A Descriptive Study to Assess the Knowledge, Attitude, and Practice on Carbonated Soft Drinks and Their Effect on Health among Teenagers in Selected Educational Institutions of Mangalore

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Abstract

Introduction: The Indian culture has accepted the habit of drinking carbonated soft drinks. As flavored carbonated beverages gained popularity, many people especially teenagers are used to the consumption of large quantities of soft drinks all through the day neglecting their normal food habits.

Aim: To assess the knowledge, attitude and practice (KAP) on carbonated soft drinks and their effect on health among teenagers.

Materials and Methods: 100 students in the age group of 13–19 years were included in the study. A structured questionnaire was used to measure knowledge, 3-point Likert's scale was used to find attitude and a check list was used to assess the practice.

Results: Among teenagers, 13.8% had adequate knowledge, 23.55% had favorable attitude towards carbonated soft drinks and their effect on health. The favorable practice was shown by 28% of teenagers.

Conclusion: Health education and primordial prevention would be the best way to create awareness and to adopt healthy life style and combat the problems associated with carbonated soft drink consumption among teenagers.

Keywords: Soft drinks, Life style, Primordial prevention, Teens

Introduction

"To eat is a necessity, but to eat intelligently is an art"

Food is at the heart of our well-being and is central to maintain good health. We have to take good care of our body because it is a vehicle to transport us from one place to another and enable us to do the things that we dream of doing. Food, health and education are the three most

important ingredients of our lives. The leading trend in functional food ingredients can impact our health and life style.

Nowadays the consumption of soft drinks is much favored by every generation. No sector is left unaffected by their influence. People are consuming soft drinks almost every day without even knowing their ill-effects, and thus harm their own health.

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Recent studies have shown that teenagers are the group who are consuming the soft drinks regularly. In all the controversies over what the soft drinks are and their ill effects to health, the teenagers must not have paid attention to avoid them. They yield to occur health problems to them.

Need for the Study

According to American Health Centre of Saina, soft drinks are enormously popular beverages consisting primarily of carbonated water, sugar, and flavoring. Many countries enjoy the sweet sparkling soda with an unusual consumption of more than 34 billion gallons.

Soft drink manufacturers have been quick to respond to consumer preferences. In 1962, diet colas were introduced in response to the fashion of thinness for women. In the 1980s, the growing health consciousness of the country led to creation of caffeine-free and low-sodium soft drinks. New flavors of carbonated soft drinks constantly appeared on the market.

High prevalence of exposure and excessive consumption of soft drinks may represent an emerging public health problem. Hence this study was considered as an eye opener for teenagers in whom awareness regarding carbonated soft drinks and related problems are included.

Statement

A descriptive study to assess the knowledge, attitude, and practice on carbonated soft drinks and their effect on health among teenagers in selected educational institutions of Mangalore.

Objectives

- To assess the knowledge, attitude, and practice (KAP) on carbonated soft drinks and their effects on health among teenagers.
- To create awareness regarding carbonated soft drinks and their effect on health among teenagers.

Review of Literature

The study has been reviewed under following sections:

Section A: Literature related to carbonated soft drinks conception among teenagers

Section B: Literature related to effects of carbonated soft drinks on health of teenagers

Research Methodology

A study was carried out among students of schools and colleges in Mangalore, India. The target population for this study was 100 students. In this study, a knowledge questionnaire consists of part 1 and part 2, namely, carbonated soft drinks and effects on health. Modified 3-point Likert's scale to assess the attitude and a check list to assess their practice. Based on the total score, knowledge, attitude and practice were graded as:

- Excellent knowledge, favorable attitude and favorable practice the score is: $\geq 80\%$.
- Good knowledge, moderately favorable attitude and moderately favorable practice the score is: 51–79%.
- Poor knowledge, unfavorable attitude and unfavorable practice the score is: $\leq 50\%$.

The questionnaire was checked for validity. The aims and objectives were explained to all the students before starting the study, and consent was obtained from all the students prior to the beginning of the study. The study was approved by the ethical clearance committee of the institution. Permission was sought from the concerned authority.

Data Analysis and Interpretation

- Appropriate descriptive and inferential statistics methods were used.
- Descriptive statistics that were used include frequencies, percentage, mean, median, range and standard deviation.
- The level of significance was $p < 0.05$.

Section A

Table 1. Frequency and Percentage Distribution of Demographic Variables of Teenagers

S. No.	Demographic Variables	Frequency	Percentage
1	Age of the teenagers 13 to 15 years 15+ to 17 years 17+ to 19 years	60 22 18	60 22 18
2	Present educational level High school level Higher secondary level College level	40 20 40	40 20 40
3	Family income per month Below Rs. 10,000 Rs. 10000 to Rs. 20000 Above Rs. 20000	38 42 20	38 42 20
4	Type of family they belong to Nuclear Joint Others (single and separated)	64 24 12	64 24 12
5.	Sources of health information Mass media Family members and relatives Health agency	16 66 18	16 66 18

N=100

Section B

Table 2. Association of Knowledge Attitude and Practice on Carbonated Soft Drinks and Their Effect on Health Among Teenagers

Demographic Variables	Adequate	Moderately Adequate	Inadequate	Chi-Square Value	df	p-value
Knowledge	13.8%	35.82%	50.37%	7.19*	09	p<0.05*
Attitude	23.53%	62.14%	14.31%	0.004 'NS'	09	p>0.05'NS'
Practice	28%	63%	9%	0.32'NS'	09	p>0.05'NS'

*significant (i.e., p<0.05) 'NS' not significant (i.e., p>0.05)

Results

Among teenagers, 13.8% had adequate knowledge, 23.55% had favorable attitude towards carbonated soft drinks and their effect on health. The favorable practice was shown by 28% of teenagers.

It is generally understood that soft drinks, even though they contain a large number of calories, have little nutritional benefit and are known as "empty calories". Soft drinks are composed mostly of filtered water with diet colas containing close to 100% water. Most of the calories in soft drinks are from refined sugars, and there are no other nutritionally beneficial components in soft drinks. Dr. Charles Best, the discoverer of insulin, claims that teenagers who consume too many soft drinks have cirrhosis of the liver similar to what chronic alcoholics have. A common problem that is

associated with consumption of a large number of soft drinks is the increased acid levels throughout the body. All soft drinks are very acidic, but dark colas such as Coke and Pepsi are much more acidic. In the present study the knowledge base of the students regarding the harmful effects of carbonated drinks is not satisfactory.

Majority of students (50%) did not have adequate level of Knowledge, Attitude and Practice towards carbonated soft drinks and its effects on health.

S. Kishore, P. Aggarwal(2009) reported that the knowledge of the students regarding the ill-effects of the consumption of carbonated drinks is not convincing one. The attitudes of the students are relatively better but their practices are neither preventive nor health promoting. Thus, it is recommended that a holistic approach should be

incorporated to combat the problems associated with the consumption of carbonated drinks. There is a need of Behavioral Change (BCC) for youngsters.

Conclusion

Thus to conclude, from the above responses from the students media advertisements and other related factors have led to carbonated drink consumption among students.

Most of them were well aware about the side effects and were willing to stop the consumption of carbonated drinks, if suitable alternatives were available. But they preferred to drink carbonated drinks and fruit juices. It was surprising to note that they were aware of the ill-effects of carbonated beverages, still their consumption of soft drinks was increasing day by day, but they had not experienced any ill effects of consuming carbonated beverages.

Health education would be the best way to adopt a healthy life style and to combat the problems associated with the consumption of carbonated drinks.

Conflict of Interest: None

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