A Descriptive Study to Assess the Knowledge and Attitude Regarding Health Hazards of Soft Drinks among Adolescents<br>*Dr.P.Shanthi ${ }^{1}$, M.Ajitha ${ }^{2}$, M.Muneeswari ${ }^{3}$, R.Rahul ${ }^{4}$, Prof. Dr.C.Jothi Sophia ${ }^{5}$, Prof.Dr. Sivailango ${ }^{6}$<br>${ }^{1}$ Professor and HOD in OG Dept, C.S.I Jeyaraj Annapackiam College of Nursing, Pasumalai, Madurai, The Tamil Nadu Dr.MGR, Medical University, Chennai.<br>${ }^{2,3,4}$ BSc (N) Student, CSI Jeyaraj Annapackiam College of Nursing. Pasumalai, Madurai, The Tamil Nadu Dr.MGR, Medical University, Chennai.<br>${ }^{5}$ Principal and Research Coordinator, C.S.I Jeyaraj Annapackiam College of Nursing, Pasumalai, Madurai, The Tamil Nadu Dr.MGR, Medical University, Chennai.<br>${ }^{6}$ Chemistry Dept, Thiyagaraja Engineering College, Madurai, Anna University, Chennai<br>Submission Date: 10 Feb. 2023 |Published Date: 23 Feb. 2023<br>*Corresponding author: Dr.P.Shanthi<br>Professor and HOD in OG Dept, C.S.I Jeyaraj Annapackiam College of Nursing, Pasumalai, Madurai, The Tamil Nadu Dr.MGR, Medical University, Chennai.


#### Abstract

A descriptive study to assess the level of knowledge and attitude regarding health hazards of soft drinks among adolescents in selected Colleges at Madurai District, is carried out to assess the existing knowledge and attitude on health hazards of soft drinks among adolescents, find out the correlation between knowledge and attitude and also to find out association between knowledge and attitude with selected demographical variables. The conceptual framework for the study was derived from Health Promotion Theory Model (Nola.I.Pender's -2002). Methodology: Quantitative approach was used with descriptive design in a selected college. The target population of this study is all adolescents from Colleges. The accessible population of this study is first year adolescents from the selected college at Madurai. The samples were collected using purposeful sampling technique for 50 adolescents. Findings: The level of knowledge regarding health hazards of soft drinks, majority $42(84 \%)$ of the adolescents had inadequate and $8(16 \%)$ are moderate and no one had adequate. The level of attitude on health hazards of soft drinks shows that the positive $1(2 \%)$ and negative $15(30 \%)$ and neutral $34(68 \%)$.Study suggest that, the facilities must be created in all schools and colleges to have adequate display or audiovisual materials to educate adolescence regarding health hazards of soft drinks.


Keywords: Knowledge, Attitude, soft drink, Health hazards, Adolescents

## Introduction

"An ounce of prevention is worth a pound of cure"- Today, man is constantly exposed to a variety of toxic chemicals primarily due to changes in life style such as food, drink, air, environment are contaminated with toxic xenobiotics. Progressive globalization, increases in food intake, such as snacks, soft drinks and fast food which is directly related with obesity, diabetes, cancer, hypertension and coronary heart disease. Soft drinks are non-alcoholic water-based flavoured drinks that are highly sweetened, acidulated and carbonated. Some carbonated soft drinks also contain caffeine, mainly the brown-colored cola drinks. Common soft drinks include colas, sparkling water, lemonade, squash and fruit punch. Drinks such as hot chocolate, coffee, tea, milk, tap water, alcohol and milkshakes do not fall in this classification. Sugar-sweetened beverages such as soft drinks are considered unhealthy food products that are energy rich and nutrient poor (Pettigrew et al., 2015).

According to the dietary guidelines of the USA, the intake of products high in added sugar such as soft drinks is a concern (United States Departments of Agriculture and Health and Human Services, 2002). Wanjek (2015) reported that sugar-based drinks are causing 184,000 deaths world wide per year and although its consumption in India is
comparatively lower, they still cause approximately 10,000 deaths per year (Karnik, 2015). While the rest of the world, empirical results suggest that carbonated soft drinks are rationally addictive.

National Health Interview Survey Cancer Control Supplement (NHIS CCS), 2015. A report indicates that Sri Lankans have consumed 62 million liters of carbonated soft drinks in 2009 and 2012 report showed that, overall $82 \%$ consumed sugar-sweetened soft drinks once weekly or more often. Average consumption worldwide increased from 9.5 gallons per person per year in 1997 to 11.4 gallons per person per year in 2010. Sugar-sweetened beverages such as soft drinks are considered unhealthy food products that are energy rich and nutrient poor (Pettigrew et al., 2015).

Cultural shift, travelling and Television viewing play major role in changing food habits among young children and adolescents. Which is causing the hazards such as tooth decay, heartburn, obesity, reduced bone strength, type 2 diabetic mellitus and also effects due to plastics.

## Assumptions

$>$ College students may have some basic knowledge regarding health hazards of soft drinks.
$>$ The student's knowledge regarding health hazards of soft drinks may vary with selected demographic variables.
> Positive attitude among adolescents promote health and will reduce the misconceptions

## Delimitations

The study is delimited to,

* Knowledge and attitude were only assessed through structured questionnaire.
* Those who consume sugar-sweetened soft drinks once weekly or more often.

Usha Rani Kandula,(2001), conducted a study to assess the knowledge regarding health hazards of soft drinks among Nursing College students at Chaitanya College of Nursing, Ongole Andhra Pradesh, a quantitative research approach with descriptive research design was adopted to assess the knowledge on health hazards of soft drinks. Total 100 students were selected by purposive sampling technique. Data were collected with structured questionnaire. Data analysis reveals that, majority $60(60 \%)$ them had inadequate knowledge, $29(29 \%)$ of them had moderately adequate knowledge and $11(11 \%)$ of them had adequate knowledge on health hazards of soft drinks with Mean 11.81 and Stranded Deviation 4.75. The study indicates that, among 100 samples majority of the students had inadequate knowledge. The study strongly recommends that, there should be a need to bring awareness among Nursing College students on health hazards of soft drinks in order to prevent health associated risk and complications among the nursing students.

Ravi Dhingra (2007), consumption in participants in the Framingham Heart Study ( 6039 person-observations, 3470 in women; mean age 52.9 years). Cross-sectional, individuals consuming $\geq 1$ soft drink per day had a higher prevalence of metabolic syndrome, than those consuming <1 drink per day. On follow-up (mean of 4 years), new-onset metabolic syndrome developed in 765 ( $18.7 \%$ ) of 4095 participants consuming <1 drink per day and in 474 ( $22.6 \%$ ) of 2059 persons consuming $\geq 1$ soft drink per day. Consumption of $\geq 1$ soft drink per day was associated with increased odds of developing metabolic syndrome, increased waist circumference and obesity, impaired fasting glucose, higher blood pressure, hyper glycaemia and low high-density lipoprotein cholesterol, dental erosion, diabetes, hypertension, mental health and multimorbidities.

## Research Approach

Quantitative approach was used with descriptive design in a selected college. The target population of this study is all adolescents from Colleges. The accessible population of this study is first year adolescents from the selected college at Madurai. The samples were collected by using purposeful sampling technique for 50 adolescents.

## Criteria for the Sample Selection

The sample were selected based on inclusive and exclusive criteria

## Inclusive Criteria

> The students who are studying in first year B.Sc(Nursing)
$>$ The students who are present at the time of study.

## Exclusion Criteria

$>$ The students are absent during the study.
$>$ The students who are not interested about the study.

## Findings and Discussions

Subjects were based on demographic variables majority $29(58 \%)$ of them belong to $16-18$ years of age and $21(42 \%)$ samples were between the age of 18-20 years, majority $37(74 \%)$ of them were female and $13(26 \%)$ of them were male, majority $29(58 \%$ ) of them belong to Christian and $21(42 \%)$ of them belong to Hindu.

Majority $22(44 \%)$ of them were from rural area and $16(32 \%)$ of them are from urban area and $12(24 \%)$ of them are from semi urban. Majority $40(80 \%)$ of them were received information from TV, majority $37(74 \%)$ of them from joint family and only $13(26 \%)$ samples from nuclear family.

The level of knowledge regarding health hazards of soft drinks, majority 42(84\%) of the adolescents had inadequate and $8(16 \%)$ are moderate and no one had adequate.

Figure_1: Level of knowledge regarding health hazards of soft drinks among adolescents


The level of attitude on health hazards of soft drinks shows that the positive $1(2 \%)$ and negative $15(30 \%)$ and neutral 34(68\%).

Figure_2: Level of attitude regarding health hazards of soft drinks among adolescents


There is a significant association between the age of adolescents $\mathrm{X} 2=1.4, \mathrm{DF}=4, \mathrm{P}<0.05$, religion $\mathrm{X} 2=0.06$, $\mathrm{DF}=4, \mathrm{P}<0.05$, occupation $\mathrm{X} 2=0.17, \mathrm{DF}=6, \mathrm{P}<0.05$, type of family $\mathrm{X} 2=0.2, \mathrm{df}=2, \mathrm{P}<0.05$, ther is no significant association between the gender $\mathrm{X} 2=8.5, \mathrm{DF}=2, \mathrm{p}<0.05$, family income $\mathrm{X} 2=37.4, \mathrm{DF}=6, \mathrm{P}<0.05$, place of residence $\mathrm{X} 2=5.7, \mathrm{DF}=4$, $\mathrm{P}<0.05$, source of information $\mathrm{X} 2=11.8, \mathrm{DF}=6, \mathrm{p}<0.05$, Diet $\mathrm{X} 2=33.2, \mathrm{DF}=4, \mathrm{P}<0.05$, spending money $\mathrm{X} 2=14.4, \mathrm{DF}=6$, $\mathrm{P}<0.05$.

## Conclusions

Existing level of knowledge that, majority $42(84 \%)$ of adolescents had inadequate, $8(16 \%)$ of the were moderate and no one had adequate knowledge regarding health hazards of soft drinks. The level of attitude on health hazards of soft drinks shows that, the positive $1(2 \%)$, neutral $34(68 \%)$ and negative 15 (30\%) among adolescents. Fung T.T., et.al (2009) conducted a study, nearly 90,000 adolescents who drank more than two servings of sugary beverage each day had a 40 percent higher risk of heart attacks or death. Adolescents are also risk for nutritional deficiencies, behaviour pattern and sleep pattern disturbances. The study strongly recommends that, there is a need to bring awareness among College students on health hazards of soft drinks in order to prevent health complications among the students.

## Recommendations

1. A similar study can be conducted among adolescents.
2. An experimental study can be conducted with intervention on improving knowledge and attitude regarding health hazards of soft drinks among adults.
3. A study can be done on a large sample using self-instructional module.

## Implications

## The findings of the study implications as follows

## Implications in Nursing Practice

1. The result of the study will help the nurses to enlighten their knowledge on importance of natural juices and health hazards of soft drinks.
2. The nurses have responsibility in educating the public regarding healthy habits of nutrition.
3. The study also implies the need for integral services, feedback, follow up in collaborative approach, both hospital and community health team.
4. Adolescents need to be taught about the protective measures in order to reduce the hazards of soft drinks.

## In Nursing Education

1. It can be included in syllabus inorder to improve their knowledge on health hazards of soft drinks.
2. The nurse educator should uptake their knowledge and attitude on hazards of soft drinks.

## Implications in Nursing Administration

1. The nursing administration should take active part in policy making related to health, developing protocol, procedures and standing orders, health education modules on hazards of soft drinks.
2. Extensive use of mass media can help to create awareness program the public regarding health hazards of soft drinks in the country.
3. Nurse's administrator should initiate community based awareness program with active support of available resources in the community.
4. Facilities must be created in each hospital to have adequate display or audiovisual materials to educate adolescence regarding health hazards of soft drinks.

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## CITE AS

P.Shanthi, M.Ajitha, M.Muneeswari, R.Rahul, C.Jothi Sophia, \& Sivailango. (2023). A Descriptive Study to Assess the Knowledge and Attitude Regarding Health Hazards of Soft Drinks among Adolescents. Global Journal of Research in Medical Sciences, 3(1), 47-50. https://doi.org/10.5281/zenodo. 7667472

