DEPARTMENT OF COMMUNITY MEDICINE

ASSESSMENT OF PERCEPTION OF CAFFEINE AND ITS EFFECTS ON MENTAL

SATISFICATION AMONG THE STUDENTS OF ANMC.

Submitted by Group F1

Hajra Jalees	**F15-148**
Amber Zahid	**F15-146**
Mehvish Irshad	**F15-143**
Mohsin Kamran	**F15-132**
Mehboob Sami	**F15-136**
Umair Shafique	**F15-137**

Session (2018-2019)

DECLARATION

We declare that this report has been composed by our group and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where states otherwise by reference or acknowledgment, the work presented is entirely our own.

Hajra Jalees   F15-148

Amber Zahid   F15-146

Mehvish Irshad   F15-143

Mohsin Kamran   F15-132

Mehboob Sami   F15-136

Umair Shafique   F15-137

Supervisor:

Sir Raes Ur Rehman

DEDICATION

I dedicate this project to God Almighty my creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. He has been the source of my strength   throughout this program and on His wings only have I soared.

   This research   is dedicated to my father, who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my mother, who taught me that even the largest task can be accomplished if it is done one step at a time and friends, who have provided us with constant motivation and unwavering support throughout this entire journey and encouraged us at every turn.

ACKNOWLEDGEMENTS

For the sake of the Allah (SWT), the most Merciful and Beneficent. All gestures of recognition to Allah and His endowments for the culmination of this work. He offered us with the learning, capacity and chance to attempt this exploration work and to achieve our objectives attractively. Without his gifts, this accomplishment would not have been conceivable.

Our humblest appreciation to the Holy Prophet Muhammad (P.B.U.H) whose lifestyle is a persistent direction just as a wellspring of motivation and boldness for us.

We offer our most profound appreciation to Sir Raes Ur Rehman, for his important knowledge, direction, and mentorship through the procedure of our examination, just as furnishing us with the fundamental offices to complete our work. His positive consolation and patient methodology helped us monstrously through this procedure.

An uncommon gratitude to our family, companions and associates for their inspiration, petitions and consolation.

ABSTRACT

Caffeine consumption has lately become a trend among students nowadays, in all of its forms including tea, coffee, chocolate and energy drinks.   Where consumers only think about pros it comes with its cons to.   The research's sample is collected through stratified non convince sampling.   The conclusion of this research holds to be that caffeine consumption amongst students is increasing and purpose behind usage ranges from pleasure of caffeinated product to attempts to combat fatigue and stress.

LIST OF CONTENTS

LIST OF CHAPTERS

LIST OF TABLES

9	Dependence Distribution	
10	Reason of Consumption Distribution	
11	Mental Satisfaction Distribution	
12	Mental Alertness Distribution	
13	Stress Distribution	

LIST OF CROSSTABS

8	Program* Could you go 24 hours without caffeine?	
9	Program* On the scale of 1-5 with 1being the lowest how much do you think you depend upon caffeinated product	
10	Program* Do you drink caffeine for mental satisfaction	
11	Residence* Which caffeinated product do you intake most	
12	Residence* How much caffeine do you drink a day	
13	Residence* On the scale of 1-5 with 1being the lowest how much do you think you depend upon caffeinated product	
14	Residence* Could you go 24 hours without caffeine	
15	Residence* Why do you intake caffeine	

LIST OF ABBREVIATIONS

Sr. No.	Abbreviations	
1	CA	Carcinoma
2	CVS	Cardiovascular System
3	AIP	The American Institute of Pediatrics

ASSESSMENT OF PERCEPTION OF CAFFEINE AND ITS EFFECTS ON MENTAL SATISFICATION AMONG THE STUDENTS OF ANMC.

INTRODUCTION

Caffeine (1,3,7 trimethylxanthine) is one of the most abundantly used psychoactive drug used world-wide [1]. It acts on the central nervous system by antagonizing the adenine receptors, specifically the subtype's alpha 1 and alpha 2 [2].

Caffeine is the foremost widely utilized sedate within the world. And, like other drugs, caffeine features a significant impact on brain chemistry that produces it successful and addictive. To get it how caffeine works, it's helpful to break the science down into its impacts on two fundamental receptors within the brain: adenosine and dopamine.

Adenosine

  Adenosine may be a chemical compound that's one of four necessarily bases of the nucleic acids that make life conceivable. Since this chemical is made within the brain, it's planned to tie to adenosine receptors and moderate down nerve cell action to eventually cause drowsiness. Caffeine looks like adenosine to a nerve cell, but that when it ties to the adenosine receptor, it doesn't moderate the cell's action. Instep, caffeine enables the cell to recognize adenosine and causes the nerve cells to extend action. It too causes the blood vessels to choke, which boosts the terminating of neurons and triggers a sense of movement and crisis within the brain's pituitary organ.

Dopamine

Dopamine, a neurotransmitter that prompts feelings of pleasure in the brain, can be easily mimicked by drugs like heroin, cocaine, and, unsurprisingly, caffeine. Though caffeine's effect on dopamine levels is much weaker than heroine, the concept is the same—it's what creates the chemical addiction to caffeine

It is a natural alkaloid found in coffee beans, tea leafs, cocoa beans, cola nuts etc. Synthetically found in energy drinks, beverages, medication, chocolate . It is a vague mystery the discovery of coffee, but there is a myth that dates its discovery initially in Ethopia . It is now generated   in diverse countries, South Africa being the native producer of the plant but Brazil is the gross producer (2,595,000 metric tons) for 150 years, others include Vietnam, Indonesia, Uganda and Mexico [6] .

Approximately 90 % of a cup of coffee after oral ingestion, requires about 20 minutes for the caffeine product to be cleared from the stomach after consumption[7] . Commencing its effect after an hour and last for 3-4 hours. In 40 to 60 minutes peak plasma concentration is reached [8] . The quantity of caffeine is various in different beverages [9] (table)

Caffeine being a beverage consumed by 80 % of the world has many applications[8.2] , e.g. mental alertness, boost energy, the ability to concentrate is increased, improves psycho motor vigilance, improves long-term memory, socializing and arousal [9.2] . A study conducted by institute of medicine food and nutrition board committee on military nutrition research reported that ingesting 150 mg of caffeine enhances cognitive performance for at least 10 hours [4.2] . It is also known to help prevent several chronic diseases, liver diseases (cirrhosis and Hepatocellular CA) diabetes mellitus, Alzheimer disease, Parkinson disease, liver disease [9. 3] .

Caffeine is the most widely consumed legal drug worldwide [10] with all its pros, cons are definite in line. The effects of caffeine on CVS consists of direct myocardial stimulation (resulting in tachycardia, increased cardiac output, ectopic beats and palpations) ,increased respiratory rate and gastric secretion. A study conducted Shepard et al on medical students showed that relationship of caffeine consumption and examination stress resulted in elevation in blood pressure of 10/6 mmHg and 9/5 mmHg [7.2] .

The American Institute of Pediatrics prescribes a 100mg day by day caffeine restrain for youths. Meaning that a single container of coffee is twofold the prescribed limit. How numerous high scholars simply know are devouring less than 100mg of caffeine? My reply is: perhaps one. With refreshment names like "Wired" and shinning bundling and catchy commercials, it's all high scholars can do to not jump on the caffeinated refreshment temporary fad. These drinks are all over, and they're too in our schools. In spite of the fact that work is being done to diminish soft drinks in tall school distributing machines, those drinks are still effectively open, and sensibly estimated, for today's teenagers. So, the combination of straightforwardly promoting caffeine to youngsters, additionally the "remaining control" that caffeine gives high scholars when their plans are more boisterous than yours and mine combined, gives us a great thought why youngsters and understudies run to caffeine each day. But there are way better options to the yo-yo impacts of this white, fine sedate.(11)

LITERATURE REVIEW

Last year, Therapeutic News Today detailed on a ponder recommending that devouring three glasses of coffee a day may diminish the chance of liver cancer by 50%, whereas another ponder proposes that drinking four glasses a day might split the chance of mouth and throat cancer.Caffeine utilization has too been related with positive impacts on the brain.

Last year, a consider from the Harvard School of Open Wellbeing proposed that drinking between two and four mugs of coffee a day may decrease suicide hazard in grown-ups, whereas more later investigate found that ingesting 200 mg of caffeine each day may boost long-term memory. Other ponders have too proposed that caffeine admissions may secure against sort 2 diabetes, Parkinson's infection, cardiovascular disease and stroke. (1)

Poor rest and overwhelming utilize of caffeinated refreshments have been embroiled as hazard variables for a number of antagonistic wellbeing results. Caffeine utilization and utilize of other stimulants are common among college understudies all inclusive. In any case, to our information, no thinks about have inspected the impact of caffeinated refreshments on the rest quality of college understudies in Southeast Asian populaces. We conducted this consider to assess the designs of rest quality and to look at the degree to which destitute rest quality is related with utilization of vitality drinks, caffeinated refreshments, and other stimulants among 2,854 Thai college understudies. (2)

A study shows that the consumption of caffeine tends to increase as the years in education system pass by. Undergrad students (N = 691) were given the 1992 Caffeine Utilization Survey of Landrum and given data on age, sex, and year in school. A subset (n = 168) of those completing the survey were too given the Morningness–Eveningness Survey of Horne and Ostberg. Investigation

demonstrated that the normal admissions of caffeine was generally 1,600 mg, i.e., a extend from 13 mg to 21,840 mg per week. More seasoned understudies expended more caffeine than more youthful ones, and understudies with an Evening identity inclination devoured more caffeine within the evening and nighttime hours than those with a Morning identity inclination. (3)

OBJECTIVES

1-To assess the perception of caffeine and its effects on mental satisfaction in medical& non medical students.

2-To find the frequency of caffeine consumed in medical and non students at times of stress.

3-To raise awareness of the harmful effects of excessive intake.

4- The trend of caffeine consumption at different times of the day among male and female students.

MATERIALS AND METHODOLOGY

Study design: Descriptive and Cross Sectional Study

Study area: Azrah Naheed Medical College, Lahore

Study duration: 1 month

Study subjects: MBBS students in Azrah Naheed Medical College

Inclusion criteria: all ages, both sexes that consume caffienated products, willing to participate

Exclusion criteria: Non consumers , patients unwilling to participate

Ethical Clearance

The purpose and process of the study will be explained to all the subjects. They will be informed about the benefits of study. Assurance will be given to protect the life, health, privacy, and dignity of the human study subjects.

Data Collection Methods / Instruments

Structured Questionnaires will be used to interview the subjects and data will subsequently be analyzed. Before induction in the study, informed consent will be obtained. Demographics details (age, gender, education, area of residence, employment status) will be taken. Then patients will be asked about their preception of caffeine consumption and its effects on mental satisfication

Sampling Size

200 MBBS students

Sampling Technique

Non-probability convenience sampling

Data Management and Analysis Plan

Epi Info and SPSS computer software will be used for entry, compilation, and analysis of the data. Descriptive and inferential stat will be applied on data. Chi Square test of significance will be applied.

RESULTS

Frequencies

Table No:1 Frequency of distribution of caffeine consumption by respondents

Program

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medical	99	49.5	49.5	49.5
	Non-medical	101	50.5	50.5	100.0
	Total	200	100.0	100.0	

Chart No:1

Consumption of caffiene among medical and non medical students

94%   6%   6%

■ Medical
■ Non Medical
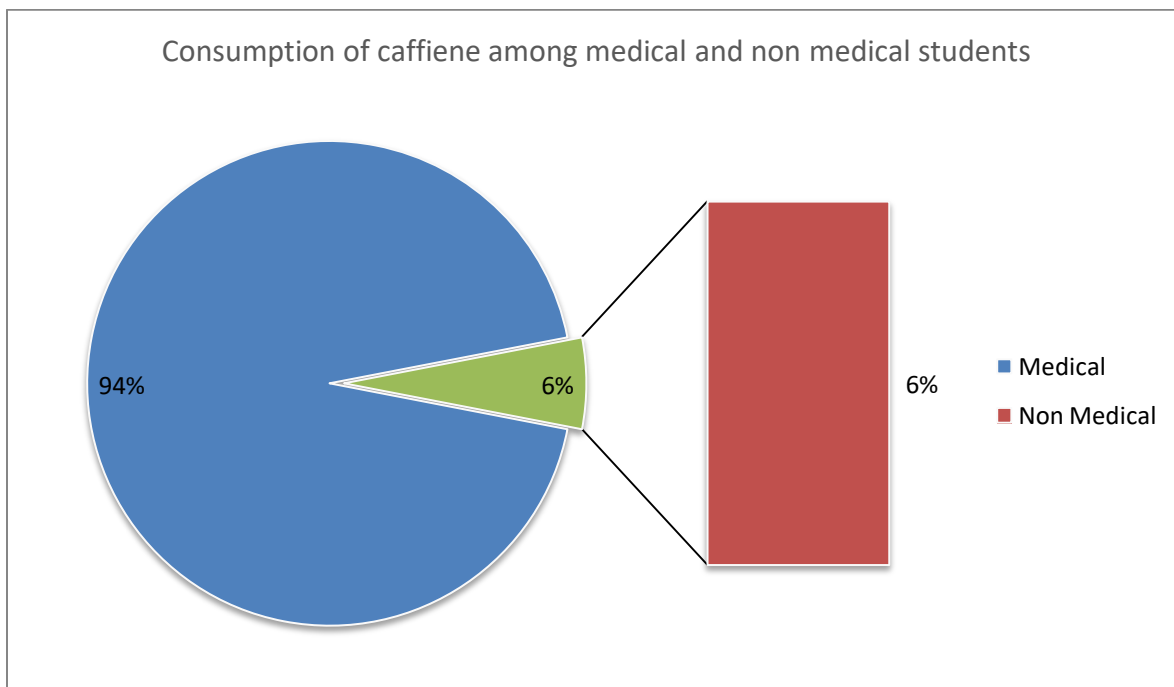
Table No2 : Frequency of distribution of caffeine consumption by respondents.

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	98	49	49	49
	Female	102	51	51	100
	Total	200	100	100	

Chart No:2

Consumption among Male and female

49%   51%   51%

Male
Female
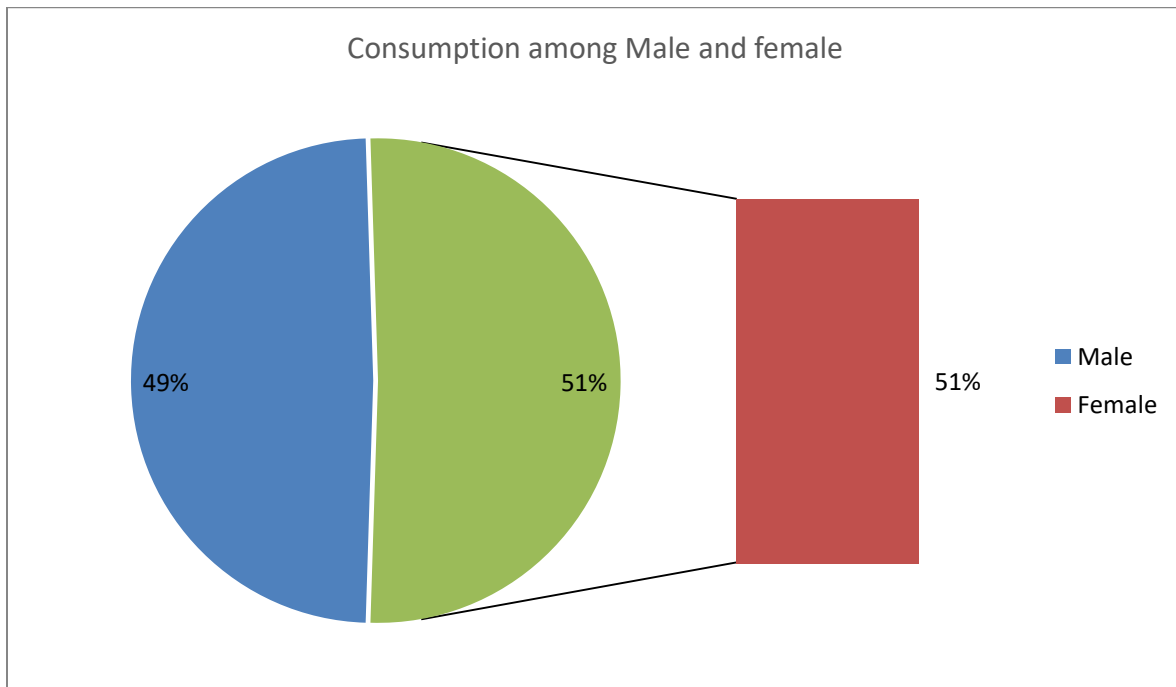
Table No:3 Frequency of distribution of caffeine consumption by respondents

Residency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hostelied	99	49.5	49.5	49.5
	Day scholar	101	50.5	50.5	100.0
	Total	200	100.0	100.0	

Chart No:3

Consumption of caffiene among hostelied and day scholars

49% 51% 51%

■ Hostelied
■ Day Scholar
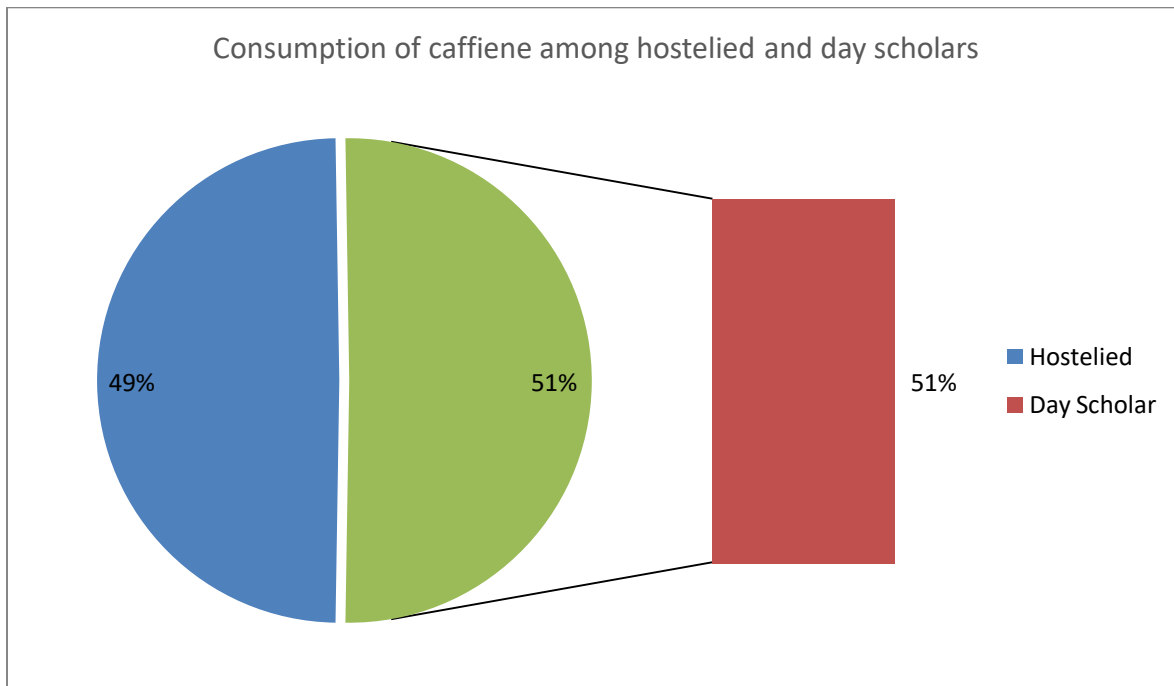
Table No:4 Frequency of distribution of caffeine consumption among different age groups.

Age

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	*18*	*11*	*5.5*	*5.5*	*5.5*
	19	*23*	*11.5*	*11.5*	*17.0*
	20	*28*	*14.0*	*14.0*	*31.0*
	21	*50*	*25.0*	*25.0*	*56.0*
	22	*36*	*18.0*	*18.0*	*74.0*
	23	*22*	*11.0*	*11.0*	*85.0*
	24	*21*	*10.5*	*10.5*	*95.5*
	25	*5*	*2.5*	*2.5*	*98.0*
	26	*2*	*1.0*	*1.0*	*99.0*
	29	*1*	*.5*	*.5*	*99.5*
	30	*1*	*.5*	*.5*	*100.0*
	Total	*200*	*100.0*	*100.0*	

Chart no:4

Consumption of caffeine among different age groups
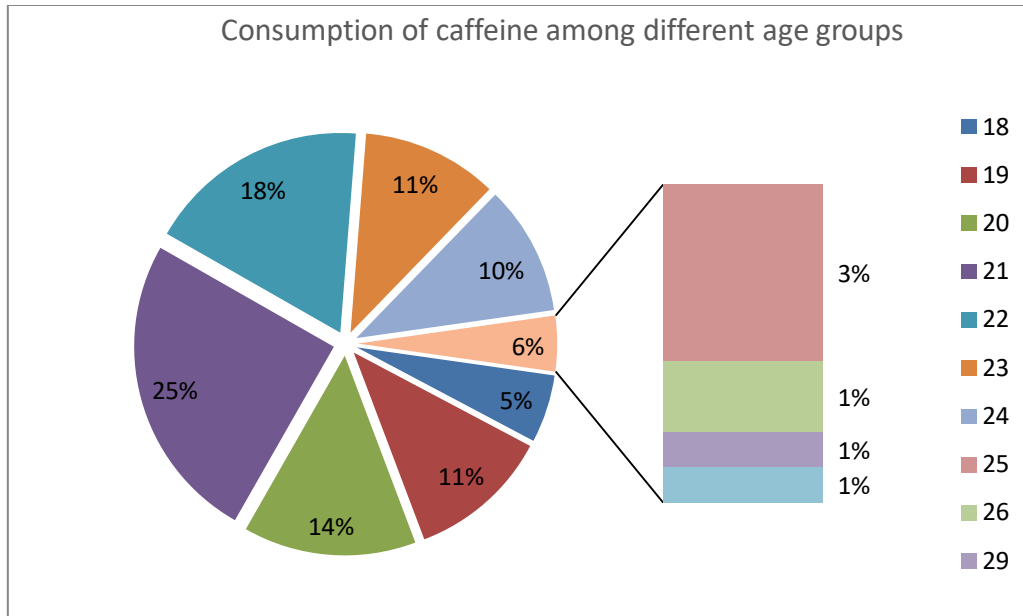
Table No:5 Frequency of distribution of knowledge of caffeine by respondents

Do you know anything about caffeine?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Yes**	162	81.0	81.0	81.0
	No	38	19.0	19.0	100.0
	Total	200	100.0	100.0	

Chart No:5

Do you know anything about caffiene

81%   19%   19%

Yes
No
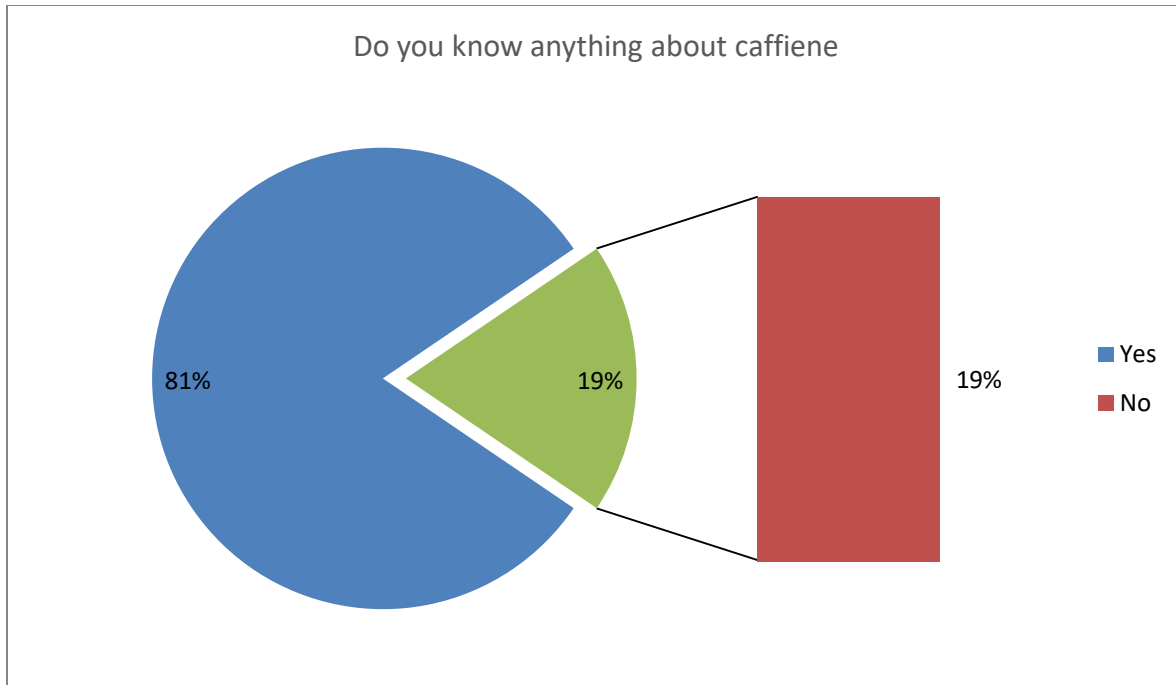
Table No:6 Frequency of distribution of most consumption by respondents

When do you have the most consumption of caffeine?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Morning**	51	25.5	25.5	25.5
	Afternoon	39	19.5	19.5	45.0
	Evening	69	34.5	34.5	79.5
	Night	41	20.5	20.5	100.0
	Total	200	100.0	100.0	

Chart No:6

When do you have the most consumption of caffeine?

	Legend
■	Morning
■	Afternoon
■	Evening
■	Night

19%
56%
25%
35%
21%
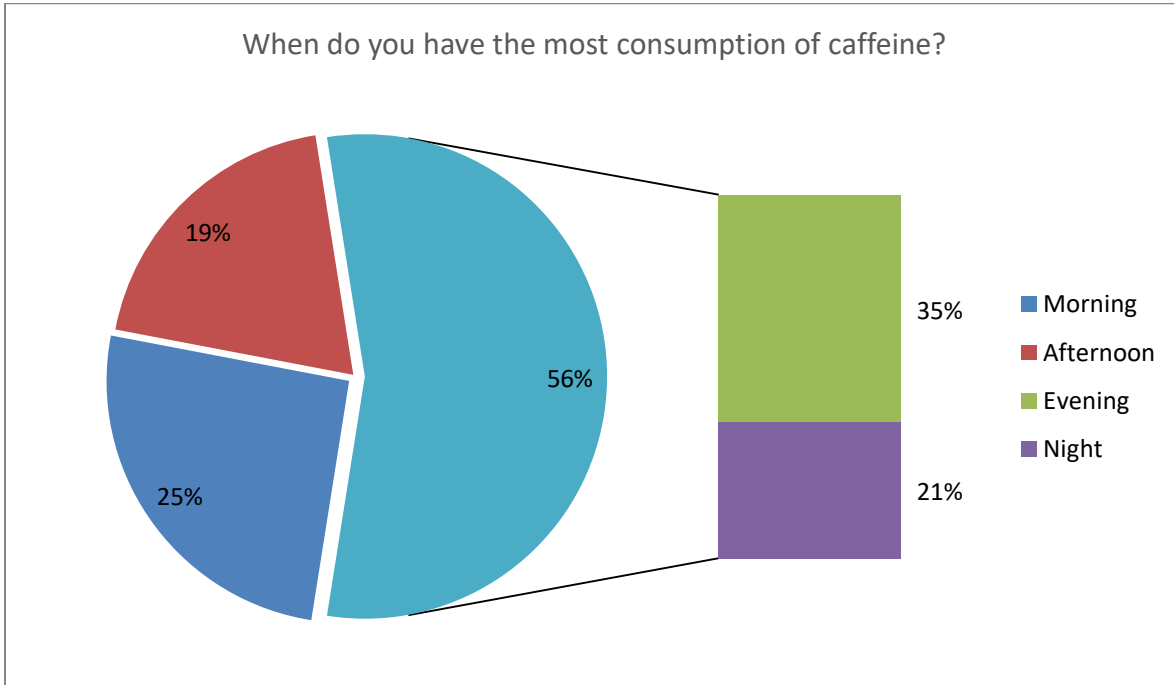
Table No:7 Frequency of distribution of most consumed caffeinated product by respondents

Which caffeinated product do you intake most?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Tea	108	54.0	54.0	54.0
	Coffee	30	15.0	15.0	69.0
	Chocolate	35	17.5	17.5	86.5
	Energy drink	27	13.5	13.5	100.0
	Total	200	100.0	100.0	

Chart No:7

Which caffeinated product do you intake most?

- Tea
- Coffee
- Chocolate
- Energy Drink

54% · 15% · 31% · 17% · 14%
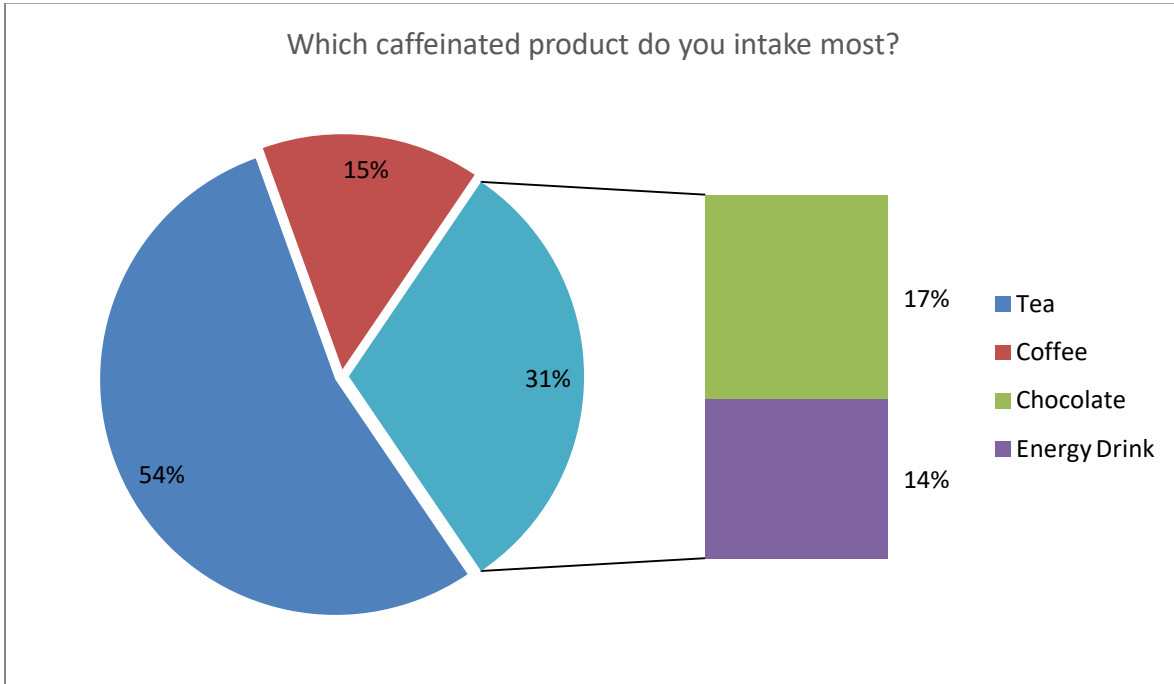
Table No:8 Frequency of distribution of how long one can go without caffeine by respondents

Could you go 24 hours without caffeine?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	111	55.5	55.5	55.5
	No	89	44.5	44.5	100.0
	Total	200	100.0	100.0	

Chart No:8

Could you go 24 hours without caffeine?

55%   45%   45%

■ Yes
■ No
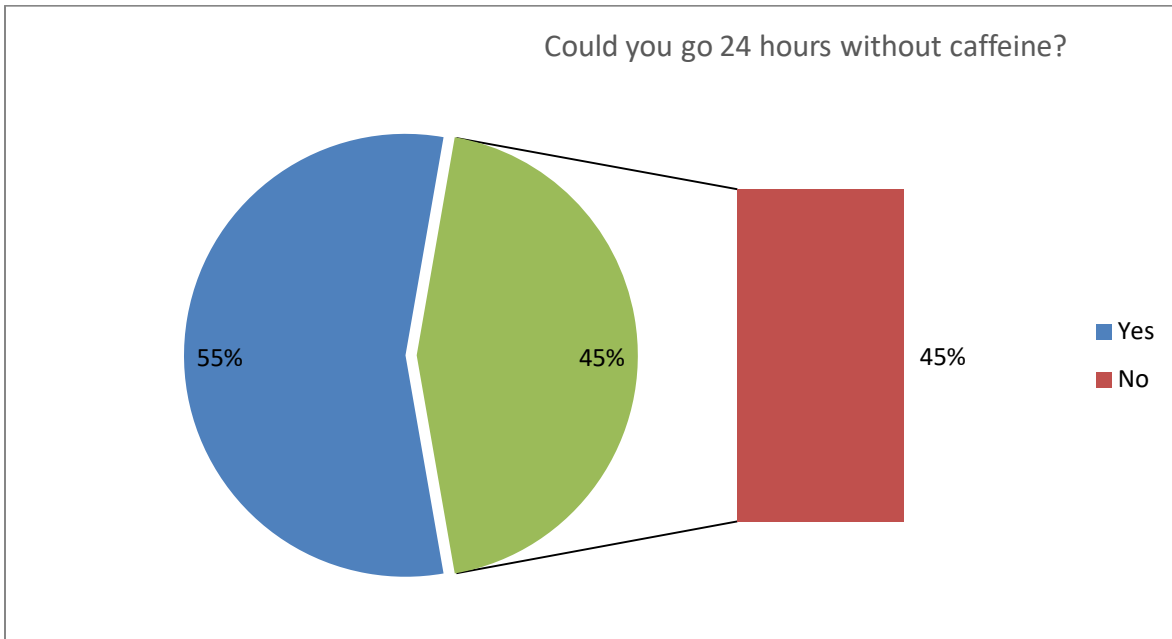
Table No:9 Frequency of distribution of dependence on caffeine consumption by respondents

On the scale of 1-5 with 1 being the lowest how much do you think you depend upon caffeinated product?

	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	**Lowest**	65	32.5	32.5	32.5
	Mild	52	26.0	26.0	58.5
	Moderate	45	22.5	22.5	81.0
	High	18	9.0	9.0	90.0
	Severe	20	10.0	10.0	100.0
	Total	200	100.0	100.0	

Chart No:9

On the scale of 1-5 with 1 being the lowest how much do you think you depend upon caffeinated product?
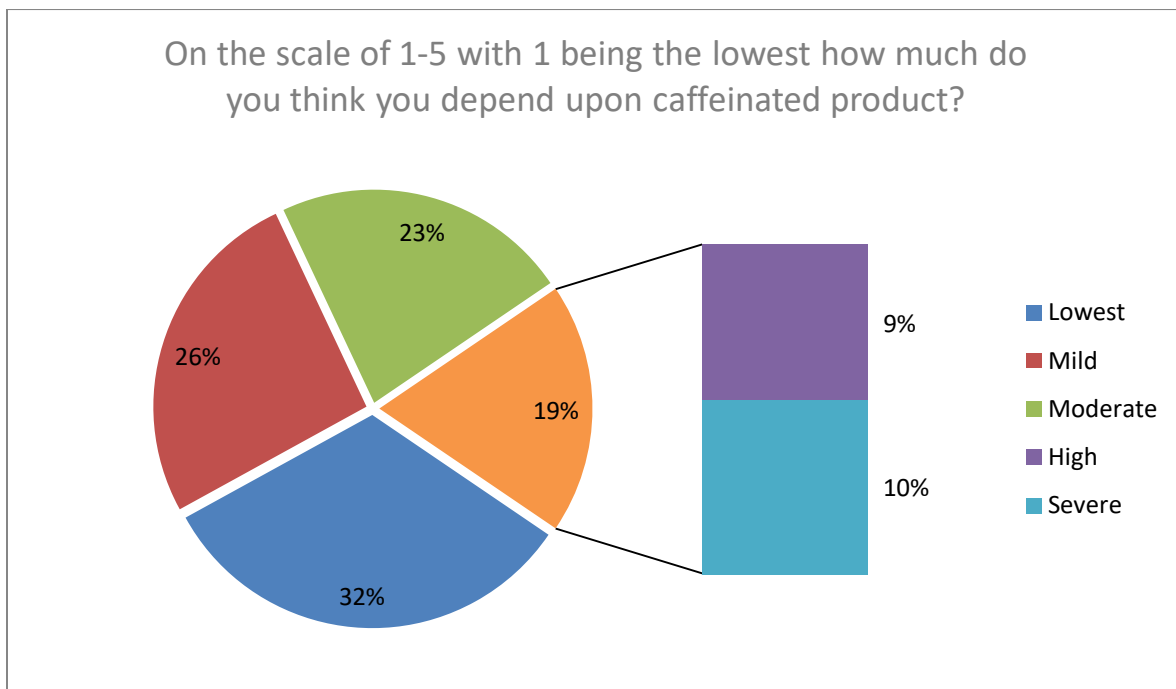
Table No:10 Frequency of distribution of why caffeine is consumed by respondents

Why do you intake caffeine?

	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	Increase concentration	41	20.5	20.5	20.5
	Enjoying drink	77	38.5	38.5	59.0
	Reduce sleep	36	18.0	18.0	77.0
	Driving	7	3.5	3.5	80.5
	Reduce fatigue	39	19.5	19.5	100.0
	Total	200	100.0	100.0	

Chart No:10
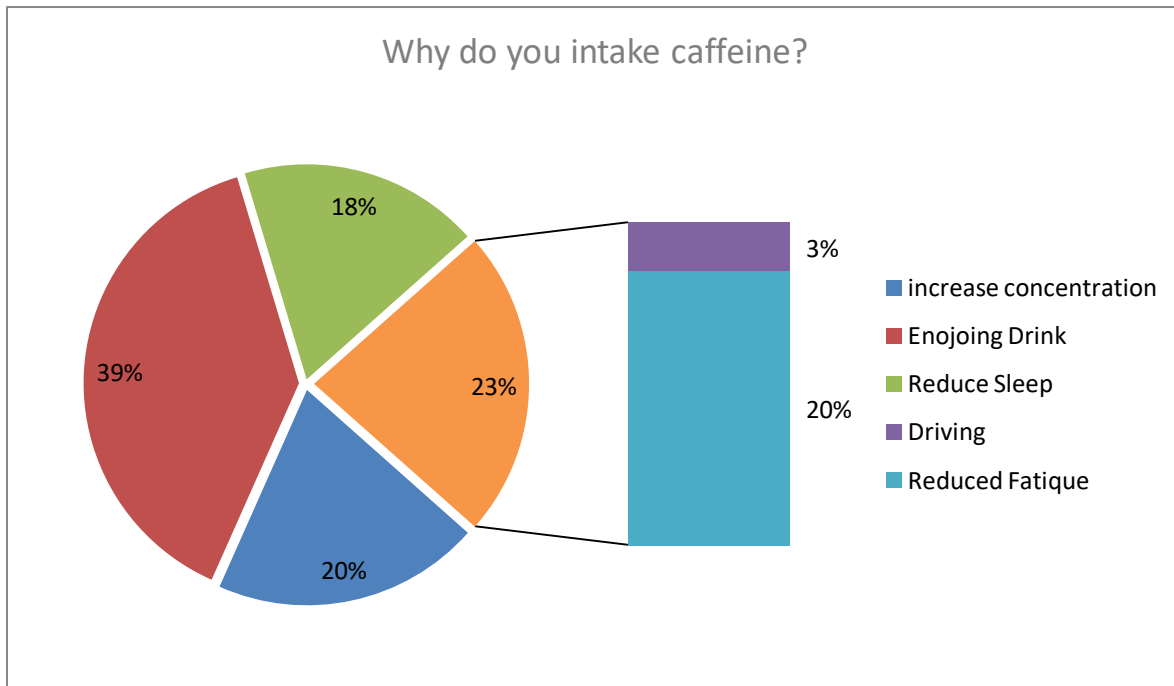
Table No:11 Frequency of distribution of mental satisfaction by respondents

Do you drink caffeine for mental satisfaction?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Yes**	94	47.0	47.0	47.0
	No	106	53.0	53.0	100.0
	Total	200	100.0	100.0	

Chart No:11

Do you drink caffeine for mental satisfaction?

47%   53%   53%

■ Yes
■ No
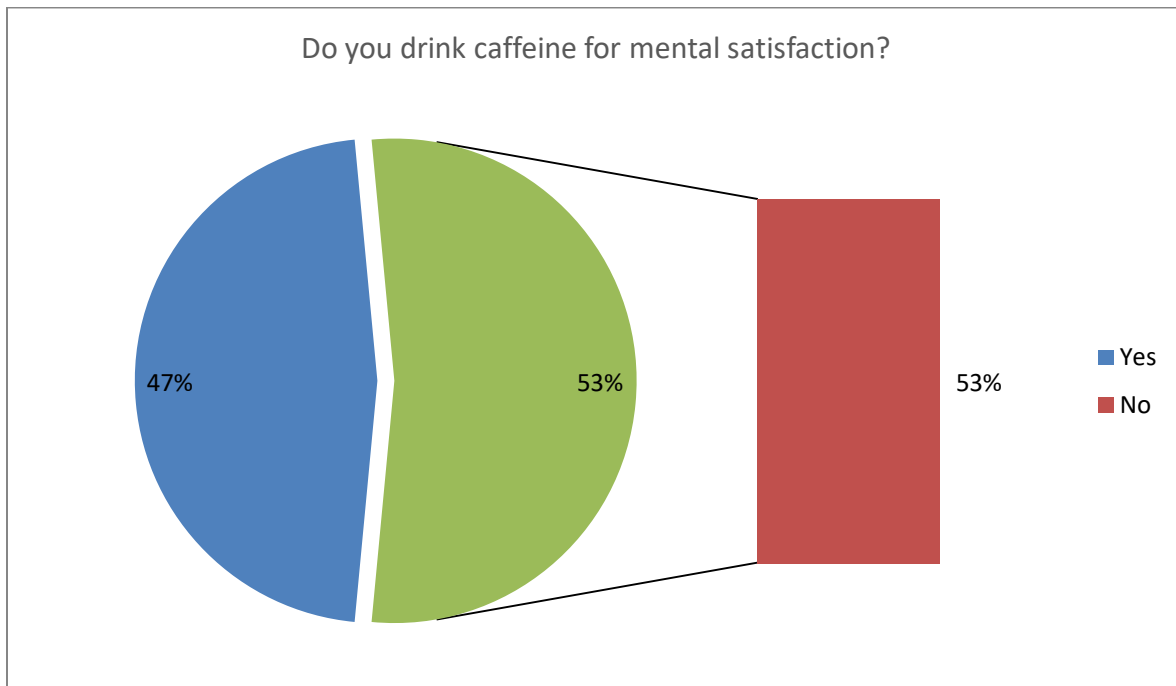
Table No:12 Frequency of distribution of effect of caffeine consumption on mental alertness by respondents.

Does intake of caffeinated product increase you mental alertness/help you concentrate better?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sometimes	69	34.5	34.5	34.5
	Most of the time	76	38.0	38.0	72.5
	Always	21	10.5	10.5	83.0
	Never	34	17.0	17.0	100.0
	Total	200	100.0	100.0	

Chart No:12

Series 1

- 38%
- 28%
- 11%
- 34%
- 17%
- Sometimes
- Most of the time
- Always
- Never
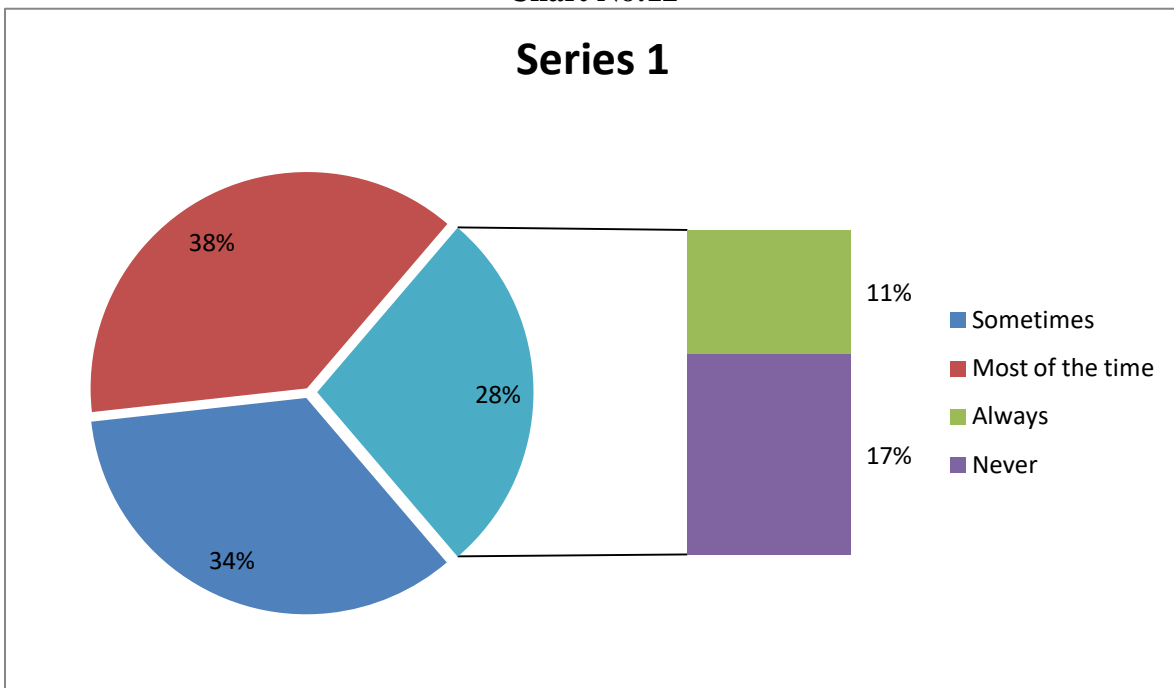
Table No:14 Frequency of distribution of amount of caffeine consumption during stressful time by respondents

Do you feel that you increase the amount of intake of caffeine during stressful time?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Sometimes**	66	33.0	33.0	33.0
	Most of the time	61	30.5	30.5	63.5
	Always	29	14.5	14.5	78.0
	Never	44	22.0	22.0	100.0
	Total	200	100.0	100.0	

Chart No :14

Do you feel that you increase the amount of intake of caffeine during stressful time?

- Sometimes 33%
- Most of the time 30%
- Always 15%
- Never 22%
- 37%
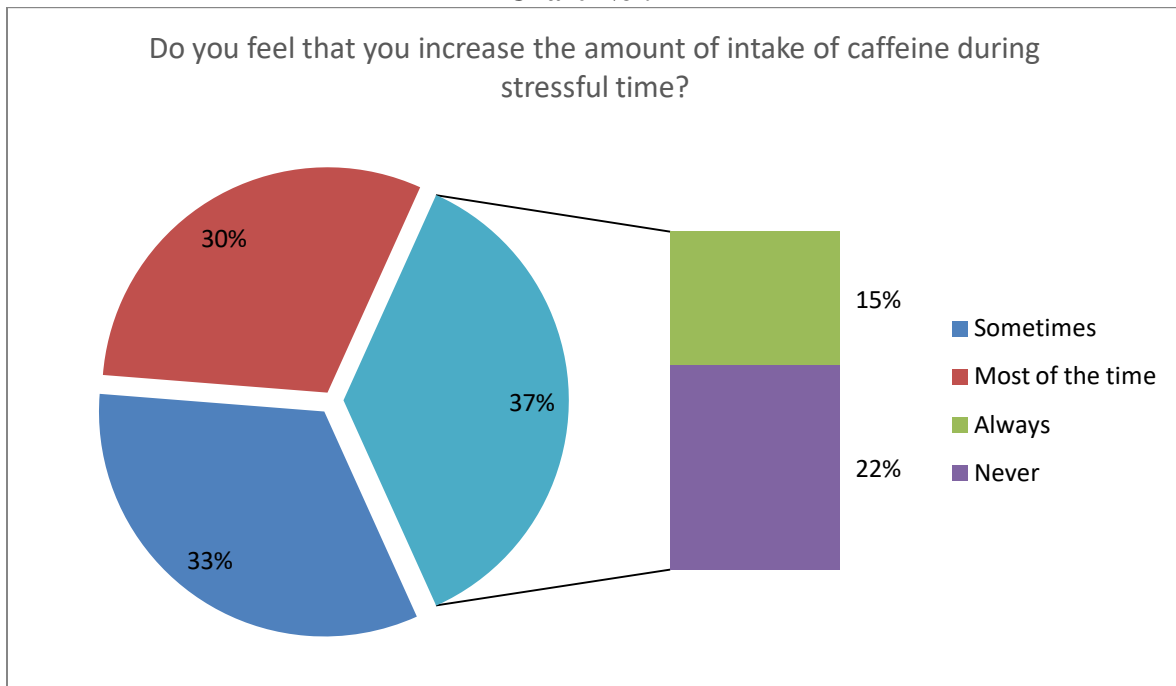
RESULTS

Cross Tabs

Table 1: Frequency distribution of age and dependence of caffeinated product by respondent.

newage * On the scale of 1-5 with 1being the lowest, how much do you think you depend upon caffeinated product? Cross tabulation

Count							
		On the scale of 1-5 with 1being the lowest, how much do you think you depend upon caffeinated product?					
		Lowest	Mild	Moderate	High	Severe	Total
newage	lower age group	17	19	16	4	6	62
	higher age group	48	33	29	14	14	138
Total		65	52	45	18	20	200

Pearson Chi-Square 0.025

Table 2: Frequency distribution of gender and what caffeinated product is consumed by respondent the most.

Crosstab

Count						
		Which caffeinated product do you intake most?				
		Tea	Coffee	Chocolate	Energy drink	Total
gender	Male	49	18	11	20	98
	Female	59	12	24	7	102
Total		108	30	35	27	200

Pearson Chi-Square 0.004

Table 3: Frequency distribution of gender with consumption of caffeine by respondent.

Crosstab

Count						
		When do you have the most consumption of caffeine?				
		Morning	Afternoon	Evening	Night	Total
gender	Male	24	21	24	29	98
	Female	27	18	45	12	102
Total		51	39	69	41	200

Pearson Chi-Square 0.003

Table 4: Frequency distribution of gender and why caffeinated product is taken by respondent.

Crosstab

Count							
		Why do you intake caffeine?					
		Increase concentration	Enjoying drink	Reduce sleep	Driving	Reduce fatigue	Total
gender	Male	22	49	15	3	9	98
	Female	19	28	21	4	30	102
Total		41	77	36	7	39	200

Pearson Chi-Square 0.001

Table 5: Frequency distribution of program and knowledge of caffeinated product by respondent.

Crosstab

		Do you know anything about caffeine?		Total
		Yes	No	
program	Medical	88	11	99
	Non-medical	74	27	101
Total		162	38	200

Pearson Chi-Square 0.005

Table 6: Frequency distribution of program and which caffeinated product is taken by respondent.

Crosstab

Count

		Which caffeinated product do you intake most?				Total
		Tea	Coffee	Chocolate	Energy drink	
program	Medical	62	14	15	8	99
	Non-medical	46	16	20	19	101
Total		108	30	35	27	200

Pearson Chi-Square 0.05

Table 7: Frequency distribution of program and time of consumption of caffeine product by respondent.

Crosstab

Count		When do you have the most consumption of caffeine?				
		Morning	Afternoon	Evening	Night	Total
program	Medical	19	16	43	21	99
	Non-medical	32	23	26	20	101
Total		51	39	69	41	200

Pearson Chi-Square 0.03

Table 8: Frequency distribution of program with how long respondent can last without caffeine.

Crosstab

Count		Could you go 24 hours without caffeine?		
		Yes	No	Total
program	Medical	65	34	99
	Non-medical	46	55	101
Total		111	89	200

Pearson Chi-Square 0.004

Table 9: Frequency distribution of program with dependence of caffeine by respondent.

Crosstab

Count		On the scale of 1-5 with 1being the lowest how much do you think you depend upon caffeinated product?					Total
		Lowest	Mild	Moderate	High	Severe	
program	Medical	45	21	18	7	8	99
	Non-medical	20	31	27	11	12	101
Total		65	52	45	18	20	200

Pearson Chi-Square 0.05

Table 10: Frequency distribution of program with mental satisfaction of caffeine by respondent.

Crosstab

Count		Do you drink caffeine for mental satisfaction?		Total
		Yes	No	
program	Medical	39	60	99
	Non-medical	55	46	101
Total		94	106	200

Pearson Chi-Square 0.03

Table 11: Frequency distribution of residency with dependence of caffeine by respondent.

Crosstab

Count		Which caffeinated product do you intake most?				Total
		Tea	Coffee	Chocolate	Energy drink	
residency	Hostalite	64	6	14	15	99
	Day scholar	44	24	21	12	101
Total		108	30	35	27	200

Pearson Chi-Square 0.001

Table 12: Frequency distribution of residency with amount of caffeine taken by respondent.

Crosstab

Count		How much caffeine do you drink a day?				Total
		Once	Twice	Thrice	More	
residency	Hostalite	35	26	16	22	99
	Day scholar	45	36	8	12	101
Total		80	62	24	34	200

Pearson Chi-Square 0.010

Table 14: Frequency distribution of residency with dependence of caffeine by respondent.

Crosstab

Count							
		On the scale of 1-5 with 1being the lowest how much do you think you depend upon caffeinated product?					
		Lowest	Mild	Moderate	High	Severe	Total
Residency	Hostalite	34	22	16	11	16	99
	Day scholar	31	30	29	7	4	101
Total		65	52	45	18	20	200

Pearson Chi-Square 0.010

Table 13: Frequency distribution of residency with how long they can go without caffeine by respondent.

Crosstab

Count				
		Could you go 24 hours without caffeine?		
		Yes	No	Total
residency	Hostalite	48	51	99
	Day scholar	63	38	101
Total		111	89	200

Pearson Chi-Square 0.048

Table 15: Frequency distribution of residency with why do respondents intake caffeine.

Crosstab

Count							
		Why do you intake caffeine?					
		Increase concentration	Enjoying drink	Reduce sleep	Driving	Reduce fatigue	Total
residency	Hostalite	22	29	16	6	26	99
	Day scholar	19	48	20	1	13	101
Total		41	77	36	7	39	200

Pearson Chi-Square 0.010

DISCUSSION

Cross Tabs

- o Table 3 shows that most of our male respondent 49% consume tea among caffeinated products and among females this percentage is 59% who prefer tea. The least preferable caffeinated product in males is chocolate which is taken by 11% and in female energy drink is less common which is taken by 7%.
- P vales is < 0.004 which is quite significant.

- o Table 4 shows that majority of males 29% consumes caffeinated products at night and majority of females 45% during evening time.
- P value is <0.003 which shows a better result.

- o Table 5 shows that 49% males takes their caffeinated products because they enjoy their drink and majority of females 30% take to reduce fatigue.
- P value is <0.001 which is significant.

- o Table 6 shows that 88% medical students know about caffeine while among non-medical, this percentage is 74%. The result 11% medical and 27% non-medical students are unaware,
- P value is <0.005 which is significant.

- Table 7 shows a majority of medical students 62% consumes tea among caffeinated products and most of the percentage (46%) of non-medical students also prefer tea.
  - P vales is <0.05

- Table 8 shows that 43% medical students consumes caffeinated products during evening and 32% non-medical during morning.
  - P value is <0.03

- According to table 9, 65% of medical students can go 24 hours without caffeine but in non-medical, most students (35%) can go 24 hours without caffeine.
  - P value shows a significant result which is <0.004

- Table 10 shows 45% medical students are on scale no 1 which shows the lowest dependence on caffeinated products and 7% have high dependency of scale no4. In non-medical, 31% are on scales no2 which shows mild dependence and 11% are highly dependent.

FREQUENCY

- o Table 1: Slightly majority of non-medical students consumes caffeine with 50.5%. However, 49.5% of medical students consumes which is also quite high.

- o Table 2: Based on gender, majority of caffeine consumers are females with 51%. Males are moderately lower then females with 49% of intake of caffeine.

- o Table 3: 50.5% of day-scholars consumes caffeine compared to 49.5% of boarders (Hostel students).

- o Table 5: The frequency regarding an idea of caffeine is high. 81% of people are aware about caffeine whereas 19% have no knowledge about it.

- o Table 6: The consumption of caffeine is high in the evening with 34.5%. Morning comes in second having 25.5%. Third one is Night where its 20.5%. The minimum among them all is afternoon with 19.5%.

- o Table 7: Most of the intake of caffeinated product is tea with 54%. After that, its chocolate with 17.5%. Coffee comes at third with 15%. The last but not the least is Energy drink with 13.5%.

- Table 8: Majority can go without having caffeine for 24 hours straight with percentage of 55.5 whereas 44.5% cannot go without it for the same amount of time.

- Table 9: The dependency on caffeinated products in lowest category is 32.5%. The mild one has 26%. Moderate level of dependency is 22.5%. Severe is of about 10%. The High level is of 9%.

- Table 10: One of the main reasons of intake of caffeine is Enjoying the drink with 38.5%. 20.5% of them take it for increase concentration. Then comes reduce fatigue with 19.5%. The reduce sleep has 18%. The last one is driving with 3.5%.

- Table 11: Most of the people (53%) don't drink caffeine for mental satisfaction. However, 47% do drink caffeine for their mental satisfaction.

- Table 12: Increased concentration by the intake of caffeinated products is most of the time with 38%. Sometimes also holds 34.5%. For people on whom it never works is 17%. For people on whom it always works is 10.5%.

o   Table 13: The percentage frequency of sometimes increased intake during stressful times is 33%. The percentage of "most of the time" is 30.5%. People who never increased their intake of caffeine during stressful time is 22%. People who always increase their intake of caffeine is 14.5%.

CONCLUSION

To conclude this research we see that both sexes are almost equally indulged in caffeinated products but there reasons of intake varies. Men are prone to take caffeine for the sake of pleasure of the beverage or product where as women have very different approach to caffeine consumption, the indulge in such products in order to reduce fatigue or to give them a boost in their routine lifestyle. To further prove this point the results also showed the trend of caffeine intake during different time during the day. Men tend to have caffeinated products during the night as source of pleasure or during gathers with friends, whereas female take it mostly during the evening when the have exhausted or are low on stamina. This can help predict that it is a requirement of women rather than a recreation. Tea being the most consumed caffeinated product among respondents followed by chocolate. If we were to compare the results of medical and non medical students, then the survival of non medical students without caffeine for 24 hour seems unlikely where as majority of medical students claim that they would.

RECOMMENDATION

We attempt to raise awareness among students what the over consumption of caffeine can lead to, what are the side effects that come along with over usage. It should be kept in mind that anything over its limit is heading towards harm. Normal limits varying fromv400/450 mg/day in adults, for young children 45mg/day and for pregnant women 300mg/ day is the criteria set. Since students regardless medical or non medical tend to be indulged in some kind of caffeinated products. The reasons being attempting to maintain better concentration or reducing fatigue either way there must be lifestyle changes that must be in cooperated to combat such problems. For example for achieving better concentration one should opt for meditation and to counter fatigue one should consider underlying cause, if there is lack of sleep that the leading cause then scheduling their routine should be considered.

Further studies should be conducted on the trend of caffeine consumption according to mood, gradual increment of caffeine consumption with age and the why one is compelled to intake caffeine at times of stress.

REFERENCES

1. Distelberg, B. J., Staack, A., Elsen, K. D. D., & Sabaté, J. (2017). The effect of coffee and caffeine on mood, sleep, and health-related quality of life. *Journal of Caffeine Research*, *7*(2), 59-70.

2. Al Ghali, R. M., Al Shaibi, H., Al Majed, H., & Haroun, D. (2016). Caffeine consumption among Zayed University students in Dubai, United Arab Emirates: A cross-sectional study. *Arab Journal of Nutrition and Exercise-ISSN: 2518-6590*, *1*(3), 187-202.

3. Nawrot, P., Jordan, S., Eastwood, J., Rotstein, J., Hugenholtz, A., & Feeley, M. (2003). Effects of caffeine on human health. *Food Additives & Contaminants*, *20*(1), 1-30.

4. Temple, J. L., Bernard, C., Lipshultz, S. E., Czachor, J. D., Westphal, J. A., & Mestre, M. A. (2017). The safety of ingested caffeine: a comprehensive review. *Frontiers in psychiatry*, *8*, 80.

5. Iliff, S. L. (2017). Student conceptions of self-reflection and its relationship to occupational competence and clinical performance in level II fieldwork (Doctoral dissertation).

6. Ahmad, M., E Hinna, R., & Tayyab, A. (2017). Knowledge and trends of caffeine consumption Among medical and non medical students of Lahore Pakistan. *Pakistan Journal of Neurological Sciences (PJNS)*, *12*(2), 24-30.

7. Aslam, H. M., Mughal, A., Edhi, M. M., Saleem, S., Rao, M. H., Aftab, A., ... & Khan, A. M. H. (2013). Assessment of pattern for consumption and awareness regarding energy drinks among medical students. *Archives of Public Health*, *71*(1), 31.

8. Lee, K., Human, G. P., Fourie, J. J., Louw, W. A., Larson, C. O., & Joubert, G. (2009). Medical students' use of caffeine for 'academic purposes' and their knowledge of its

benefits, side-effects and withdrawal symptoms. *South African Family Practice*, *51*(4).

9. Olsen, N. L. (2013). Caffeine consumption habits and perceptions among University of New Hampshire students.

10. O'Brien, M. C., McCoy, T. P., Rhodes, S. D., Wagoner, A., & Wolfson, M. (2008). Caffeinated cocktails: energy drink consumption, high-risk drinking, and alcohol-related consequences among college students. *Academic Emergency Medicine*, *15*(5), 453-460.

11. Oteri, A., Salvo, F., Caputi, A. P., & Calapai, G. (2007). Intake of energy drinks in association with alcoholic beverages in a cohort of students of the School of Medicine of the University of Messina. *Alcoholism: Clinical and Experimental Research*, *31*(10), 1677-1680.

12. Hidiroglu, S., Tanriover, O., Unaldi, S., Sulun, S., & Karavus, M. (2013). A survey of energy-drink consumption among medical students. J Pak Med Assoc, 63(7), 842-5.

13. Laporte, J. R., Cami, J., Gutierrez, R., & Laporte, J. (1977). Caffeine, tobacco, alcohol and drug consumption among medical students in Barcelona. *European journal of clinical pharmacology*, *11*(6), 449-453.

14. Ashton, C. H., & Kamali, F. (1995). Personality, lifestyles, alcohol and drug consumption in a sample of British medical students. Medical education, 29(3), 187-192.

15. Lohsoonthorn, V., Khidir, H., Casillas, G., Lertmaharit, S., Tadesse, M. G., Pensuksan, W. C., ... & Williams, M. A. (2013). Sleep quality and sleep patterns in relation to consumption of energy drinks, caffeinated beverages, and other stimulants among Thai college students. *Sleep and Breathing*, *17*(3), 1017-1028.

16. Mino, Y., Yasuda, N., Fujimura, T., & Ohara, H. (1990). Caffeine consumption and anxiety and depressive symptomatology among medical students. Arukoru kenkyu to

ANNEXURE

ASSESSMENT OF PERCEPTION OF CAFFEINE AND ITS EFFECTS ON MENTAL SATISFACTION AMONG THE STUDENTS OF ANMC.

Name_____   Age_____   Gender_____

Year of MBBS _____

Hostelied   ☐   Day Scholar   ☐

1: Do you know anything about caffeine?

    Yes   ☐   No ☐

2:   Which caffeinated product do you intake most ?

   a) Tea   b)   Coffee   c)   Chocolate   d)   Energy drink

3: When do you have the most consumption of caffeine?

   a) Morning   b)   Afternoon   c)   Evening   d)   Night

4: How much caffeine do you drink a day?

a) Once   b) Twice   c) Thrice   d) More _____

5: Could you go 24 hours without caffeine?

a) Yes   ☐   b) No   ☐

6: On the scale of 1-5 with 1 being the lowest, How much do you think you depend upon caffeinated products?

a) 1   b) 2   c) 3   d) 4   e) 5

7: Why do you intake caffeine?

a) Increase concentration   b) enjoying the drink   c) reduce sleep   d) driving

e) reduce fatigue

8: Do you drink caffeine for   mental satisfaction?

a) Yes   b) No

9: Does intake of caffeinated product increase your mental alertness or help you concentrate better?

A) Sometimes   B) Most of the time   C) Always   d) Never

10: Do you feel that you increase the amount of intake of caffeine during stressful times?

A) Sometimes   B) Most of the time   C) Always   d) Never