers as a consequence They are tough to digest and require more power to carry out the method from body and make some one loss of oxygen level inside the body which lead toward fallacious Brain functioning. Junk ingredients are high in bad cholesterol and cause heart and liver Harm. Because of loss of dietary fibers they cause stress to the digestive organs and result Constipation and diarrhea. Junk foods are full of harmful effects which cause harm to a human body. Some of the health hazards of the junk foods are extra calories, insulin, resistance, high blood pressure, Bloating and puffiness, shortness of breath, depression, mental distress, blood sugar spike, over Weight, high cholesterol, heart problems, head ache and acne, etc., It also affects one's Learning ability like brain power, intelligence and non-treatable disease like cancer, digestive Problems, fatigue, weakness and kidney disease.

Many adolescents are unaware of the long-term health consequences of junk food consumption. This lack of knowledge contributes to poor dietary choices and increased vulnerability to non-communicable diseases. Schools play a vital role in shaping the health behavior of students. Structured health education programmes can serve as effective tools to impart knowledge and promote healthy eating practices.

The present study aims to assess the effectiveness of structured teaching programme on levels of knowledge regarding health hazard of junk food among adolescents. By educating students at an early age, this intervention hopes to encourage healthier dietary habits and reduce the risk of future health complications.

NEED FOR THE STUDY

Adolescents are particularly vulnerable to the influence of unhealthy dietary patterns, especially the increased consumption of junk food. The rising trend of consuming processed and fast foods among school-going children is a growing public health concern. These foods are rich in Trans fats, sugar, and salt, and are poor in essential nutrients. Regular consumption contributes to the development of lifestyle diseases such as obesity, type 2 diabetes, cardiovascular conditions, and metabolic disorders at an early age.

The lack of awareness and knowledge among adolescents about the harmful effects of junk food is one of the key factors contributing to its widespread consumption. Schools, being central to the lives of adolescents, offer a strategic setting for interventions aimed at promoting healthy dietary behaviors. Health education, particularly in the form of structured teaching programmes, has the potential to enhance knowledge and encourage positive lifestyle choices among students.

Singh, A., & Sharma, M. (2020) titled "Effectiveness of Structured Teaching Programme on Knowledge Regarding Junk Food among Adolescents" published in the International Journal of Nursing Education and Research, found that structured teaching significantly improved students' awareness about junk food hazards. The study emphasized the role of educational interventions in school settings to reduce junk food intake and promote health-conscious behaviour.

Mehta, A., & Joshi, R. (2021). A Study to Assess the Knowledge Regarding Junk Food and Its Impact Among School Children. Journal of Nursing and Health Science, 10(4), 45-49. The study emphasized that lack of awareness was a key factor in unhealthy eating patterns, and educational programmes were effective in promoting dietary awareness.

Statement of the Problem

A study to assess the effectiveness of structured teaching programme on levels of knowledge regarding health hazard of junk foods among Adolescent at Govt Higher secondary school, villapakkam, Arcot.

OBJECTIVES OF THE STUDY

1. To assess the levels of knowledge regarding health hazard of junk foods among Adolescent.
2. To evaluate effectiveness of structured teaching programme on levels of Knowledge regarding health hazard of junk foods among Adolescent.
3. To find the association between the levels of knowledge with socio demographic

METHODOLOGY

A pre-experimental one-group pre-test and post-test design was adopted to assess the effectiveness of a structured teaching programme on knowledge regarding the health hazard of junk foods among adolescents.The study was conducted at Government Higher Secondary School, Villapakkam, Arcot.

The population for the study consisted of adolescents aged 13–16 years studying at the selected school.A total of 40 adolescents were selected for the study.Purposive sampling technique was used to select the participants who met the inclusion criteria.

- Adolescents aged between 13 to 16 years.
- Adolescent who were studying 8^{th} -11^{th} standard
- Students who were present during the data collection.
- Those who could understand Tamil or English.
- Students who gave assent and whose parents provided consent.

Exclusion Criteria:

- Adolescents who were absent on the day of data collection.
- Students who had prior formal education on junk food hazards.

A structured knowledge questionnaire was developed and validated. It consisted of:
Part I: Demographic data (age, gender, dietary habits, etc.).
Part II: Knowledge-related questions about health hazard of junk foods.

Each item was objective type close ended multiple choice questions with a single answer scoring for the correct answer was "1" and wrong answer "0" the total score items was "25

Pre-test was conducted using the structured knowledge questionnaire.A structured teaching programme was administered, focusing on types of junk foods, their ingredients, and associated health risks. After 7 days, a post-test was conducted using the same questionnaire to assess knowledge gain. Descriptive statistics such as mean, percentage, and standard deviation were used to describe the demographic variables and knowledge scores. Inferential statistics (paired t-test) was used to compare pre-test and post-test knowledge scores and to determine the effectiveness of the structured teaching programme.

LEVEL OF KNOWLEDGE	SCORING
• Inadequate	0-8
• Moderate	9-16
• Adequate	17-25

Table 1: Show that the majority (90%) of students had either inadequate or moderate knowledge before the teaching programme.

Pre-test-Knowledge level	No. of students	Percentage (%)
Inadequate (0-8)	20	50%
Moderate (9-16)	16	40%
Adequate (17-25)	4	10%

Table 2: Depicts the difference in scores was statistically significant ($p < 0.05$), indicating that the structured teaching programme was effective.

Post-test-Knowledge level	No. of students	Percentage (%)
Inadequate (0-8)	0	0%
Moderate (9-16)	5	12.5%
Adequate (17-25)	35	87.5%

Table 3: Revealed the mean knowledge score increased significantly from 9.6 (pre-test) to 18.7 (post test) after the structured teaching programme.The paired t-test value of 15.82 with a p-value <0.001 indicates that the improvement in knowledge was statistically highly significant.

Test	Mean	Standard deviation (SD)	Mean difference	t-value	p-value	Interpretation
Pre test	9.6	2.8				
Post test	18.7	2.5	9.1	15.82	<0.001	Significant

Comparison of pre -test and post-test knowledge scores (n=40)

Figure 1: shows that majority (55%) of participants were in the 15–16 years age group, while 45% were aged 13–14 years. This indicates the sample mainly included mid to late adolescents, an appropriate group for assessing knowledge and behavior related to junk food.

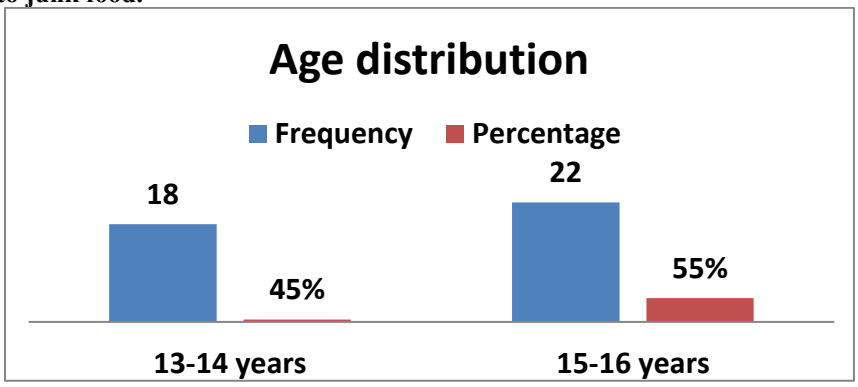


Figure 2: depicts that the sample consisted of 52.5% male and 47.5% female students.This shows a balanced gender distribution, allowing for a fair comparison in knowledge levels between boys and girls.

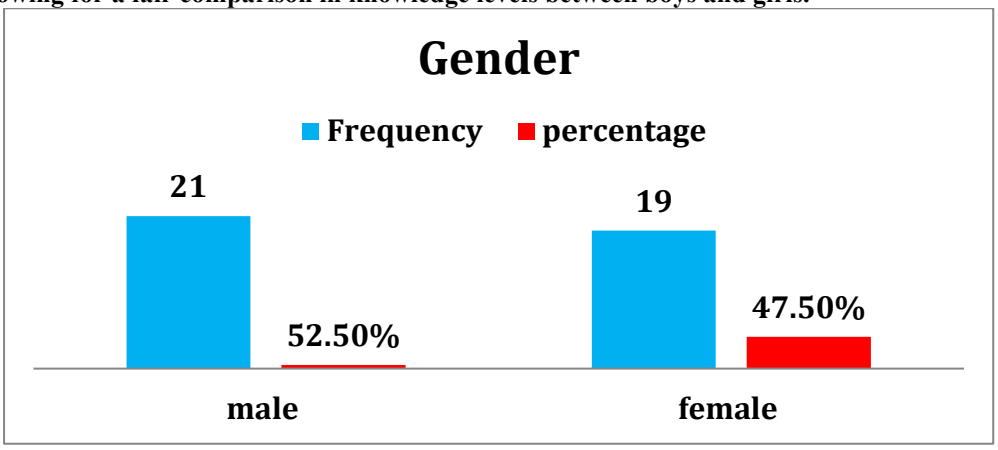


Figure 3: reveals that 50% of parents had secondary or higher education, while 35% had primary education, and 15% were illiterate.Higher parental education may positively influence children's awareness and dietary practices, possibly contributing to better post-test outcomes.

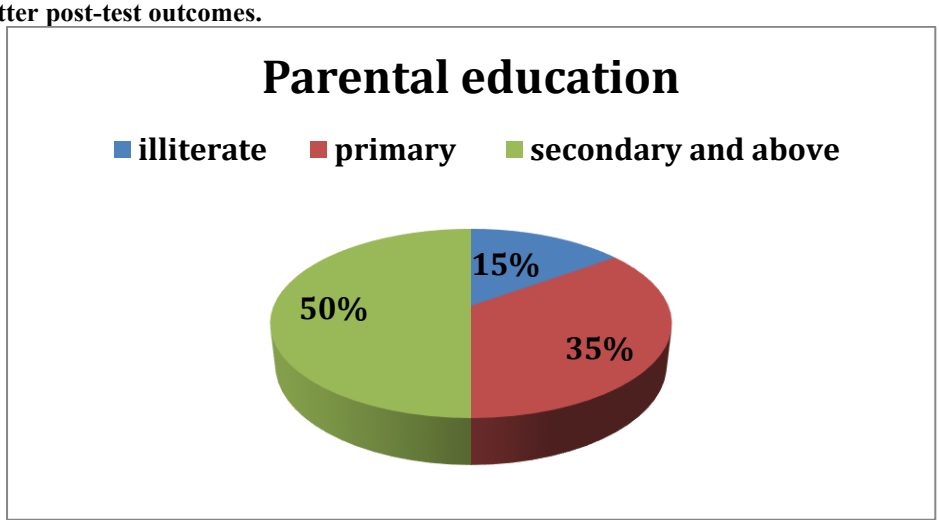
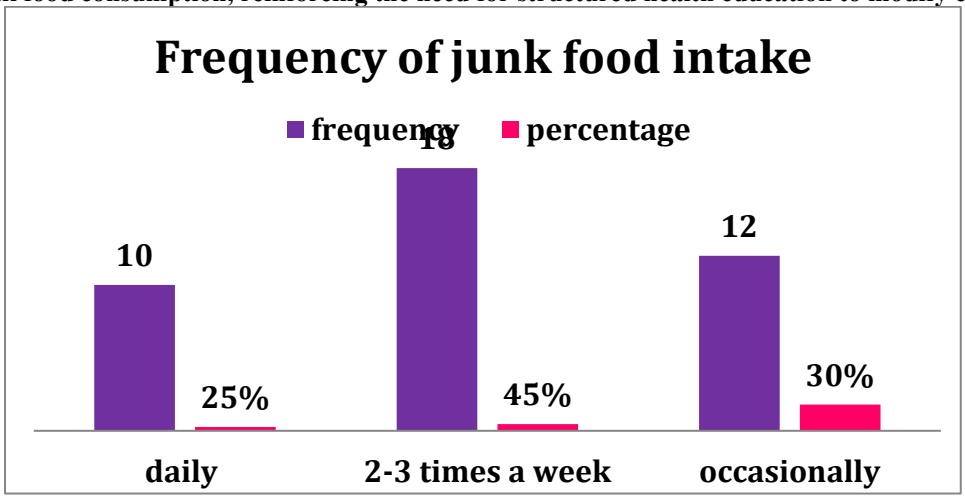


Figure 4: shows that 45% consumed junk food 2–3 times a week, 25% daily, and 30% occasionally.This shows a high prevalence of junk food consumption, reinforcing the need for structured health education to modify eating behaviour.



DISCUSSION

The present study was conducted to assess the effectiveness of a structured teaching programme on the knowledge regarding health hazard of junk foods among adolescents at Government Higher Secondary School, Villapakkam, Arcot. A total of 40 students participated. The findings are discussed in relation to each objective:

Objective 1: To assess the levels of knowledge regarding health hazard of junk foods among adolescents.

The pre-test results showed that a majority of the adolescents had inadequate to moderate knowledge about the health risks associated with junk food. This indicates a lack of awareness regarding the long-term consequences of frequent junk food consumption such as obesity, diabetes, hypertension, and other lifestyle diseases. A study conducted by Bansal and Kaur (2018) in Punjab revealed that more than 60% of adolescents had poor knowledge about the harmful effects of junk food consumption. The authors concluded that most students were unaware of the long-term health consequences associated with high intake of fast food, such as obesity, diabetes, and cardiovascular issues. This emphasizes the need for baseline assessments to identify knowledge gaps in school-aged children.

Objective 2: To evaluate the effectiveness of the structured teaching programme on levels of knowledge.

Post-test results showed a significant improvement in knowledge scores. The mean post-test score was considerably higher than the pre-test score, and the difference was statistically significant ($p < 0.05$). This demonstrates that the structured teaching programme was effective in improving the knowledge levels of adolescents. These findings are supported by similar studies, such as those by Singh & Sharma (2020), Kumar & Rani (2019), and Mehta & Joshi (2021), all of which reported that structured educational interventions effectively enhanced students' awareness and understanding of junk food-related health hazards.Patil and More (2021) conducted a study on high school students and found that post-test knowledge scores significantly improved after an educational intervention. Their findings confirmed that structured teaching strategies, when properly implemented, could successfully enhance awareness and motivate adolescents to adopt healthier eating practices. The study highlighted the effectiveness of school-based health education in bringing about meaningful knowledge gains.

Objective 3: To find the association between levels of knowledge and selected socio-demographic variables.

The study also analyzed the association between post-test knowledge scores and demographic factors such as age, gender, dietary habits, and parental education. Statistical analysis revealed that certain variables, such as the level of parental education and frequency of junk food consumption, had a significant association with the students' knowledge levels. This suggests that family background and lifestyle patterns influence adolescents' awareness of health-related topics.

Reddy and Thomas (2020) conducted a study among school children in urban Chennai. They found that parental education, socioeconomic background, and frequency of junk food intake had a significant influence on the level of nutritional knowledge. Children from families with higher education levels tended to perform better in post-tests, showing that the home environment plays a crucial role in shaping food awareness and choices.

RECOMMENDATIONS

1. **For School:** Integrate regular health education sessions into the school curriculum focusing on nutrition, healthy eating habits, and the health hazards of junk food.
2. **For Teachers:** Reinforce health-related topics during class discussions.
3. For Parents: Encourage parents to promote healthy eating habits at home by avoiding the frequent purchase of junk food.
4. **For Students:** Encourage peer-led campaigns and clubs that promote healthy lifestyles and discourage junk food consumption.
5. **For Health Professionals:** Community health nurses and dietitians should collaborate with schools to deliver structured health education programmes.
6. **For Future Research:** Similar studies can be conducted with a larger sample size and in different geographical areas to generalize findings.

NURSING IMPLICATIONS

1. **Nursing Practice:** Community health nurses play a crucial role in promoting nutritional awareness among adolescents.School health nurses should screen for unhealthy dietary habits during routine health check-ups and provide appropriate guidance.
2. **Nursing Education:** Nursing curriculum should include content related to adolescent nutrition, dietary behavior, and community health promotion.
3. **Nursing Administration:** Nurse Administrators should collaborate with schools and local health departments to plan and coordinate school-based health education programmes.
4. **Nursing Research:** This study can serve as a foundation for further research on adolescent dietary habits and the effectiveness of health education interventions.

CONCLUSION

The present study was conducted to assess the effectiveness of structured teaching programme on the knowledge regarding health hazard of junk foods among adolescents at Government Higher Secondary School, Villapakkam, Arcot, with a sample size of 40 students. The findings revealed that prior to the intervention, a majority of students had inadequate (50%) to moderate (40%)

knowledge, and only 10% had adequate knowledge about the health risks associated with junk food consumption. This highlighted a clear need for nutritional awareness among adolescents.

Following the structured teaching programme, there was a marked improvement in knowledge levels, with 87.5% of students achieving adequate knowledge and only 12.5% remaining in the moderate category. The mean knowledge score increased significantly from 9.6 (pre-test) to 18.7 (post-test), and the difference was found to be statistically significant ($p < 0.05$).

The study found a significant association between knowledge levels and selected socio-demographic variables, specifically parental education and frequency of junk food consumption.

In conclusion, the structured teaching programme proved to be an effective method to enhance adolescents' knowledge regarding the health hazards of junk foods. It also emphasizes the role of school-based nursing interventions in promoting healthy dietary behaviors among youth. Continued educational efforts, parental involvement, and support from healthcare professionals are essential to sustain these positive outcomes.

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