

## Original Research Paper

Paediatrics

TO ASSESS EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HARMFUL EFFECTS OF SOFT DRINK CONSUMPTION AMONG HIGH SCHOOL CHILDREN IN SELECTED SCHOOLS:

A QUASI EXPERIMENTAL STUDY

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ABSTRACT Background: Soft drinks are frequently substituted for milk in children and teenagers, depriving them of vital nutrients for growth and development. Eating foods with a lot of sugar and acid can have a bad impact on your health. These impacts include being overweight, being obese, having type 2 diabetes, getting cavities, and losing your teeth. Objective: To assess the effectiveness of structured teaching programme on knowledge regarding harmful effects of soft drink consumption among high schools children in selected schools. Material and Methods: A Quasi experimental study with one group pre-test post-test design was carried in selected high schools children. 70 samples were drawn by non-probability convenient sampling technique. Tool was consisting of Section A: It consists of semi-structured questionnaire to collect demographic data. Section B: Self-Structured Knowledge Questionnaires. Result: The comparison of pretest and post-test knowledge scores of high school children regarding harmful effects of soft drink consumption from selected high school. Mean was 10.24, standard deviation was 1.22 and mean difference values are compared and student's paired 't' test is applied at 5% level of significance. The tabulated value for n=70-1 i.e. 69 degrees of freedom was 1.98. The calculated  $ilde{t}$  value i.e. 70.18 are much higher than the tabulated value at 5% level of significance for overall knowledge score of high school children which is statistically acceptable level of significance. Conclusion: The knowledge of high school children on harmful effects of soft drink consumption is inadequate. The use of structured teaching programme is effective in improving knowledge of high school children on harmful effects of soft drink consumption.

## KEYWORDS: Soft Drink Consumption, Harmful Effects, High School Children, Structured Teaching Programme

## INTRODUCTION

Every parents should consider their children as blessings from the lord and these blessings also comes with responsibilities. Parents are responsible for helping children grow physically, intellectually, emotionally and spiritually strong. In today's scenario, discipline is one of the biggest problems that every parent face, especially in a school going child.

School age children consume carbonated drinks in breathtaking quantities and are often unaware of the health hazards of the excess consumption. The term "drink", while nominally neutral, often carries connotations of alcoholic content, and the name "soft drink" specifies a lack of alcohol by way of contrast to the term "hard drink", like colas, sparkling water, iced tea, lemonade, squash, and fruit punch are among the most common types of soft drinks.

Annually, 3.4 million adults die each year from obesity-associated diseases such as, diabetes, heart disease, and cancer. Many other diseases are affiliated with these chemicals, included but were not limited to high blood pressure, gout, kidney function decline, cirrhosis, depression and anxiety, and osteoporosis. These conditions affect the body, which in turn affected the oral cavity by causing manifestations such as xerostomia, aphthous ulcers, chelitis, halitosis, bruxism, lichen planus, necrotizing ulcerative gingivitis, bone loss, tooth loss and periodontal disease.

#### **Background Of The Study**

Soft drinks are often substituted for milk by kids and teens, depriving them of vital nutrients needed for proper growth and development. Unfortunately, just 36% of boys and 14% of girls get the required calcium intake. High use of soft drinks is linked to low intakes of magnesium, vitamin A, vitamin C, and riboflavin as well as high intakes of calories, fat, and carbohydrates. Children between the ages of four and eight are roughly three times more likely to regularly consume fizzy drinks than other children their

age who do not. Studies have shown that consuming sugary and acidic soft beverages can have detrimental effects on a child's or teens overall health as well as their oral health, including an increased risk of being overweight, obese, and developing type 2 diabetes, dental caries, and dental erosion.

## Need Of The Study

The fact that soft drinks offer energy with little accompanying nutrition, displace other nutrient sources, and are linked to several key health conditions such as diabetes obesity, osteoporosis and many more. Additionally, the research data shows an alarming increase in consumption of drinks by children. Subsequently children are having less knowledge about the health hazards of soft drink consumption Hence the investigator felt the need to aware high school children about the harmful effects of soft drink consumption to avoid various consequences.

### Statement Of Problem

A Quasi Experimental Study To Assess Effectiveness of Structured Teaching Programme on Knowledge regarding Harmful Effects of Soft Drink Consumption among High School Children in selected schools

## **OBJECTIVE**

## Primary objectives:

To assess the effectiveness of structured teaching programme on knowledge regarding harmful effects of soft drink consumption among high schools children in selected schools.

## Secondary objectives:

- To assess the pre-test knowledge regarding harmful effects of soft drink consumption among high school children in selected schools.
- To assess the post-test knowledge regarding harmful effects of soft drink consumption among high school

children in selected schools.

- To evaluate the effectiveness of structured teaching programme on knowledge regarding harmful effects of soft drink consumption among high school children in selected schools.
- 4. To associate the knowledge score with selected demographic variables.

#### Conceptual Framework

The conceptual framework for the present study is developed from the Imagene King's goal achievement theory.

#### METHODOLOGY

Research Approach: In this study quantitative approach is used.

Research Design: One group pre-test post-test design

Setting: Selected high school

Sample - All high school children of selected schools of the city.

Sample Size -70 high school children.

Sampling Technique - Non-Probability Convenient Sampling Technique

#### Tool-

- Section A: It consists of semi-structured questionnaire to collect demographic data.
- Section B: Self-Structured Knowledge Questionnaires

#### RESULT AND DISCUSSION

# Section I: Description of distribution of high school children with regards to demographic variables

- Majority of the subjects 54.30% of high school children were in the age of 14 years.
- Majority of the subjects 57.10% of high school children were males.
- Majority of the subjects 54.30% of high school children were studying in 9<sup>th</sup> standard.
- Majority of the subjects 78.60% of high school children had monthly family income of more than 25000Rs.
- All of the subjects (100%) of high school children were from urban area and none of them were from rural area.
- Majority of the subjects38.60% of them were government servant
- Majority of the subjects 55.70% of mothers of high school children were homemaker.
- Majority of the subjects 68.60% of them were from nuclear families.
- Majority of the subjects51.40% of them were consuming occasionally.
- Majority of the subjects 55.7% of high school children were not aware about soft drink consumption.
- Majority of the subjects 58.10% of high school children were aware about soft drink consumption from parents.

Section II: Description of assessment of level of pre-test knowledge regarding harmful effects of soft drink consumption among high school children n=70

Level of pre-test	Score Range	Level of Pre-test		
knowledge		Knowledge Score		
		Frequency(f)	Percentage(%)	
Poor	0-20%(0-6)	9	12.86	
Average	21-40%(7-12)	34	48.57	
Good	41-60%(13-18)	27	38.57	
Very Good	61-80%(19-24)	0	0	
Excellent	81-100%(25-30)	0	0	
Minimum score		4		
Maximum score		18		
Mean knowledge score		11.50 ± 3.60		
Mean % Knowledge Score		$38.33 \pm 12$		

Section III: Description of assessment of level of post-test knowledge regarding harmful effects of soft drink consumption among high school children n=70

Level of post-	Score Range	Level of Post-test					
test knowledge		Knowledge Score					
		Frequency (f)	Percentage(%)				
Poor	0-20%(0-6)	0	0				
Average	21-40%(7-12)	0	0				
Good	41-60%(13-18)	12	17.14				
Very Good	61-80%(19-24)	41	58.57				
Excellent	81-100%(25-30)	17	24.29				
Minimum score		16					
Maximum score		28					
Mean knowledge score		21.74 ± 3.08					
Mean % Knowledge Score		72.47 ± 10.28					

Section IV: Description of assessment of level of effectiveness of structured teaching programme on knowledge regarding harmful effects of soft drink consumption among high school children n=70

Overall	Mean	SD	Mean	df	Tabulate	t-	p-value
			Difference		d value	value	
Pre Test	11.50	3.60	10.24±1.22	69	1.98	70.18	0.0001
Post Test	21.74	3.08					S,p < 0.05

Section V: Association of level of knowledge score regarding harmful effects of soft drink consumption among high school children with their selected demographic variables

In the above study, association of post-test knowledge of high school children was seen with age(in year), standard, monthly family income(in Rs.), area of residence, , type of family and awareness about side effects of soft drink consumption.

#### CONCLUSION

After the detailed analysis, this study leads to the following conclusion: The high school children have good, very good and excellent level of knowledge regarding harmful effects of soft drink consumption. There was a significant increase in knowledge of high school children after introduction of structured teaching programme. To find the effectiveness of structured teaching programme, paired 't' test was applied and post-test score.it reveal that 58.57% of high school children had very good knowledge scores, 24.29% of high school 114 children had a excellent knowledge score, 17.14% had good knowledge scores and none of high school children had very average and poor level of knowledge. Thus, it was concluded that structured teaching program on knowledge regarding harmful effects of soft drink consumption among high school children in selected schools of the city was found to be effective as teaching strategy. Hence, based on the above cited findings, it was concluded undoubtedly that the educational intervention by the investigator in the form of structured teaching program helped the high school children to increase knowledge regarding harmful effects of soft drink consumption.

## Recommendation

Since the present study was conducted on moderate sample, more extensive studies on wider sample are recommended,

- Similar study can be conducted to assess the effectiveness of planned teaching program on knowledge harmful effects of soft drink consumption among parents of high school children in selected area of the city.
- Interventional studies can be done to assess the harmful effects of soft drink consumption among high school children in selected schools of the city.
- A similar study can be carried to find out the incidence of soft drink consumption among high school children.
- Follow-up studies could be conducted to evaluate utility and effectiveness of the guide sheet on the harmful effects of soft drink consumption among high school children in selected schools of the city.

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- A similar study can be replicated on a larger population for generalization of findings.
- A comparative study can be done to assess the knowledge regarding the harmful effects of soft drink consumption among high school children in rural and urban areas. 118
- A descriptive study can be conducted on the awareness regarding the harmful effects of soft drink consumption among high school children.
- A similar study can be carried out to evaluate the effectiveness of video assisted teaching programme on the harmful effects of soft drink consumption among high school children.

#### **Authours Contributions**

The author carries out tasks from data collection, data analysis, making discussions to make manuscripts.

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