

UNRAVELING THE THREAD: AN OBSERVATIONAL STUDY ON SUBSTANCE ABUSE AND ITS IMPACT ON PSYCHIATRIC SYMPTOMS AMONG A DIVERSE AGE GROUP

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KEYWORDS

Substance Abuse, Observational, Psychiatric symptoms

ABSTRACT:

Background: Substance abuse is a significant public health concern that has profound implications for mental health and psychiatric symptoms. Misuse of drugs, such as alcohol, nicotine, caffeine, opiates, and cannabis, can result in a variety of behavioural and psychological problems, frequently making pre-existing mental health conditions worse or causing the emergence of new ones. **Material and Methods:** Over the course of six months, we carried out observational research. There were 628 individuals in all, 460 of whom were men (73.24%) and 168 of whom were women (26.75%). The majority of individuals (30.09%) were between the ages of 26 and 35. The intensity of drug misuse and psychiatric symptoms are evaluated using the Addictions for Triage and Evaluation (MATE-en 2.1) Measurements, the Brief Psychiatric Rating Scale (BPRS), and the Depression, Anxiety, and Stress Scale (DASS-21). **Results:** All age categories had a high prevalence of drug usage (71.33% for alcohol, 67.51% for tobacco, 13.21% for opiates, 27.22% for cannabis, and 72.61% for caffeine). Alcohol has a greater effect on psychiatric disorders than other substances (anxiety: 61.94%, depression: 47.13%, sleep disturbances: 58.12%, hallucinations: 26.91%, and disorientation: 27.07%). **Conclusion:** This study emphasizes the pervasiveness of substance use across diverse age groups including the detrimental impacts of alcohol, tobacco, opiates, cannabis, and caffeine on mental health. It demonstrates alarmingly high prevalence rates, indicating a pressing public health concern.

INTRODUCTION:

Psychoactive substances are a medication or other substance that affects brain function and causes changes in mood, cognition, awareness, thoughts, feelings, or behaviour. These drugs have the ability to change neurotransmitter activity and brain chemistry, which can have a variety of physiological and psychological impacts. Examples of Psychoactive substance include alcohol, nicotine, caffeine, cannabis and opiates. This can lead to long-lasting behavioural symptoms that persist even after detoxification [1].

The World Drug Report for 2023 states that in 2022, one in every 17 persons globally had taken drugs, which is 23% higher than ten years earlier. The global rate of drug usage is still very high. One in every seventeen persons worldwide, aged 15 to 64, reported using drugs over the previous 12 months in 2022. From 240 million in 2011 to 296 million in 2022, the expected number of users increased (5.8% of the world's population between the ages of 15 and 64). This is a 23% increase, partially attributable to population growth [2,3]. The Press Information Bureau reports that Andhra Pradesh has the following rates of substance usage prevalence: 2.08% for cannabis, 4.46% for opioids, 3.3% for sedatives, and 17.10% for alcohol [4,5].

Substance Abuse Denotes the use of particular substances, like alcohol, tobacco products, drugs, inhalants, and other ingestible or absorbable materials, which could result in dependency and other

unfavourable effects. The lack of reliable and precise information on the epidemiological aspects of substance use has hindered efforts to better understand the prevalence, patterns, and trends of substance use in India, despite some attempts having been made in this direction [6,7].

Alcohol, nicotine, opiates, cannabis, and caffeine, are widely consumed substances with significant impacts on mental health. Alcohol alters neurotransmitter activity, particularly affecting GABA and glutamate receptors, leading to dependency and mental health issues such as anxiety and depression, affecting 1.7% of women and 8.6% of men globally [8-11]. Nicotine, found in tobacco products, stimulates dopamine production in the brain's reward circuits but raises anxiety levels and can lead to cardiovascular problems. In India, 21.4% of the population uses smokeless tobacco like pan masala and gutka, which contain harmful ingredients that can cause oral cancer and other organ damage [12,13]. Opiates like morphine are effective pain relievers but carry a high risk of addiction and can lead to cognitive deficits and severe mental health issues [14,15]. Cannabis interacts with the endocannabinoid system, with heavy use linked to anxiety, depression, and cognitive impairment [16,17]. Caffeine stimulates the central nervous system but excessive consumption may worsen mental health issues. Each substance poses unique risks that significantly affect physical and mental well-being [18,19].

Anxiety is a mental health condition characterized by intense fear and nervousness that disrupt daily functioning. It involves the amygdala, hippocampus, and prefrontal cortex, with neurotransmitter imbalances in GABA and serotonin contributing to symptoms [20]. Depression, or major depressive disorder, leads to profound sadness and loss of interest, linked to monoamine deficiencies and hippocampal dysfunction [21]. Sleep disturbances encompass various disorders affecting cognitive processes and memory due to inadequate sleep. Mechanisms include neural circuit control and thalamic activity during REM sleep [22]. Hallucinations involve perceptions without external stimuli, often linked to dopamine dysregulation and neural network disruptions [23]. Disorientation manifests as confusion about surroundings or identity, often resulting from substance use or withdrawal. It can stem from cognitive impairments caused by drugs like lithium or ecstasy [24]. Overall, these psychiatric disorders highlight the complex interplay between neurobiology and mental health.

MATERIALS AND METHODS

Patients

Between September 2023 and February 2024, all consecutive patients presenting Educational Institutes present in Guntur and in the inwards and outpatients Department of Psychiatry at Tertiary Care Hospital, Guntur were screened for inclusion in the study. A total of 628 patients were screened with substance abuse.

Severity assessment

The intensity of drug misuse and psychiatric symptoms are evaluated using the Addictions for Triage and Evaluation (MATE-en 2.1) Measurements, the Brief Psychiatric Rating Scale (BPRS), and the Depression, Anxiety, and Stress Scale (DASS-21).

Study method

This study was an observational study, conducted in a tertiary care teaching hospital and educational institutes. This study involved all the subjects who were included in the inclusion and exclusion criteria. Subjects were observed for their prevalence of substance abuse and its effects on psychiatric symptoms. An informed consent form was taken from the patient. We compared the data obtained and reported the outcomes.

Statistical analysis

All the data were collected, entered, and assessed in an advanced Microsoft Excel spreadsheet. The data obtained were statistically analysed, and the results were represented using Pearson's Chi Square

correlation analysis from IBM SPSS Software (version 29.0.2.0) to assess the relationship between the variables. Descriptive statistics were reported as percentages.

RESULTS

A total of 628 subjects had met the inclusion criteria during 6-month time period and were included in the study. Data was expressed as percentage.

TABLE 01: DISTRIBUTION OF SUBJECTS BASED ON AGE GROUPS

Table 1 depicts the information regarding the distribution of subjects within the age group of 18 years to 60 years. The mean value of subjects is **157** and the standard deviation (SD) is ± 25.97 . Majority of the cases were found within the age group of 26-35 years (30.09%), followed by 18-25 years (26.59%), 36-45 years (22.13%), and 45-60 years (21.17%).

Age groups (N=157)	No. of subjects(n=121)		Total Percentage (%)
	Mal es	Femal es	
18 - 25	121	46	26.59
26 - 35	148	41	30.09
35 - 45	101	38	22.13
45 - 55	90	43	21.17

TABLE 01: DISTRIBUTION OF SUBJECTS BASED ON AGE GROUPS

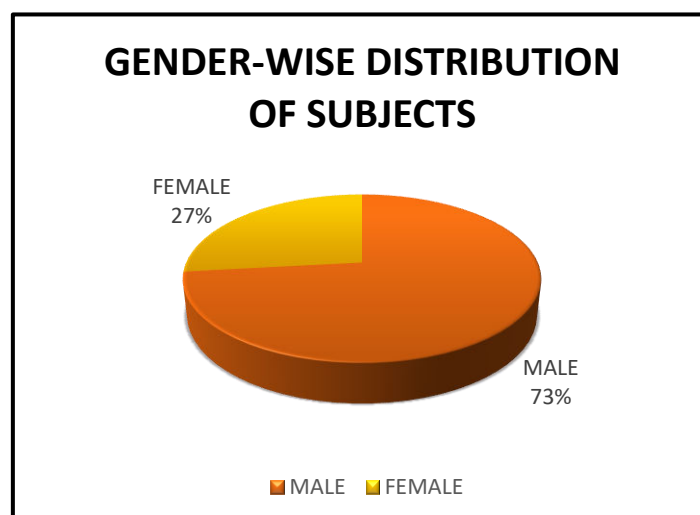


FIGURE 01: GENDER- NUMBER OF SUBJECTS

From all the subjects (628) majority of subjects are male with 460 subjects (73.24 %) and only 168 (26.38%) are female subjects, which is represented in the Figure-01.

TABLE 02: DISTRIBUTION OF SUBJECTS BASED ON ALCOHOL CONSUMPTION

Table02depictstheinformationregardingthedistributionofthesubjects based on alcohol consumption among diverse age groups. From all the subject's majority of the cases with low alcohol consumption were found within the age group 18-25 years (11.30%), medium alcohol consumption was found within the age group 26-35 years (9.17%) and with high alcohol consumption were found within the age group 46-60 years (7.48%), which is represented in the Figure-02.

TABLE 02: - NUMBER OF SUBJECTS BASED ON ALCOHOL CONSUMPTION

S.NO	AGE GROUPS	NO. OF SUBJECTS	LOW	MEDIUM	HIGH	NO
1.	18-25	167	71	17	22	57
2.	26-35	189	41	61	38	49
3.	36-45	139	14	52	32	41
4.	46-60	133	10	43	47	33

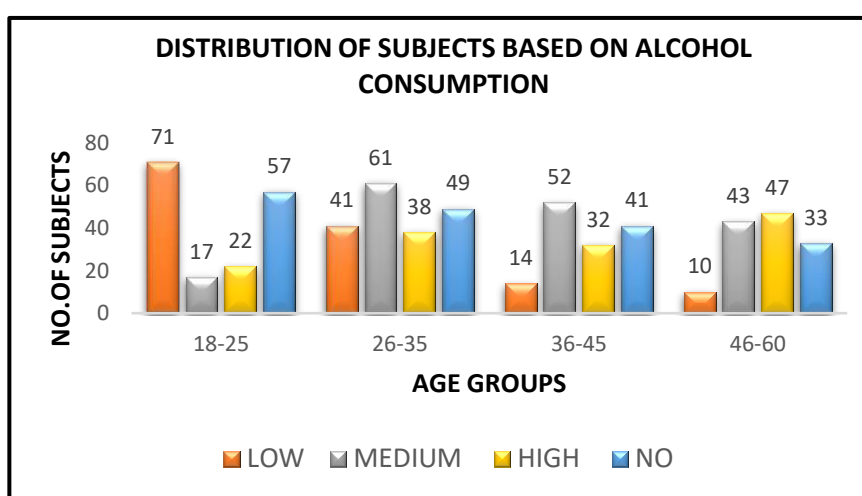


FIGURE 02: - GRAPHICAL REPRESENTATION OF AGE GROUPS Vs NO. OF SUBJECTS BASED ON ALCOHOL CONSUMPTION

TABLE 03: DISTRIBUTION OF SUBJECTS BASED ON TOBACCO USE

Table03depictstheinformationregardingthedistributionofthesubjects based on tobacco use among diverse age groups. From all the subject's majority of the cases with low and medium tobacco use were found within the age group 26-35 years (9.39% and 5.09% respectively), and with high tobacco use were found within the age group 36-45 years (9.23%), which is represented in the Figure- 03.

TABLE 03: - NUMBER OF SUBJECTS BASED ON TOBACCO USE

S.NO	AGE GROUPS	NO. OF SUBJECTS	LOW	MEDIUM	HIGH	NO
1.	18-25	167	41	25	29	72
2.	26-35	189	59	32	41	57
3.	36-45	139	11	30	58	40
4.	46-60	133	18	24	56	35

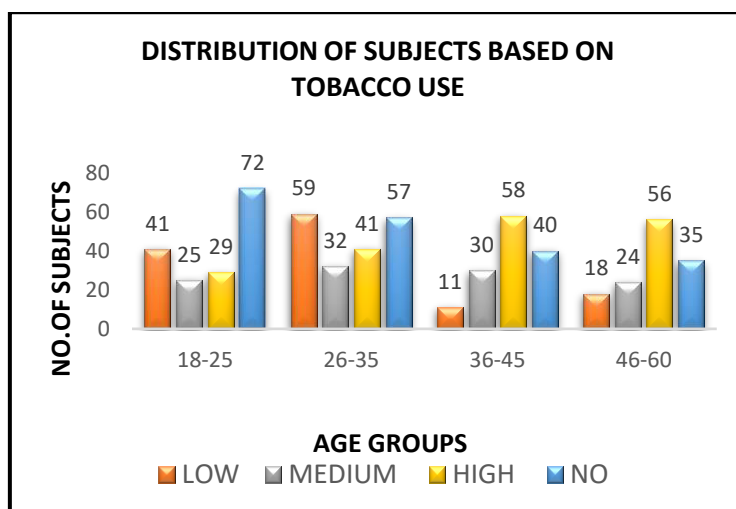


FIGURE 03: - GRAPHICAL REPRESENTATION OF AGE GROUPS Vs NO. OF SUBJECTS BASED ON TOBACCO USE

TABLE 04: DISTRIBUTION OF SUBJECTS BASED ON OPIATES CONSUMPTION

Table 04 depicts the information regarding the distribution of the subjects based on opiates consumption among diverse age groups. From all the subject's majority of the cases with low and medium opiates consumption were found within the age group 46-60 years (1.27% and 1.91% respectively), and with high opiates consumption were found within the age group 26-35 years (1.75%), which is represented in the Figure-04.

TABLE 04: - NUMBER OF SUBJECTS BASED ON OPIATES CONSUMPTION

S.NO	AGE GROUPS	NO. OF SUBJECTS	LOW	MEDIUM	HIGH	NO
1.	18-25	167	0	0	10	157
2.	26-35	189	03	09	11	166
3.	36-45	139	03	10	10	166
4.	46-60	133	08	12	07	106

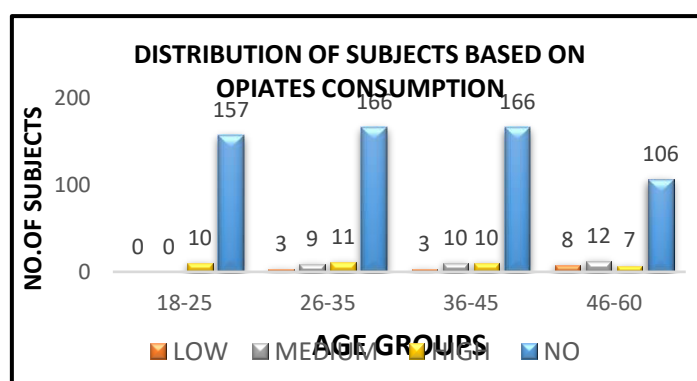


FIGURE 04: - GRAPHICAL REPRESENTATION OF AGE GROUPS Vs NO. OF SUBJECTS BASED ON OPIATES CONSUMPTION

TABLE 05: DISTRIBUTION OF SUBJECTS BASED ON CANNABIS CONSUMPTION

Table05depictstheinformationregardingthedistributionofthesubjects based on cannabis consumption among diverse age groups. From all the subject's majority of the cases with low cannabis consumption were found within the age group 26-35 years (4.77%) and medium and high cannabis consumption were found within the age group 18-25 years (2.86% and 5.73% respectively), which is represented in the Figure-05.

TABLE 05: - NUMBER OF SUBJECTS BASED ON CANNABIS CONSUMPTION

S.NO	AGE GROUPS	NO. OF SUBJECTS	LOW	MEDIUM	HIGH	NO
1.	18-25	167	09	18	36	104
2.	26-35	189	30	11	14	134
3.	36-45	139	09	04	16	110
4.	46-60	133	12	05	07	109

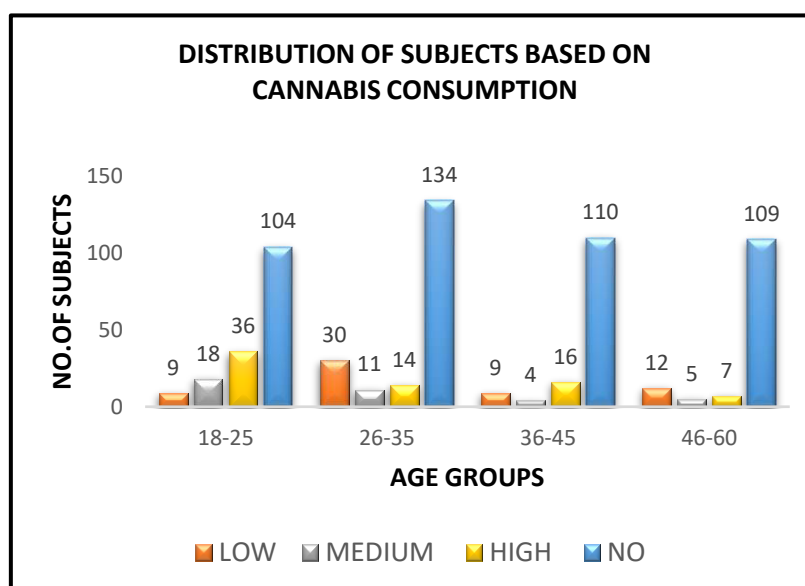


FIGURE 05: - GRAPHICAL REPRESENTATION OF AGE GROUPS Vs NO. OF SUBJECTS BASED ON CANNABIS CONSUMPTION

TABLE 06: DISTRIBUTION OF SUBJECTS BASED ON CAFFEINE CONSUMPTION

Table06depictstheinformationregardingthedistributionofthesubjects based on caffeine consumption among diverse age groups. From all the subject's majority of the cases with low caffeine consumption were found within the age group 18-25 years (8.75%) and medium and high caffeine consumption were found within the age group 26-35 years (10.66% and 8.28% respectively), which is represented in the Figure-06.

TABLE 06: - NUMBER OF SUBJECTS BASED ON CAFFEINE CONSUMPTION

S.NO	AGE GROUPS	NO. OF SUBJECTS	LOW	MEDIUM	HIGH	NO
1.	18-25	167	55	36	22	54
2.	26-35	189	23	67	52	47
3.	36-45	139	26	28	44	41
4.	46-60	133	35	36	32	30

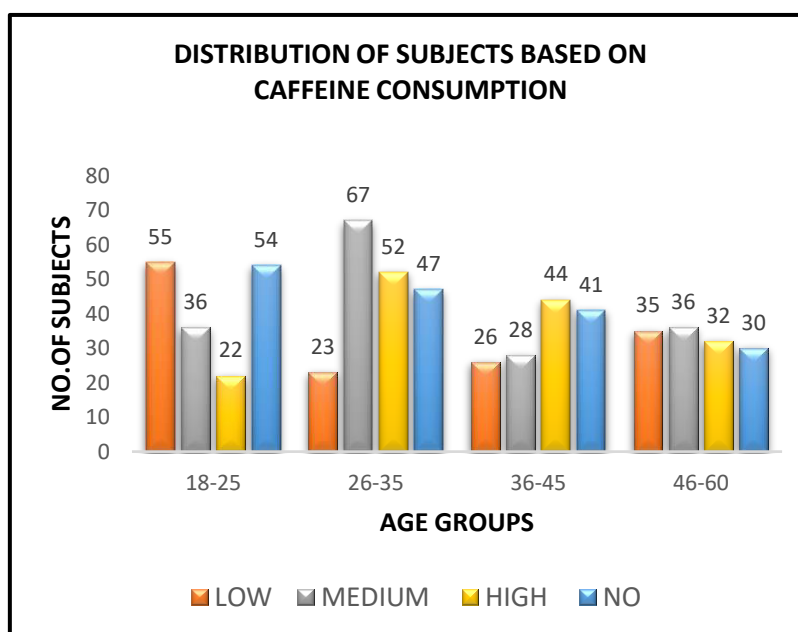


FIGURE 06: - GRAPHICAL REPRESENTATION OF AGE GROUPS Vs NO. OF SUBJECTS BASED ON CAFFEINE CONSUMPTION

TABLE 07: DISTRIBUTION OF SUBJECTS BASED ON ANXIETY IN ALCOHOL, TOBACCO, OPIATES, CANNABIS, CAFFEINE CONSUMPTION

Table 07 depicts the information regarding the distribution of the subjects based on anxiety in alcohol, Tobacco, Opiates, Cannabis, and Caffeine consumption respectively among diverse age groups. From all the subject's majority of the instances with mild anxiety is found in low alcohol consumption (10.50%), moderate anxiety is found in medium alcohol consumption (10.03%) and severe anxiety is found in high alcohol consumption (7.32%). High tobacco uses accounts for the majority of cases of mild, moderate, and severe anxiety among all subjects (12.73%, 9.55%, and 7.96%). The majority of mild anxiety instances among all subjects were identified in those who used medium amounts of opiates (2.07%), whereas moderate and severe anxiety were discovered in those who consumed large amounts of opiates (1.59% and 2.54%, respectively). The majority of mild anxiety instances among all subjects were identified in those who used modest amounts of cannabis (3.34%), whereas moderate and severe anxiety were discovered in those who consumed large amounts of cannabis (3.50% and 7.32%, respectively). From all the subject's majority of the cases with mild anxiety were found in low caffeine consumption (11.78%), moderate anxiety is found in medium caffeine consumption (8.91%) and severe anxiety is found in high caffeine consumption (5.73%).

TABLE 07: - NUMBER OF SUBJECTS BASED ON ANXIETY IN ALCOHOL, TOBACCO, OPIATES, CANNABIS, CAFFEINE CONSUMPTION

		ANXITEY					$P = <0.001$
		MILD	MODERATE	SEVERE	NORMAL	TOTAL	
ALCOHOL	LOW	66	20	30	20	136	
	MEDIUM	51	63	24	35	173	
	HIGH	54	35	46	04	139	
	NO	87	38	21	34	180	
TOBACCO	LOW	51	19	24	09	103	
	MEDIUM	41	31	19	20	111	
	HIGH	80	60	50	20	210	
	NO	86	46	28	44	204	
OPIATES	LOW	04	08	01	0	13	
	MEDIUM	13	09	08	01	31	
	HIGH	06	10	16	07	39	
	NO	235	129	96	85	545	
CANNABIS	LOW	21	20	12	05	58	
	MEDIUM	13	0	19	06	38	
	HIGH	03	22	46	04	75	
	NO	221	114	44	78	457	
CAFFEINE	LOW	74	36	08	21	139	
	MEDIUM	61	56	32	14	163	
	HIGH	49	37	36	32	154	
	NO	74	27	45	26	172	

TABLE 08: DISTRIBUTION OF SUBJECTS BASED ON DEPRESSION IN ALCOHOL, TOBACCO, OPIATES, CANNABIS, CAFFEINE CONSUMPTION

Table 08 depicts the information regarding the distribution of the subjects based on depression in alcohol, tobacco, opiates, cannabis, and caffeine consumption respectively among diverse age groups. The majority of mild depression cases (8.12%) among all subjects were identified in those who used medium amounts of alcohol, whereas moderate and severe depression cases (6.36% and 5.57%, respectively) were discovered in those who consumed large amounts of alcohol. High tobacco use was associated with the majority of mild, moderate, and severe depression cases among all subjects (11.7%, 7.00%, and 7.48%, respectively). Of all the subjects, the majority of mild depression cases (2.22%) were identified in those who used medium amounts of opiates, while moderate and severe depression instances (1.75% and 3.50%, respectively) were discovered in those who consumed large amounts of opiates. Moderate cannabis use was associated with moderate depression (3.34%). High cannabis use was associated with moderate and severe depression (2.54% and 7.96%, respectively). From all the subject's majority of the cases with mild and moderate depression were found in medium caffeine consumption (9.07% and 5.73% respectively) and severe depression were found in high caffeine consumption (6.68%).

TABLE 08: - NUMBER OF SUBJECTS BASED ON DEPRESSION IN ALCOHOL, TOBACCO, OPIATES, CANNABIS, CAFFEINE CONSUMPTION

		DEPRESSION					$P = <0.001$
		MILD	MODERATE	SEVERE	NORMAL	TOTAL	
ALCOHOL	LOW	37	05	29	65	136	
	MEDIUM	51	39	17	66	173	
	HIGH	43	40	35	21	139	
	NO	40	17	21	102	180	
TOBACCO	LOW	23	14	28	45	110	
	MEDIUM	31	21	05	54	111	
	HIGH	74	44	47	38	203	

	NO	43	22	22	117	204	P = 0.03
OPIATES	LOW	07	02	02	03	14	
	MEDIUM	14	06	03	08	31	
	HIGH	05	11	22	0	38	
	NO	145	82	86	232	545	P = <0.001
CANNABIS	LOW	05	07	11	12	35	
	MEDIUM	21	08	08	17	54	
	HIGH	05	16	50	11	82	
	NO	140	70	33	214	457	
CAFFEINE	LOW	27	29	05	78	139	
	MEDIUM	57	36	22	52	167	
	HIGH	50	26	33	41	150	
	NO	37	10	42	83	172	

TABLE 09: DISTRIBUTION OF SUBJECTS BASED ON SLEEP DISTRUBANCES IN ALCOHOL, TOBACCO, OPIATES, CANNABIS, CAFFEINE CONSUMPTION

Table09depictstheinformationregardingthedistributionofthesubjects based on sleep disturbances in alcohol, tobacco, opiates, cannabis, and caffeine consumption respectively among diverse age groups.The majority of mild and moderate sleep disruption instances among all subjects were discovered in those with medium alcohol intake (12.57% and 5.89%, respectively), whereas severe sleep disturbances were detected in those with excessive alcohol consumption (7.00%). The majority of mild sleep disruption instances (12.26%) among all subjects were identified in those with low tobacco use, whereas moderate and severe sleep disturbances (5.73% and 8.43%) were found in those with high tobacco use. High opiate intake was linked to the majority of cases of mild, moderate, and severe sleep disruptions among all subjects (2.38%, 2.07%, and 1.75%, respectively). High cannabis use was associated with the majority of mild, moderate, and severe sleep disruption instances among all subjects (6.05%, 4.77%, and 3.50%, respectively).From all the subject's majority of the cases with mild, moderate and severe sleep disturbances were found in high caffeine consumption (10.98%, 5.73% and 5.57% respectively).

TABLE 09: - NUMBER OF SUBJECTS BASED ON SLEEP DISTRUBANCES IN ALCOHOL, TOBACCO, OPIATES, CANNABIS, CAFFEINE CONSUMPTION

		SLEEP DISTRUBANCES					
		MILD	MODERATE	SEVERE	NORMAL	TOTAL	
ALCOHOL	LOW	75	09	10	43	136	P = <0.001
	MEDIUM	79	37	24	23	163	
	HIGH	52	35	44	18	149	
	NO	59	37	28	56	180	
TOBACCO	LOW	78	15	11	25	129	
	MEDIUM	59	20	12	20	111	
	HIGH	55	36	53	40	184	
	NO	73	47	30	54	204	
OPIATES	LOW	01	04	03	0	14	
	MEDIUM	10	12	06	03	31	
	HIGH	15	13	11	05	38	
	NO	239	89	86	131	545	
CANNABIS	LOW	32	08	02	08	50	
	MEDIUM	06	11	02	09	28	
	HIGH	38	30	22	03	93	
	NO	189	69	89	119	457	
CAFFEINE	LOW	57	18	26	26	127	P = 0.002
	MEDIUM	63	24	30	46	163	
	HIGH	69	36	35	26	166	

	NO	76	40	15	41	172	
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TABLE 10: DISTRIBUTION OF SUBJECTS BASED ON HALLUCINATIONS IN ALCOHOL, TOBACCO, OPIATES, CANNABIS, CAFFEINE CONSUMPTION

Table10depictstheinformationregardingthedistributionofthesubjects based on hallucinations in alcohol consumption among diverse age groups. Moderate and severe hallucinations were identified in high alcohol intake (3.18% and 2.22%), while the majority of mild hallucinations among all subjects were found in medium alcohol consumption (6.05%). High tobacco use was associated with the majority of mild, moderate, and severe hallucinations among all subjects (6.52%, 2.86%, and 2.54%, respectively). The majority of mild hallucinations among all subjects occur in those who use medium amounts of opiates (1.75%), whereas moderate and severe hallucinations occur in those who consume high amounts of opiates (0.95% and 3.82%). High cannabis use was associated with the majority of mild, moderate, and severe hallucinations among all subjects (3.50%, 2.86%, and 3.34%, respectively). From all the subject's majority of the cases with mild, moderate and severe hallucinations were found in high caffeine consumption (5.89%, 1.43% and 2.22% respectively).

TABLE 10: DISTRIBUTION OF SUBJECTS BASED ON HALLUCINATIONS IN ALCOHOL, TOBACCO, OPIATES, CANNABIS, CAFFEINE CONSUMPTION

		HALLUCINATIONS					$P = <0.001$
		MILD	MODERATE	SEVERE	NORMAL	TOTAL	
ALCOHOL	LOW	09	16	13	07	135	
	MEDIUM	38	10	12	113	173	
	HIGH	37	20	14	69	140	
	NO	14	04	08	154	180	
TOBACCO	LOW	22	14	10	83	129	
	MEDIUM	11	09	14	25	109	
	HIGH	41	18	16	111	186	
	NO	24	09	07	164	204	
OPIATES	LOW	06	0	02	06	14	
	MEDIUM	11	04	02	12	29	
	HIGH	01	06	24	09	40	
	NO	80	40	19	406	545	
CANNABIS	LOW	14	01	0	45	60	
	MEDIUM	10	01	10	17	38	
	HIGH	22	18	21	12	73	
	NO	52	30	16	359	457	
CAFFEINE	LOW	10	07	07	111	135	
	MEDIUM	23	04	11	126	164	
	HIGH	37	09	14	97	157	
	NO	28	50	47	433	628	

TABLE 11: DISTRIBUTION OF SUBJECTS BASED ON DISORIENTATION IN ALCOHOL, TOBACCO, OPIATES, CANNABIS, CAFFEINE CONSUMPTION

Table11depictstheinformationregardingthedistributionofthesubjects based on disorientation in alcohol consumption among diverse age groups. From all the subject's majority of the cases with mild disorientation is found in medium alcohol consumption (7.32%), moderate and severe disorientation were found in high alcohol consumption (4.61% and 3.02% respectively). High tobacco use accounts for the majority of occurrences of mild, moderate, and severe disorientation among all subjects (8.91%, 3.18%, and 2.86%, respectively). High opiate intake was linked to the majority of cases of

mild, moderate, and severe disorientation among all subjects (1.91%, 1.11%, and 2.22%, respectively). High cannabis use was associated with the majority of mild, moderate, and severe disorientation instances among all subjects (3.50%, 2.70%, and 2.38%, respectively). The bulk of mild disorientation instances among all subjects were identified in those with low caffeine intake (8.28%), whereas moderate and severe disorientation were detected in those with high caffeine intake (1.91% and 2.38%, respectively).

TABLE 11: DISTRIBUTION OF SUBJECTS BASED ON DISORENTATION IN ALCOHOL, TOBACCO, OPIATES, CANNABIS, CAFFEINE CONSUMPTION

		DISORENTATION					<i>P</i> = <0.001
		MILD	MODERATE	SEVERE	NORMAL	TOTAL	
ALCOHOL	LOW	10	0	08	118	136	
	MEDIUM	46	14	09	104	173	
	HIGH	35	29	19	56	139	
	NO	17	0	02	61	180	
TOBACCO	LOW	12	08	08	101	129	
	MEDIUM	16	08	10	77	111	
	HIGH	56	20	18	90	184	
	NO	24	07	02	171	204	
OPIATES	LOW	02	05	01	06	14	
	MEDIUM	04	04	07	13	26	
	HIGH	12	07	14	08	41	
	NO	90	27	16	412	545	
CANNABIS	LOW	07	04	0	34	45	
	MEDIUM	07	03	04	24	38	
	HIGH	22	17	15	34	88	
	NO	72	19	19	347	457	
CAFFEINE	LOW	52	11	0	76	139	
	MEDIUM	24	08	04	130	166	
	HIGH	19	12	15	105	151	
	NO	13	23	08	128	172	

DISCUSSION:

The study's findings, which included 628 participants, offer important new information about how people use opioids, alcohol, nicotine, cannabis, caffeine, and other psychoactive drugs, as well as the effects these substances have on mental health. The demographic breakdown shows that most participants are male (73.24%), and the majority (30.09%) are in the 26–35 age range. Understanding drug use patterns and designing interventions to lower consumption and address related health risks depend heavily on this demographic imbalance.

Alcohol Consumption Patterns

The findings show that various age groups use alcohol at different amounts. Interestingly, younger people (18–25 years old) tended to use alcohol at lower rates, but elderly people (46–60 years old) consumed alcohol at greater rates. This pattern implies that drinking may get more intense as people become older, which might raise health concerns. High levels of alcohol use are associated with severe anxiety and depression, making the association between alcohol consumption and mental health especially worrying. The results are consistent with previous research that emphasizes alcohol's depressant properties, which exacerbate users' anxiety and depressive symptoms.

Tobacco Use Insights

A clear age-related pattern was also observed in tobacco use, with the highest levels of low and medium usage occurring in the 26–35 age group and the highest levels of high consumption peaking in the 36–45 age group. The social and environmental variables influencing tobacco use in these groups are called into question by this distribution. Particularly concerning is the link between heavy tobacco use and elevated anxiety levels, which raises the possibility of a vicious cycle in which worry fuels tobacco use, which in turn intensifies anxiety symptoms. This result is in line with studies showing that while nicotine can reduce anxiety at first, its withdrawal symptoms eventually cause anxiety levels to rise.

Trends in Opiate Consumption

According to a review of opiate use, older persons (46–60 years old) are more likely to use opiates at low to medium levels, whereas those between the ages of 26 and 35 are most likely to use them at high levels. This tendency could be a result of both the growing trend of opiate abuse among younger persons and the increasing prescription of opiates for pain treatment among older populations. Significant effects on mental health have been noted; those who used large doses of opiates had moderate to severe anxiety and sadness. This is consistent with research showing opioids' dual function as painkillers and possible causes of mood disorders.

Patterns of Cannabis Use

Younger people (18–25 years old) were the ones who reported using cannabis the most, especially in big quantities. The relationship between cannabis uses and mental health outcomes is complicated; extensive cannabis use has been associated with higher rates of anxiety and depression, even though some users may use it to relieve these illnesses. The evidence indicating a correlation between excessive cannabis usage and moderate to severe anxiety highlights the need for more investigation into the long-term effects of cannabis on mental health.

Perspectives on Caffeine Intake

According to data on caffeine consumption trends, younger persons (18–25 years old) tend to use less caffeine, but those between the ages of 26 and 35 have greater medium and high consumption rates. It's interesting to note that mild to moderate sleep disruptions, which can worsen mental health conditions like anxiety and depression, were linked to increased coffee usage. This research highlights how crucial it is to take lifestyle factors like coffee intake into account when evaluating mental health.

Implications for Mental Health

The findings consistently show a link between drug abuse and symptoms of mental illness. Anxiety, sadness, sleep difficulties, hallucinations, and disorientation were all consistently linked to high levels of alcohol, tobacco, opioids, cannabis, and caffeine usage. For example:

- **Anxiety:** Severe anxiety symptoms were associated with heavy drinking and smoke usage.
- **Depression:** While increased depressive symptoms were common across all drug users, they were more noticeable in those who used tobacco and alcohol heavily.
- **Sleep Disturbances:** Users of tobacco and alcohol reported severe sleep disturbances, indicating that these drugs had a negative impact on the quality of sleep.
- **Hallucinations:** Significantly linked to excessive substance use in all categories, suggesting that psychotic symptoms connected with substance abuse may require more research.
- **Disorientation:** High tobacco consumption was associated with increased anxiety (12.73% mild anxiety), which could contribute to feelings of disorientation as individuals struggle to manage their emotional states.

CONCLUSION:

The study highlights the pervasive issue of substance abuse and its significant impact on mental health

across diverse demographics. The results, which come from a sample of 628 people, show concerning rates of drug use, especially among those who use alcohol and tobacco, which are linked to a number of mental disorders. Alcohol use was particularly common, affecting 71.33% of subjects, and was highly correlated with disorientation (27.07%), anxiety (61.94%), sadness (47.13%), sleep difficulties (58.12%), and hallucinations (26.91%). These mental illnesses have a variety of underlying causes, including structural alterations in the brain brought on by long-term drug abuse and neurotransmitter imbalances. The decline in mental health is caused by the effects of alcohol on GABA and glutamate receptors, nicotine on dopamine pathways, and the cognitive deficits linked to opiates and cannabis. With greater prevalence rates seen in younger individuals and notable distinctions between male and female users, the study also emphasizes the crucial role that age and gender play in drug use patterns.

Targeted public health interventions are desperately needed in light of the 23% increase in drug users over the last ten years, which indicates that substance misuse rates are on the rise globally. Prevention, early identification, and treatment approaches that target drug use problems and their psychological effects should be the main goals of this. To sum up, this study highlights the complex connection between drug abuse and mental health conditions, underscoring the necessity of all-encompassing strategies to address this urgent public health concern.

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LIMITATIONS:

- Improper information from patient regarding the amount of consumption of substance abuse.
- Fear of opening up regarding consuming the substance because it is an illegal activity.
- False information is given by patient regarding the symptoms, thinking that he/her may portray as a psychiatric patient.
- This study contains a small sample size so this can be further extended with number of patients to derive a better conclusion.

CONFLICT OF INTEREST:

The authors declare that there is no conflict of interest.

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