



RESEARCH ARTICLE

“A STUDY TO ASSESS THE PATTERN OF CONSUMPTION AND AWARENESS REGARDING USE OF CAFFEINE AND ENERGY DRINKS AMONG NURSING STUDENTS IN SELECTED NURSING COLLEGE AT DEHRADUN, UTTARAKHAND”

Mrs. Iris George Dennis¹ and Angel Arpana Singh², Bharat Kumar², Deepika Gaur², Riya Rawat², Sarita Bisht², Shivani Rawat²

1. Nursing Tutor, Doon Institute of Medical Sciences, Faculty of Nursing, Sahaspur, Dehradun, Uttarakhand
2. B. Sc Nursing 4th year students, 2018 to 2022 Batch, Doon Institute of Medical Sciences, Faculty of Nursing, Sahaspur, Dehradun, Uttarakhand.

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Key words:-

Assess, Consumption, Awareness,
Caffeine, Energy Drinks, Nursing
Students

Abstract

Problem statement: “A study to assess the pattern of consumption and awareness regarding use of caffeine and energy drinks among nursing students in selected nursing college at Dehradun, Uttarakhand.”

Objectives:

- To assess the awareness regarding use of caffeine and energy drinks among nursing students.
- To determine the frequency of consumption of caffeine and energy drinks among nursing students.
- To associate the difference between the pattern for consumption and awareness regarding use of caffeine and energy drinks among nursing students.
- To inculcate the knowledge regarding caffeine and energy drinks among nursing students with the help of the pamphlets.

Hypotheses:

H0: There is no significant association between the knowledge regarding health risk of consuming high level of caffeine and energy drink with their selected demographic variables

H1: There is significant association between the knowledge regarding health risk of consuming high level of caffeine and energy drinks with their selected demographic variables

Methodology: The nature of the study was descriptive approach and design selected was non experimental descriptive design. The selection of sample was done by convenient sampling technique. The structured knowledge questionnaire was used as instruments for data collection of data. This study was conducted at a selected Medical College in Dehradun, Uttarakhand. The population for this study consists of medical students from selected College of Dehradun. In this study, the sample size was 100 adults and the age group is between 18 –33 years and above, adults who were willing to participate in the study and are available at the time of data collection.

Methods: Involves the description often planned to investigate the phenomenal understudy in a structured [quantitative], unstructured [qualitative] or combination of two methods. Based on the nature of the

Corresponding Author: - Mrs. Iris George Dennis

Designation: M. Sc (Nursing Tutor), **Email address-** irisgeorge97@gmail.com

Address: - Nursing Tutor, Doon Institute of Medical Sciences, Faculty of Nursing, Sahaspur, Dehradun, Uttarakhand.

problem, the research approach chosen for this study was a quantitative descriptive study.

Exclusion criteria: The sample below the age group of 18 years, samples who are willing to participate and who were available at the time of the study. The sampling technique adopted for this study was non-probability convenient sampling. The method of data collection is a virtual medium. The tool Structured questionnaire for the assessment of knowledge and pattern of consumption among medical students at this letter College of Dehradun consists of:

Part A- Demographic data: It consists of data participants such as age, gender, previous knowledge and source of information.

Part B – Self-structured questionnaire: This part consists of a structured questionnaire to assist the knowledge of the participant regarding caffeine and energy drink.

Part C- Pattern of consumption: This part deals with the pattern of consumption.

The reliability of an instrument is a major criterion for assessing its quality and adequacy. It is the ability of the data gathering device to obtain a consistent result.

A pilot study was conducted were 10 students of the Medical College of Dehradun who were selected through a convenient sampling technique. The purpose of the pilot study was to assess the feasibility of the tool and feasibility of an approach which is later intended to be used in the main study. The consent was taken and the subjects were assured about anonymity and confidentiality of their responses to the tool was found to be ($r = 0.71$) reliable and feasible.

Plans For Data Analysis: Descriptive and statistic method for the data analysis. The frequency and percentage distribution of demographic data participants. Mean, mode, median and standard deviation calculation of knowledge of participant regarding caffeine in an energy drink. Chi-square computer to determine the relationship between the knowledge level of the student regarding energy drinks and caffeine with their demographic variable.

Major Findings of the Study: Section-A The demographic variables of the samples in the study includes age, gender, course of nursing, marital status, consumption of energy drinks and caffeine and awareness related to side effects of caffeine and energy drinks. The age of participant, it indicates that 90% belong to the age group of 18-22 years. According to gender, majority of participants were females i.e., 87%. According to the educational qualification of participants, 23% were in GNM and 77% were in BSc nursing. The marital status of the participants 94% were unmarried. Consumption 100% participants were consuming caffeine related products and energy drinks. Knowledge related side effect of caffeine and energy drinks the data showed that 81% of the participants were aware about the side effect of the caffeine and energy drinks.

Section-B Findings related to consumption of caffeine and energy drinks: Among 100 participants 46% students started consuming energy drinks and caffeine at the age of 17-24 years. 69% of the students were first introduced to the energy drinks through recommendation from family and friends. 59% were taking energy drink for energy boost. 79% student's choice of energy drink is influenced by its taste. Rest 45% students consume all these caffeine containing products. The maximum samples were consuming Coca-Cola i.e., 49%. Half of the samples (50%) drinks one bottle or can of energy drink in one sitting. The percentage of students who consumed

energy drink and caffeine for 1 to 5 days in past 30 days were 45%. 24% felt heart burn after consuming caffeine and energy drinks. 44% mainly prefer to drink the energy drink and caffeine between 4 pm to 7 pm.

Section-C Knowledge score of study sample regarding caffeine and energy drinks In the present study it was found that the mean knowledge score of the study participants regarding energy drinks and caffeine was 6.34 with standard deviation 3.23. The maximum possible score was 16. In the study it was found that 54(54%) of the students had poor knowledge about the caffeine and energy drinks.

Section-D. The findings of the study show that there is no association between the demographic variables and the knowledge regarding caffeine and energy drinks. Therefore, it could be stated that the demographic variable and knowledge are not associated with each other.

Conclusion: On the basis of study findings the investigator concluded that to assess the awareness and consumption of caffeine and energy drinks among nursing students. Therefore, the investigator felt that the importance of awareness for the nursing students to reduce the consumption of caffeine and energy drinks and improved the quality of life.

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Introduction: -

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Table 1: - Score Interpretation.

S.NO	SCORING	INTERPRETATION
1	1-5	Poor
2	6-10	Average
3	11-16	Good

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Plans For Data Analysis:

Descriptive and statistic method for the data analysis. The frequency and percentage distribution of demographic data participants. Mean, mode, median and standard deviation calculation of knowledge of participant regarding

caffeine in an energy drink. Chi-square computer to determine the relationship between the knowledge level of the student regarding energy drinks and caffeine with their demographic variable.

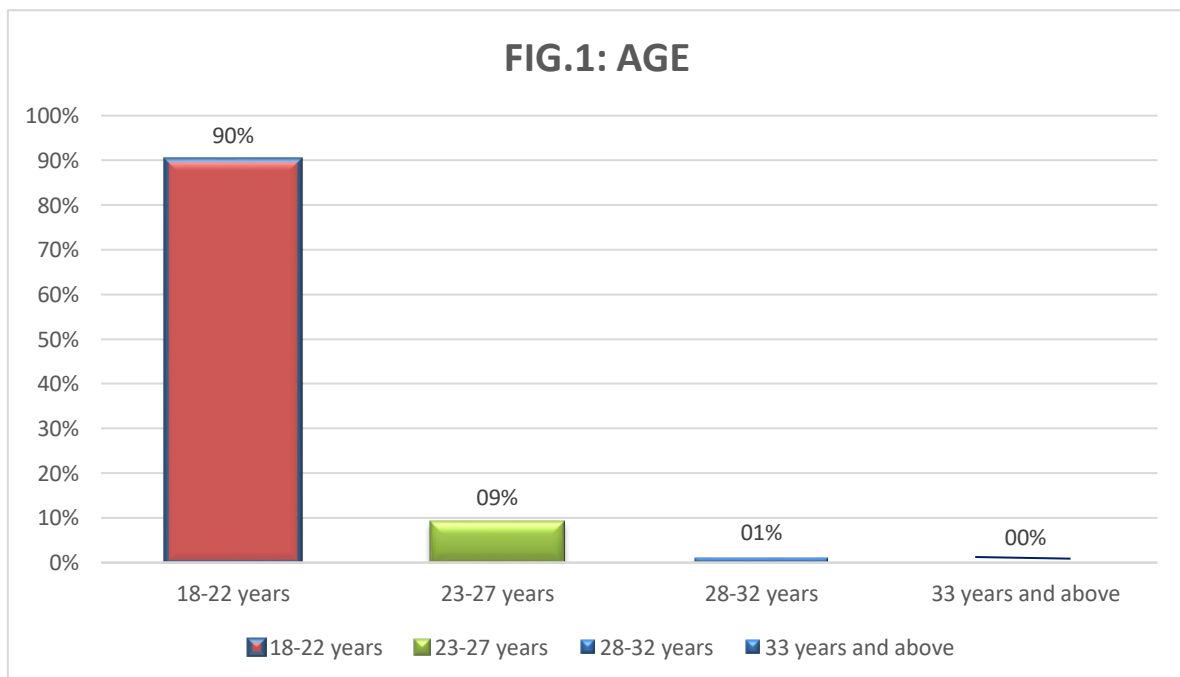
Major Findings of The Study:

Section-A The demographic variables of the samples in the study includes age, gender, course of nursing, marital status, consumption of energy drinks and caffeine and awareness related to side effects of caffeine and energy drinks.

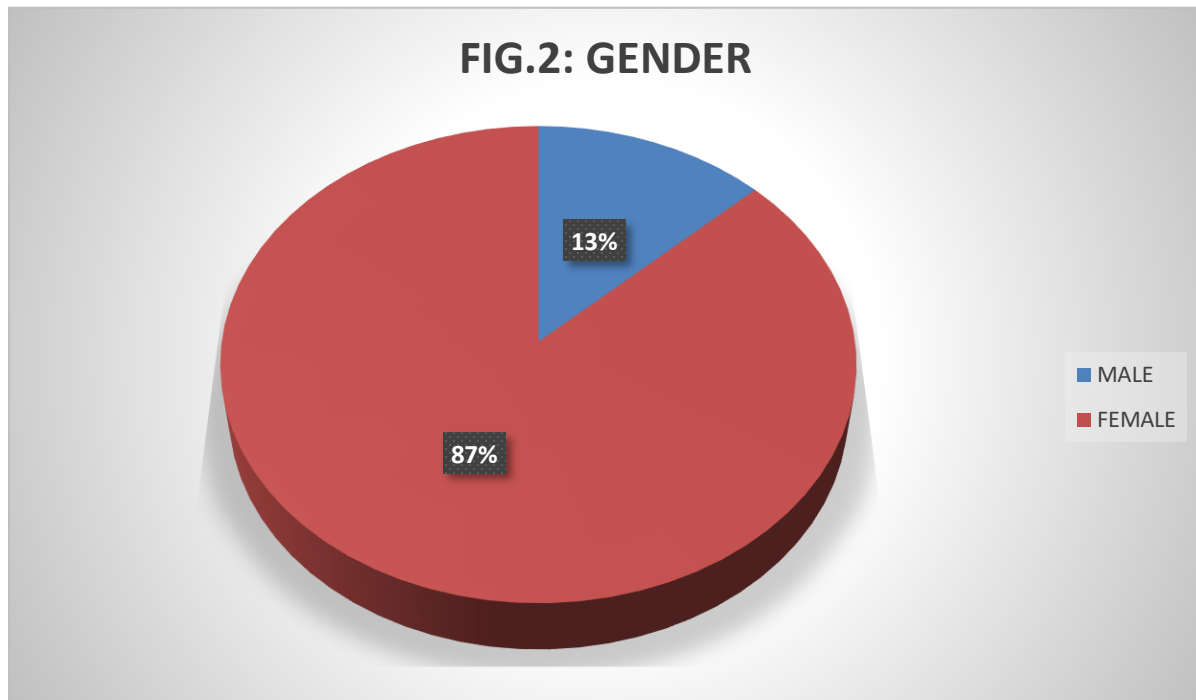
Table 2:- Frequency And Percentage Distribution Of Nursing Students To Their Selected Demographic Variable.

VARIABLES	CHARACTERISTICS	FREQUENCY	PERCENTAGE
AGE	18– 22 years	90	90%
	23 – 27 years	9	09%
	28 – 32 years	1	01%
	33 years & above	0	0%
GENDER	Male	13	13%
	Female	87	87%
COURSE OF NURSING	GNM	23	23%
	BSc. Nursing	77	77%
	Post basic Nursing	0	0%
	MSc. Nursing	0	0%
MARITAL STATUS	Married	4	4%
	Unmarried	94	94%
	Divorce	1	1%
	Widow/ Widower	1	1%
HAVE YOU EVER CONSUMED ENERGY DRINKS OR CAFFEINE?	Yes	100	100%
	No	0	0%
DID YOU KNOW THE EFFECT OF CAFFEINE AND ENERGY DRINKS?	Yes	81	81%
	No	19	19%

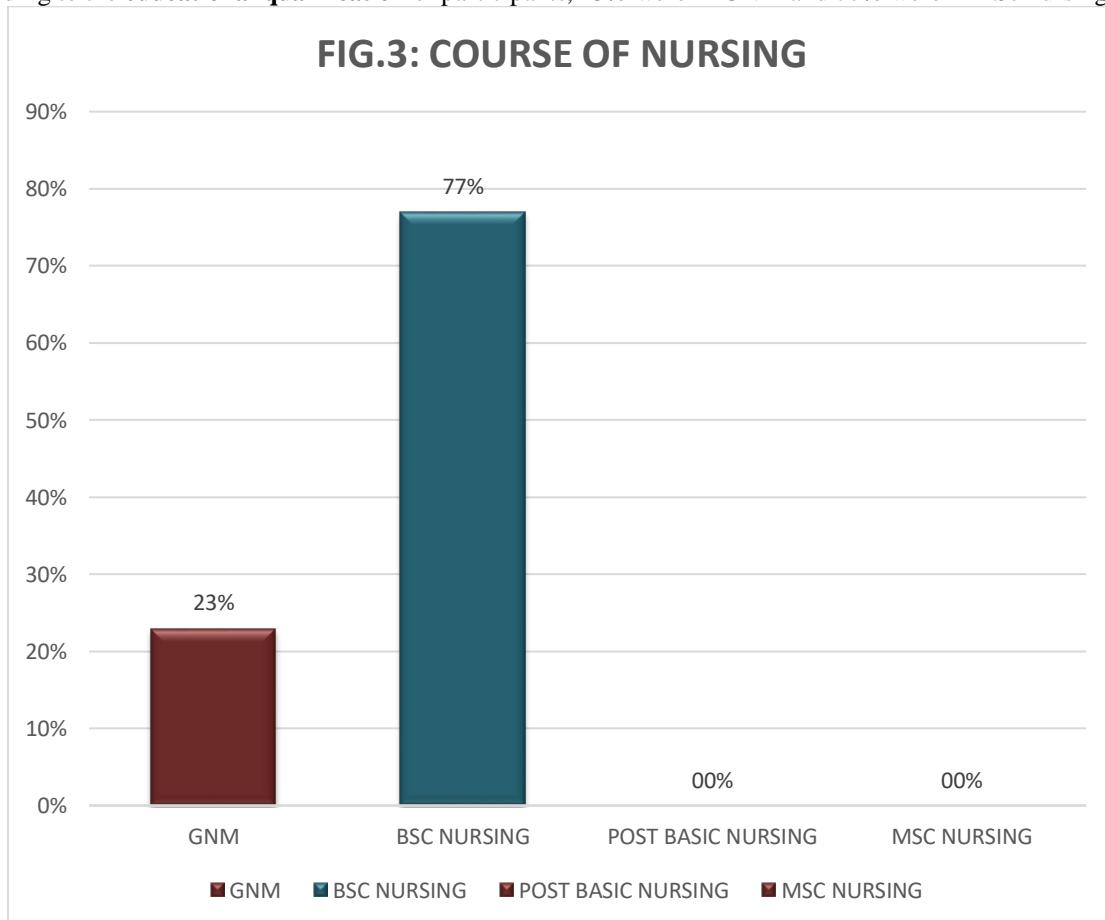
The **age** of participant, it indicates that 90% belong to the age group of 18-22 years.



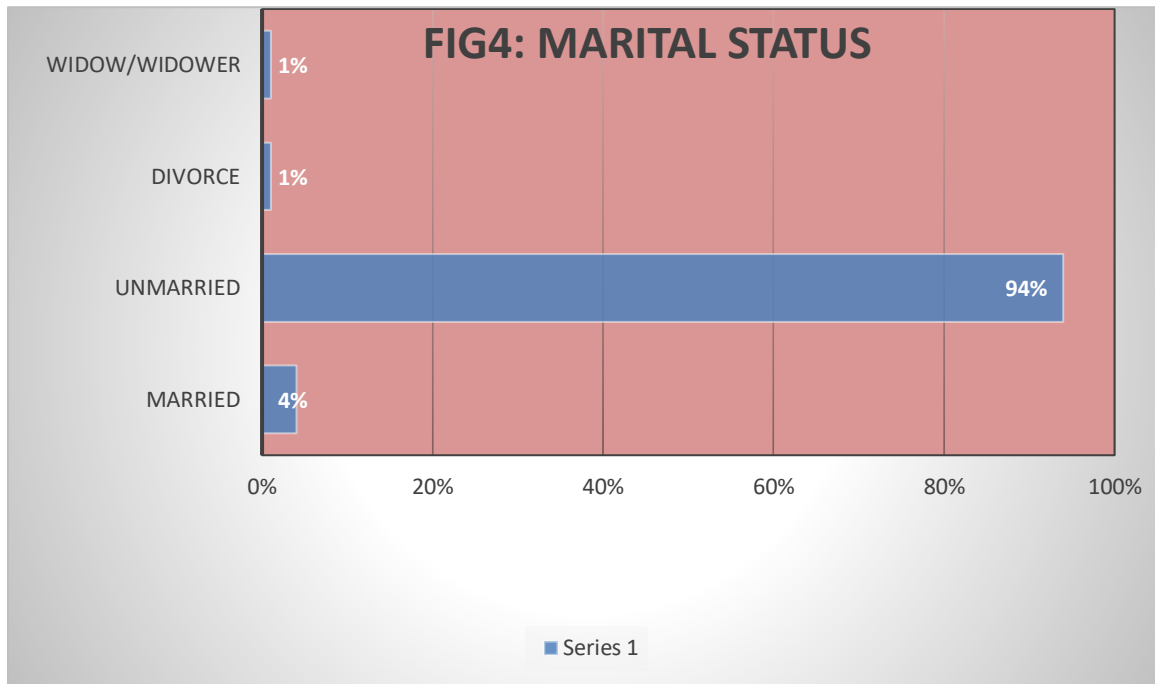
According to **gender**, majority of participants were females i.e., 87%.



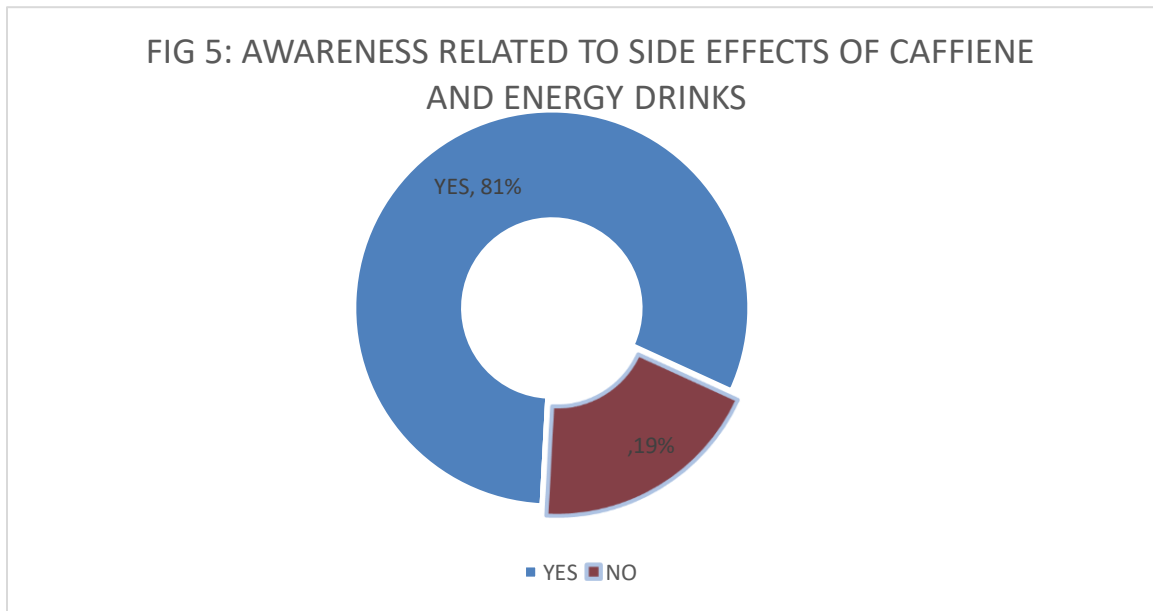
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Section-C Knowledge score of study sample regarding caffeine and energy drinks:

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Table 3: - Frequency And Percentage Distribution Of Knowledge Score N=100.

S.NO	LEVEL OF KNOWLEDGE	SCORE	FREQUENCY	PERCENTAGE
1	Good knowledge	11-16	11	11%
2	Average knowledge	6-10	35	35%
3	Poor knowledge	0-5	54	54%

Fig. 6: - Bar Diagram Showing the Percentage Distribution of Knowledge Score.

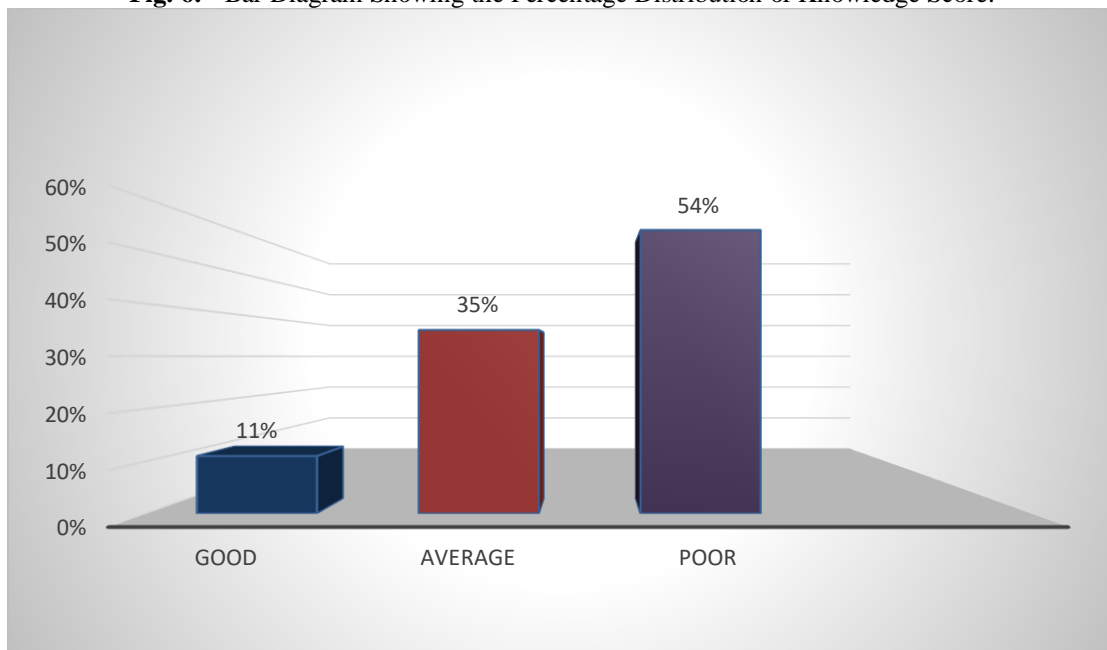


TABLE 4: - Mean, Median, Mode and Standard Deviation of The Collected Data.

MEAN	MEDIAN	MODE	STANDARD DEVIATION
6.34	5	5	3.23

Section-D.

The findings of the study show that there is no association between the demographic variables and the knowledge regarding caffeine and energy drinks. Therefore, it could be stated that the demographic variable and knowledge are not associated with each other.

Table 5: - Distribution Of Nursing Students Based on Association Between Demographic Variables and Knowledge Score Related to Caffeine and Energy Drinks.

S.NO.	DEMOGRAPHIC VARIABLES		KNOWLEDGE SCORE		X ²	df	INFERENCE
			Below median	Above median			
1.	Age	18- 22 years	52	38	9.251	4	0.055
		23 - 27 years	1	8			

		28 – 32 years	1	0			
		33 years & Above	0	0			
2.	Gender	Male	4	1			
		Female	44	43	3.75	2	0.157
3.	Course of nursing	GNM	10	13			
		BSc. Nursing	44	33	2.161	2	0.340
		Post basic Nursing	0	0			
		MSc. Nursing	0	0			
4.	Marital status	Married	0	4			
		Unmarried	52	42	6.471	6	0.373
		Divorce	1	0			
		Widow/ Widower	1	0			
5.	Awareness related to side effects	Yes	48	33	1.2	1	0.26
		No	3	6			

Conclusion: -

On the basis of study findings, the investigator concluded that to assess the awareness and consumption of caffeine and energy drinks among nursing students. Therefore, the investigator felt that the importance of awareness for the nursing students to reduce the consumption of caffeine and energy drinks and improved the quality of life.