"A STUDY TO ASSESS THE EFFECT OF PLANNED TEACHING PROGRAM ON KNOWLEDGE RELATED TO HEALTH HAZARDS OF ENERGY DRINKS AMONG ADOLESCENCE FROM SELECTED SCHOOLS OF SANGLI, MIRAJ AND KUPWAD CORPORATION AREA."

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ABSTRACT

"A study to assess the effect of planned teaching program on knowledge related to health hazards of energy drinks among the adolescence from selected schools of Sangli, Miraj And Kupwad corporation area."

OBJECTIVES OF THE STUDY:

- To assess the existing level of knowledge regarding health hazards of energy drinks.
- To assess the post-test level of knowledge regarding health hazards of energy drinks.
- To compare the difference between pre-test knowledge with post-test knowledge score.

HYPOTHESIS:

- H0: There is no significant difference between pre-test and post test knowledge scores regarding health hazards of energy drinks of 0.5 at the level of significance.
- H1: There is significant difference between pre-test and post test knowledge scores regarding health hazards of energy drinks of 0.5 at the level of significance.

MATERIAL AND METHOD:

A quasi experimental one group pre-test and post-test design was conducted to assess the effect of planned teaching program on knowledge related to health hazards of energy drinks among the adolescence from selected schools of Sangli, Miraj, Kupwad corporation area" By using simple random sampling technique 200 samples were selected for this study. A self-structured questionnaire was used to assess the level of knowledge among school students. A researcher taught the students regarding health hazards of energy drinks by using charts and posters. After the planned teaching program on the 8th day post-test was conducted. Analysis was done using frequency and percentage distribution and paired 't' test.

RESULT AND CONCLUSION:

Pre-test level of knowledge regarding health hazards of energy drinks showed that the students 90 (45%) have poor knowledge and 60 (30%%) having very poor knowledge 30(15%) have good knowledge and 20(10%) have very good knowledge and none of student having excellent knowledge regarding health hazards of energy drinks. During the post-test, majority of the students 110 (55%) had good knowledge, 50(25%) had very good knowledge, 30(15%) had excellent knowledge and 10(5%) had poor knowledge regarding health hazards of energy drinks. The overall pre-test mean score was 8.69 and S.D. was 3.955011 and the post-test Mean score was 14.41 and S.D. was 3.714957 and P-value is 0.00001 which is less than 0.05. Hence there is Significant difference found between pre-test and post- test mean score of knowledge regarding health hazards of energy drinks. This reveals the planned teaching program on knowledge regarding health hazards of energy drinks among adolescence students was effective to increase the level of knowledge of school students.

Key Words : Assess, Effect of planned teaching, Adolescence.

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INTRODUCTION

BACKGROUND OF THE STUDY:

Energy drinks are a type of liquid product that typically contain caffeine, glucose, Taurine, methylxanthines, vitamin B, ginseng, guarana, yerba mate, acai, maltodextrin, inositol, carnitine, creatine, glucuronolactone, and ginkg obiloba are either with or without additional nutritional supplements. They typically have 80 to 150 mg of caffeine per 8 oz., which is the same as five ounces of coffee or two 12-ounce cans of caffeinated soda. Many brands on the market contain a lot of glucose, and some brands offer versions that have been artificially sweetened. caffeinated drinks are the second most normal dietary enhancement utilized by youngsters. The global energy drinks market size grew from 58.58 billion in 2022 to 62.89 billion in 2023. According to a reported by statistic the energy market in India reached a revenue of INR 5.7 billion USD in 2023. About two-thirds of people who drink energy drinks are between the ages of 13 and 35, and two-thirds of them are boys. [(1)]

Youth and young adults make up the consumer market for ED, and a study found that 51% of schools' students use at least two energy drinks in week. Utilization of EDs has expanded altogether among youngsters, youths, and grown-ups, the extent of calories owing to EDs is minor contrasted with other sugar-improved refreshments (SSBs). The commonness of cutting-edge ED utilization is especially tricky because of the arising proof of relationship with unfavourable wellbeing results, for example, risk-seeking behaviour, negative cardiovascular and metabolic, renal, or dental results. [(2)]

After consumption of more energy drinks, they have effect on health. like Irritability, anxiety, restlessness, insomnia, tachycardia are normal symptoms of caffeine. A caffeine intake of less than 2.5 mg/kg for children and less than 6 mg/kg for adults, adverse effects are unlikely. Between 72 and 294 milligrams of caffeine are contained in each ED. Hypertensive people are more helpless to caffeine. [(3)]

Studies have shown that in grown-ups, a sharp caffeinated drink can cause an expansion in blood vessel pulse, while in youngsters, blood vessel solidness and circulatory strain increment, lessening the effectiveness of the left ventricle. There are increasing reports of caffeine poisoning from caffeinated energy drinks and Caffeinated beverages can frequently cause cardiovascular incidental effects like myocardial ischemia and heart arrhythmias. [(4)]

NEED FOR STUDY:

The consumption of energy drinks has increased dramatically over the past two decades, especially among teenagers and young adults. In fact, energy drinks have been linked to several adverse health effects. Published articles examining the health benefits and harms of energy drinks.

The consumption of energy drinks by young people is a new clinical issue in the field of school health. High school students now have a new way to get a quick boost of energy or boost their awareness with these drinks. These drinks are being consumed at an alarming rate by young people.

Another new risk for youngsters is the negative wellbeing impacts of caffeinated drinks. Nervousness, dizziness, inability to concentrate, difficulty concentrating, indigestion, and insomnia are some of the specific effects that young people have reported. These caffeinated drinks contain an adequate number of energizer fixings to cause uneasiness, a sleeping disorder, lack of hydration, stomach related upset, anxiety, flushing, diuresis and expanded pulse. Caffeinated drink utilization has been connected to seizures, intense madness, and strokes. [(5)]

Energy drinks consumption has become increasingly common in the last few years, despite evidence associating these products with vast adverse health effects like Irritability, anxiety, restlessness, insomnia, tachycardia are normal symptoms of caffeine. The consumption of energy drinks is very common in adolescents of both sexes, though more common in boys. A study done by Mansour B, Amarah W, Nasralla E, Elias N. these all are found that energy drinks significantly increased systolic blood pressure in most participants within a brief period after drinking. (6)

Studies have shown that in grown-ups, a sharp caffeinated drink can cause an expansion in blood vessel pulse, while in youngsters, blood vessel solidness and circulatory strain increment, lessening the effectiveness of the left ventricle. (4)

We observe the adolescence have drinking more energy drinks like red bull, sting energy drinks, and other energy drinks. these energy drinks contain high level of caffeine. Caffeinated beverages can frequently cause cardiovascular effects, metabolic effect, renal effect, and dental effects. Prevention of these health hazards of energy drink in adolescence is needed to promote the health and create awareness regarding health hazards on health our researcher is chosen this topic.

MATERIAL AND METHOD:

The current research aimed to assess the effectiveness of planned teaching knowledge related to health hazards of energy drinks. The quasi experimental pre-test and post- test design and quantitative approach is use with simple random sampling technique. Total of 200 adolescence were selected from schools of Sangli, Miraj, Kupwad corporation area. Based on the criteria of selection such as Adolescence who are willing participate and give consent to include in the study. And Can understand English, Marathi, Hindi language. Dependent variable was Knowledge of Adolescence. Independent variable was planned teaching program regarding health hazards of energy drinks.

ETHICAL CONSIDERATIONS:

The Research was approved by the Ethical committee after presenting proposal with data collection tool. Where it was promised that there will be no discomfort and risk to the participants. The time duration of the participation was 1 hour. The name of the participant and data was kept confidential. The participation was voluntary. Participant can skip the study even after consent was given. Permission from concerned authority was taken final study.

RELIABILITY AND PILOT STUDY:

Tool Reliability was measured by test-retest method. The tool used was "Self-Structured questionnaire for assessing level of knowledge in students. The reliability with coefficient formula r = 0.95, which is more than 0.7, Since the tool was found to be reliable, feasible and acceptable. No changes in tool were done after reliability.

Pilot study was conducted 20 Adolescence students. The P value is 0.00001 which is less than 0.05 and the study was feasible to conduct the final study.

PROCEDURE FOR DATA COLLECTION:

- Written permission was obtained from the school authority to conduct the study.
- Informed written consent was taken from the parents of the students and ascent from students.

Pre-test:

- The researcher visited the school and maintained good rapport with the students. The researcher selected 200 Adolescence students by simple random sampling technique and conducted pre-test with the help of self-structured questionnaire.

Planned Teaching Programme:

- Soon after pre-test planned teaching programme regarding health hazards of energy drinks was given to the students with the help of charts and posters.

Post-test:

- Post-test was conducted on the 8th day after the planned teaching programme with the help of self-structured questionnaire.

ORGANIZATION OF FINDINGS-

SECTION 1:

Frequency and percentage distribution of students according to demographic variables.

SECTION2:

Frequency and percentage distribution of students according to pre-test level of knowledge regarding health hazards of energy drinks.

SECTION3:

Frequency and percentage distribution of students according to post-test level of knowledge regarding health hazards of energy drinks.

SECTION 4:

Comparison between the pre-test and post-test knowledge score regarding health hazards of energy drinks among adolescence.

SECTION - I

Table No. 1: Frequency and percentage distribution of students according to demographic variables.

Demographic Variables

n = 200

Sr.	Demographic variable	Frequency	Percentage %

No				
1.	Age of students	10-14 years	107	53.5%
		14-19 years	93	46.5%
2.	Gender	Male	106	53%
		Female	94	47%
3.	Previous knowledge regarding health hazards of energy drinks	Yes	42	21%
		No	158	79%
4.	Do you like having energy drinks?	Yes	107	53.5%
		No	93	46.5%

RESULT

1.The study findings shows that, out of 200 (100%) students, majority of the sample 107 (53.5%) were in the age group of 10-14 years whereas 93(46.5%) of the sample were in the age group of 14-19 years.

2. It was found that out of 200 (100%) students, 106 (53%) of the sample were male and 94 (47%) sample were female.

3. Out of 200(100%) students, 42(21%) had previous knowledge and 158(79%) did not had previous knowledge regarding health hazards of energy drinks.

4. Out of 200(100%) students, 107(53.5%) likes energy drinks and 93(46.5%) did not likes drinking energy drinks.

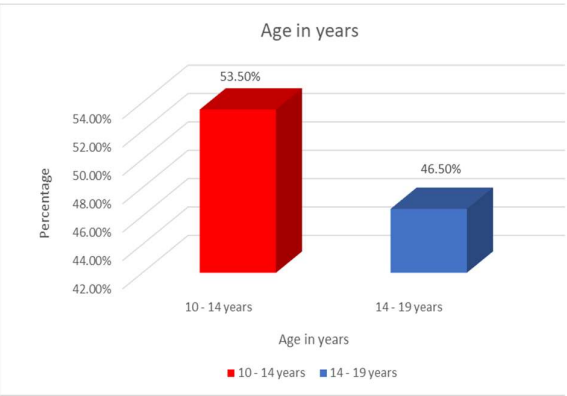

Figure No. 1 - Age in years

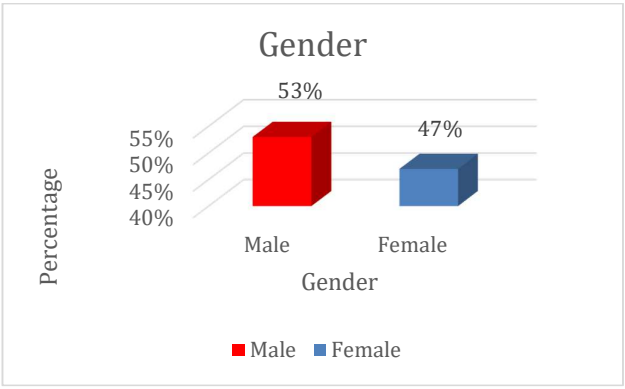

Figure No. 2 – Gender

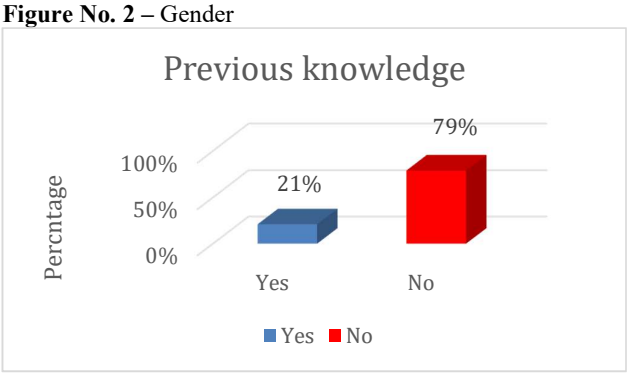

Figure No. 3 – Previous knowledge

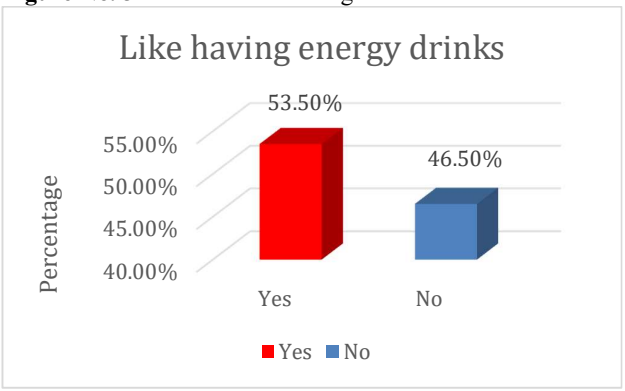

Figure No. 4 – Do you like having energy drinks?

SECTION - II

Table No. 2: Frequency and percentage distribution of students according to pre-test level of knowledge regarding health hazards of energy drinks**.**

n= 200

LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE%
(21-25) Excellent	0	0%
(16-20) Very Good	20	10%

(11-15) Good	30	15%
(6-10) Poor	90	45%
(0-5) Very Poor	60	30%

RESULT:

- The above table No.2 shows that, most of the students 90(45%) had Poor knowledge, 60(30%) had very poor knowledge and 30(15%) had good knowledge, 20(10%) had very good knowledge regarding health hazards of energy drinks.

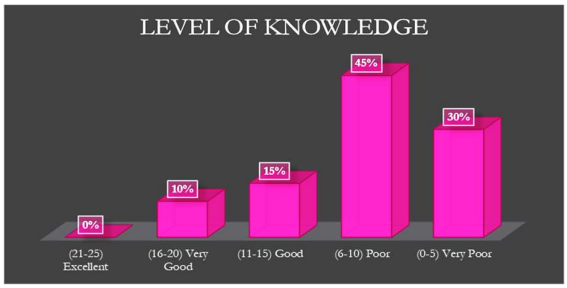

Figure no. 5 Pre-test level of knowledge

SECTION - III

Table No. 3: Frequency and percentage distribution of students according to post-test level of knowledge regarding health hazards of energy drinks.

n= 200

LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE%
(21-25) Excellent	30	15%
(16-20) Very Good	50	25%
(11-15) Good	110	55%
(6-10) Poor	10	5%
(0-5) Very Poor	0	0%

RESULT:

- The above table No.3 shows that, majority of the students 110 (55%) had good knowledge, 50 (25%) had very good knowledge, 30(15%) had excellent knowledge and 10(5%) had poor knowledge regarding health hazards of energy drinks.
- This reveals that after the planned teaching program students' level of knowledge has increased.

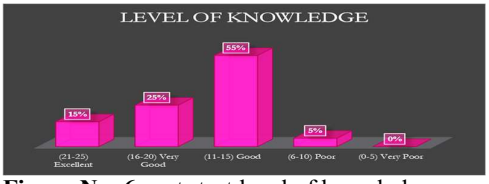

Figure No. 6 post- test level of knowledge

SECTION IV

Table No. 4: Comparison between the pre-test and post-test knowledge score regarding health hazards of energy drinks among Adolescence students.

	Mean	S.D.	d.f.	Paired t-test	p-value
Pre-test	8.69	3.955011	199	62.8571	0.00001
Post-test	14.41	3.714957			<0.05

RESULT:

- The table no. 4 shows that, the mean score of knowledge before giving planned teaching programme was 8.69 and S.D. was 3.955011 and the mean score of knowledge after giving planned teaching programme was 14.41 and S.D. was 3.714957.
- The t – value is 62.8571 and as the calculated p – value is 0.00001 which is less than 0.05. it shows that there is highly significant difference between pre and post-test level of knowledge score.

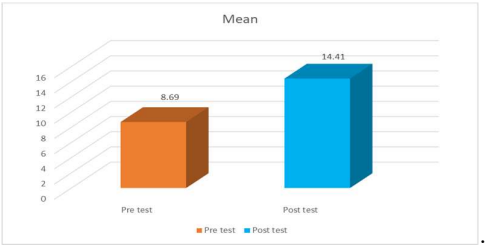

Figure No. 7 – comparison of the pre-test and post-test mean score.

DISCUSSION:

A research study was conducted to assess the level of knowledge regarding health hazards of energy drinks with the help of planned teaching program on 200 Adolescence students were selected by using simple random sampling technique. The study

shows that there is an increasing in level of knowledge of students regarding health hazards of energy drinks.

The present study shows that, the mean score of knowledge before giving planned teaching program was 8.69 and after giving planned teaching program it was 14.41. t- value is 62.8571 and **p- value is 0.00001<0.05 (at 5% at level of significance).**

It indicates, their is highly significant difference between pre-test and post-test mean score of knowledge regarding health hazards of energy drinks and planned teaching program was effective in increasing knowledge.

SUPPORTIVE STUDY:

Present study results supported by the study of Thiab S……et all in 2023 with aim to assess the of knowledge , attitude and perception regarding of energy drinks among adolescence and the results shows that the participated students had neutral level of knowledge about energy drinks, as the mean score of knowledge is 7.25 and after planned teaching it was increased to 18.57 ,so It was found that there is significant difference in pre and post-test as p-value is <0.05 and concluded that planned teaching was effective in improving the knowledge among adolescence.(7)

Conclusion:

The study result reveals that the planned teaching program regarding health hazards of energy drinks among Adolescence students was effective in increasing knowledge regarding health hazards of energy drinks.

NURSING IMPLICATION:

The findings of the study will help nurses in the following aspect.

NURSING PRACTICE:

Based on the present study results

- There has been an increase in the popularity of energy drinks among adolescence, so nurses need to practice delivering the knowledge to the parents and children about the potential risks and effects of energy drinks while providing care in pediatric ward and in pediatric OPD and community area.
- Nurses can use the planned teaching and structured knowledge questionnaires to educate both school teacher and students so that they can efficiently know the consequences of energy drinks to prevent the complications.

NURSING EDUCATION:

Present study results can be utilized by-

- Nursing faculty can teach to the student nurses regarding health hazards of energy drinks so that they can deliver the knowledge to the society during clinical postings.
- The student nurses can educate the adolescence during the school health program in schools and colleges.
- Nursing teacher can use innovative teaching strategies and interactive activities to engage nursing students in learning about adolescence heath issues related energy drinks.

NURSING ADMINISTRATION:

- The nursing leaders can organize and implement in service education programmes for nurses on preventative measures of health hazards of energy drinks so that they can deliver this knowledge to parents and children during health camps.
- Nurse administrators can provide the A.V. aids to the nurses for health education in the ward.
- Ensure logistical arrangement for delivering the teaching program such as scheduling, venue selection and supply equipment.
- The nurse administrator plans instructional programmes on health hazards energy drinks for Anganwadi workers, Asha worker and community health nurses.

NURSING RESEARCH:

- The finding of the study can be disseminated through publications journals and presentations in conferences and seminars.
- The findings of the study will motivate other investigator to conduct further studies on health hazards of energy drinks.

RECOMMENDATIONS:

- A study can be done to determine awareness and attitude of adolescence children related to consumption and health hazards of energy drinks.
- A survey can be conducted to determine the incidence of drinking energy drinks and its effects on health.
- A study can be done to examine the association between energy drinks use and mental health symptoms in adolescence.
- A study can done to check the knowledge and attitude of parents towards energy drinks among adolescence.

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