

Intensity Of Drug Consumption In Inpatients In Therapeutic Communities Of The Ecuadorian Austro

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Abstract

Introduction: The intensity of the consumption of narcotic substances constitutes a serious social problem that affects the quality of life of those who consume them consecutively, with implications for physical and mental health. It is important to approach it from an informative and preventive perspective to understand the associated risks and promote healthy decisions. Objective: Identify the intensity of drug consumption in inpatients in Therapeutic Communities of Southern Ecuador. Methodology: A quantitative descriptive association study was carried out, the sample was non-probabilistic, 480 inmates, an express questionnaire prepared by the researcher was applied to collect the sociodemographic variables that allow characterizing the population and the drug consumption detection test. alcohol, tobacco and substances (ASSIST), for the analysis contingency tables and the Chi-square technique were used, the significance level $\alpha=0.05$ was selected for the investigation. Results: It is shown that the variables age, sex, origin, education, marital status, occupation, economic income and length of confinement, with respect to the intensity of consumption of tobacco, alcohol, coca, tranquilizers, hallucinogens and opiates, for all cases The level of significance (p) (0.00) is less than 0.05, therefore the null hypothesis is rejected and the alternative hypothesis is accepted that the variables are dependent and there is a significant relationship between them. Conclusions: The consumption of substances such as alcohol, tobacco, coca, tranquilizers, hallucinogens and opiates in all consumer patients is dependent on sociodemographic variables and is significantly associated.

Keywords: Intensity, drug use, adult.

Introduction

According to the Technical Secretariat for Comprehensive Drug Prevention (SETED) (2018) in 2015, 8,693 (13.42%)¹ of the deaths occurred were related to drug use, of these, 5.18% are attributed to direct deaths, while the remaining 94.82% correspond to indirect deaths. This estimate concludes that 72.94% of the deaths were related to tobacco use, 25.38% to alcohol consumption, and 1.68% to the consumption of other drugs. From January 2017 to July of the same year, the 15,914 first outpatient visits were related to the consumption or prevention of drug use and consumption, with a greater representativeness in men with a difference between them of 56%.

With regard to the number of outpatient visits according to the type of drug, it is indicated that in the aforementioned period, 27.97% of heroin use cases were concentrated in the age range of 15 to 17 years (46.14%) and 18 to 25 years (46.88%). In cases of polydrug use, these represent 16.72% of the total (2,662), and are concentrated in the groups of 15 to 17 years of age (31.14%) and 18 to 25 years of age (48.84%); Finally, visits for alcohol

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consumption accounted for 14.40% (2,292 visits) (Garcés, n.d. 2018). In the same vein, it is recorded that hospital discharges related to drug consumption for the year 2015 were 3,519 cases, of which discharges related to alcohol consumption represented 48%.

Regardless of the high figures that are exhibited regarding the consumption of one drug or another, in the case of Ecuador, despite the advances in the country's constitution, there is a prohibitionist and exclusionary view towards people who consume drugs, mainly illegal drugs. In this sense, the presence of differences in the attitudes of health professionals towards people who use drugs becomes like stigma that labels (Otálvaro et al., 2019).

From the above analysis, the importance of the problem of drug use in the global attention is revealed, which is why several researchers: López and Segarra (2015); Gaete & Araya (2017); Coll Capdevila and Villanueva Blasco (2019); Botero and Delfino (2019); Rojas Jara et al (2019) and Segarra Saavedra and Villena Alarcón (2020) have taken on the task of addressing the issue from different areas of knowledge, some related to psychology, education, social sciences and even the analysis of scientific production around addictions and the factors associated with their consumption where different factors related to the environment such as the characteristics of teaching entities (urban-rural location; composition by sex), as well as parental consumption, in addition to their level of education, are related to differential possibilities of drug use.

Nowadays, when we talk about addictions, we think directly of drugs, without taking into account that the pathognomonic symptom of all addictive disorders is a certain behavior without restraint or control, which is established as stereotyped and self-destructive for the subject in any of its different fundamental dimensions. This complex symptom, such as the spontaneity of some behavior that may initially be a pleasurable habit, immediately mutates into a dismissive one and, gaining ground in the individual's life, becomes unique and dominant capable of triggering violent acts (Norroña Salcedo et al., 2022).

In non-toxic addictions, where there is no substance involved, there is also an addiction to a certain behavior that the subject cannot control, as is the case with compulsive gambling. On the contrary, in toxic addictions there is not only the addiction to the substance itself, but also an underlying behavioral addiction that is always present and that will become noticeable, especially in long-term treatments or cessation. The progress of any addiction or dependence can be understood as part of a brain learning process, in the sense that the interactions between behaviors, psychoactive substances, the brain pathways involved and the associated stimuli, produce lasting changes that are externalized in psychic, emotional and behavioral symptoms.

An individual who has a behavioral addiction and/or consumes a substance, whether activating or depressive of the CNS, feels a pleasurable psycho-emotional effect associated with the biological reward and, to the extent that it is repeated, it reinforces, via activation, brain circuits that increase the probability that this behavior will be repeated. The brain has systems that have progressed and become more complex to govern and direct behavior toward stimuli essential for survival. Proof of this are the primary emotions and their related stimuli, representatives of these systems indissolubly linked to the survival of the individual and the species. Thus, the primary emotions represented by aspects such as hunger, thirst, fear, aggressiveness and sex have their own specific pre-established pathways, do not go through cognition and always have a psychic and/or somatic correlate that, at the same time, are determinants of complex behaviors for the realization of the respective purposes (Rey 2019)

In toxic and non-toxic addictions, then, these same pathways are artificially activated, but with greater intensity, producing an increase in motivation to continue with this behavior. In this way, dependence is derived from a complex interaction of the

physiological effects of behaviors and substances of abuse on these brain systems associated with motivation, primary emotions and the reward system, leading to a reinforcement of psychobiological gratification as a brain learning process, which originates an automatic, irrational and exaggerated connection. between addictive behaviors, substances, and signals related to them (Franco et al., 2021).

Regarding toxic addictions, it is known that there are a large number of different drugs of abuse that have great molecular diversity and two mechanisms of action: primary or direct and secondary or indirect. The first mechanism is specific to each drug, whether psychostimulant or depressant, and the second mechanism is the result of the activation of the mesolimbic dopaminergic pathway, located in the midbrain and committed to gratification and reward as the main circuit in the development of emotional dependence and withdrawal in both types of addictions (Momeñe et al., 2021). The mesolimbic dopaminergic pathway begins in the ventral tegmental area and its activation during an acute episode causes an increase in the rate of dopamine release and an upward regulation in the levels of Cyclic Adenosine Monophosphate (cAMP) in the nucleus accumbens and the extended amygdala, areas that are strongly related to reward and learning for consumption in the nervous system (Sequeira-Cordero et al., 2022)

According to (Jerez B. & Acosta M., 2022; Momeñe et al., 2021) The direct effect of psychostimulants such as amphetamine and cocaine, inhalants, directly increases the release of dopamine in this pathway by inhibiting its transporter or by increasing exocytosis, only in the case of amphetamine. Opioids act on mu-like opioid receptors and inhibit GABAergic interneurons and excite dopaminergic neurons from the midbrain cross-section to the level of the superior colliculus. Alcohol and nicotine activate the local opioid enkephalin circuits in this area and stimulate your neurons. Nicotine also acts directly on nicotinic receptors located in neurons in the midbrain cross-section at the level of the superior colliculus and nucleus accumbens, and stimulates mesolimbic dopaminergic activity and serotonin production (Corvalán B., 2017)

On the other hand, cannabinoids operate on CB1-like receptors located in dopaminergic neurons in the cross-section of the midbrain at the level of the superior colliculus and the nucleus accumbens; and phencyclidine and ecstasy increase the release of glutamate in this area which, in turn, stimulates dopaminergic neurons responsible for the mechanisms of adaptation, response, and reward to cholinergic discharge (Nexar-QH & Caleiro Seixas, 2019). Benzodiazepine anxiolytics and alcohol act on GABA A-type receptors in the nucleus accumbens and the prefrontal cortex, which, in turn, modulate the dopaminergic action coming from the midbrain cross-section to the level of the higher colliculi in these areas, causing dysfunctions in some brain systems (Méndez-Díaz et al., 2017)

METHODOLOGY

Study Design and Sample Selection

A quantitative descriptive association study was carried out, the sample was non-probabilistic, the inmates were invited to participate in the study after having given a clear and concrete explanation as a group, each inmate individually was transferred to a room for the application of the instruments after signing the informed consent, always keeping the privacy and confidentiality of the information.

Instrument

Each of the inmates participating in the research was given a questionnaire developed by the researcher for the collection of sociodemographic variables to characterize the population and the Alcohol, Tobacco and Substance Consumption Screening Test (ASSIST), an instrument developed by the World Health Organization (WHO) (Higgins Biddle and Babor, 2018), the same one that made it possible to determine the intensity of drug use.

Statistical analysis

To analyze the relationship between the variables age, sex, education, origin, marital status, occupation, length of internment and economic income with the intensity of consumption of tobacco, alcohol, cannabis, coca, amphetamines, inhalants, tranquilizers, hallucinogens, opiates and other drugs, contingency tables and the Chi-square technique are used to determine whether the proportions with which the qualitative variables observed in the sample appear whether or not they have a significant relationship with each other, i.e., they are not attributed to chance. The significance level $\alpha=0.05$ is selected for the research, or in other words, a significance of 5%. Based on this, the corresponding hypotheses are formulated:

- Null hypothesis (H0): The variables (sociodemographic characteristics and intensity of consumption) are independent and there is no significant relationship between them.
- Alternative hypothesis (H1): The variables (sociodemographic characteristics and intensity of consumption) are dependent and there is a significant relationship between them.

Thus, depending on the significance value obtained from the Chi-square (p) test, the results are interpreted as follows:

- If the significance value of the test $(p) \leq 0.05$, the null hypothesis is rejected and the alternative of dependence and significant relationship between the variables is accepted.
- If the significance value of the test $(p) > 0.05$, the null hypothesis is accepted and the alternative is rejected

Results

Variable Age

Table 1 shows that the age variable in their respective ranges, with respect to the intensity of consumption of tobacco, alcohol, coca, tranquilizers, hallucinogens and opiates, for all cases the level of significance (p) (0.00) is less than 0.05, therefore the null hypothesis is rejected and the alternative hypothesis that the variables are dependent and there is a significant relationship between them is accepted.

Table 1

Chi-square Significance for Age Variable (Early, Middle and Late Adulthood) and Intensity of Consumption

Variables		Significance value(p)
Age (early, middle, and late adulthood)	Intensity of Tobacco Use	0.00
Age (early, middle, and late adulthood)	Alcohol Consumption Intensity	0.00
Age (early, middle, and late adulthood)	Intensity of Cannabis use	0.08
Age (early, middle, and late adulthood)	Intensity of Coca consumption	0.00
Age (early, middle, and late adulthood)	Intensity of amphetamine use	0.06
Age (early, middle, and late adulthood)	Intensity of use Inhalants	0.06

Age (early, middle, and late adulthood)	Intensity of consumption Tranquilizers	0.00
Age (early, middle, and late adulthood)	Intensity of consumption Hallucinogens	0.00
Age (early, middle, and late adulthood)	Intensity of Opiate use	0.00

Table 2. In general, there is a marked intensity of consumption associated with a younger age, so for all substances patients between the ages of 18 and 30 years (early adulthood) show a greater intensity in the strong desire to consume.

Table 2
Contingency Tables for the Variables Age and Intensity of Consumption

		Intensity strong desire to use tobacco					Total
		never	every month	every week	daily or almost daily		
Early, middle, and late adulthood	Between 18 and 30 years old Early Adulthood	74	4	6	120	1	205
	Between 31 and 45 years old Middle Adulthood	131	0	0	37	0	168
	46 & + Late Adulthood	81	0	0	26	0	107
Total		286	4	6	183	1	480
		Intensity: Strong desire to consume alcohol					Total

		never	1 or 2 times	every month	every week	daily or almost daily	
Early, middle, and late adulthood	Between 18 and 30 years old Early Adulthood	47	1	3	27	127	205
	Between 31 and 45 years old Middle Adulthood	58	0	1	0	109	168

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	46 & + Late Adulthood	36	0	0	1	70	107	
Total		141	1	4	28	306	480	
Strong desire to consume coca							Total	
			1 or 2 never	times every month	every week	daily or almost daily		
Early, middle, and late adulthood	Between 18 and 30 years old Early Adulthood	129	1	1	11	61	2	205
	Between 31 and 45 years old Middle Adulthood	96	0	1	0	71	0	168
	46 & + Late Adulthood	59	0	0	0	47	1	107
Total		284	1	2	11	179	3	480
Intense strong desire to use tranquilizers							Total	
			1 or 2 never	times every month	every week	daily or almost daily		
Early, middle, and late adulthood	Between 18 and 30 years old Early Adulthood	141	2	23	21	13	5	205
	Between 31 and 45 years old Middle Adulthood	142	0	0	4	22	0	168
	46 & + Late Adulthood	88	0	1	3	15	0	107
Total		371	2	24	28	50	5	480
Intense strong desire for hallucinogenic use							Total	
			1 or 2 never	times every month	every week	daily or almost daily		
Early, middle, and late	Between 18 and 30 years old	164	3	13	9	13	3	205

adulthood	Early Adulthood Between 31 and 45 years old	144	0	1	3	20	0	168	
	Middle Adulthood 46 & +	97	1	1	0	8	0	107	
Total		405	4	15	12	41	3	480	
Strong desire for opioid use								Total	
			never	1 or 2 times	every month	every week	daily or almost daily		
Early, middle, and late adulthood	Between 18 and 30 years old	184	1	4	12	3	1	205	
	Early Adulthood Between 31 and 45 years old	157	0	0	0	11	0	168	
	Middle Adulthood 46 & +	98	0	0	0	9	0	107	
	Late Adulthood								
Total		439	1	4	12	23	1	480	

Variable Sex

Table 3 shows that the level of significance (p) (0.04, 0.00 and 0.00 respectively) is less than or equal to 0.05 with respect to the intensity of alcohol, cannabis and tranquilizer consumption, with respect to the intensity of alcohol, cannabis and tranquilizer consumption, therefore the null hypothesis is rejected and the alternative hypothesis that the variables are dependent and that there is a significant relationship between them is accepted.

Table 3

Chi-square Significance for the Sex Variable and Intensity of Consumption

Variables	Significance value(p)
Sex Intensity of Tobacco Use	0.17
Sex Alcohol Consumption Intensity	0.04
Sex Intensity of Cannabis use	0.00
Sex Intensity of Coca consumption	0.15
Sex Intensity of amphetamine use	0.48
Sex Intensity of use Inhalants	0.81
Sex Intensity of consumption Tranquilizers	0.00
Sex Intensity of consumption Hallucinogens	0.22
Sex Intensity of Opiate use	0.07

Table 4 shows a significant incidence of male sex in a higher intensity of consumption for each of the substances.

Table 4
Contingency Tables for the Variables Sex and Intensity of Consumption

		Intensity: Strong desire to consume alcohol					Total
		never	1 or 2 times	every month	every week	daily or almost daily	
Sex	Male	104	1	3	28	239	375
	Female	37	0	1	0	67	105
Total		141	1	4	28	306	480

		Intensity: Strong desire to use cannabis					Total
		never	1 or 2 times	every month	every week	daily or almost daily	
Sex	Male	180	2	1	5	187	375
	Female	72	0	0	1	32	105
Total		252	2	1	6	219	480

		Intense strong desire to use tranquilizers					Total	
		never	1 or 2 times	every month	every week	daily or almost daily		
Sex	Male	298	2	23	22	26	4	375
	Female	73	0	1	6	24	1	105
Total		371	2	24	28	50	5	480

Education variable (patient's educational level)

Table 5 shows that the education variable, with respect to the intensity of consumption of alcohol, cannabis, tranquilizers and hallucinogens, the level of significance (p) (0.00, 0.00, 0.00 and 0.02 respectively) is less than 0.05, therefore the null hypothesis is rejected and the alternative hypothesis that the variables are dependent and there is a significant relationship between them is accepted.

Table 5
Chi-square Significance for the Education and Consumption Intensity Variable

Variables	Significance value(p)
Education Intensity of Tobacco Use	0.40
Education Alcohol Consumption Intensity	0.00
Education Intensity of Cannabis use	0.00
Education Intensity of Coca consumption	0.43
Education Intensity of amphetamine use	0.78
Education Intensity of use Inhalants	0.44
Education Intensity of consumption Tranquilizers	0.00
Education Intensity of consumption Hallucinogens	0.02
Education Intensity of Opiate use	0.27

Table 6 In general, it was found that the lower the educational level, the greater the intensity of consumption, so for all these substances the intensity of the strong desire to consume was associated with the primary and secondary level.

Table 6

Contingency Tables for the Education and Consumption Intensity Variables

Intensity: Strong desire to consume alcohol								Total
Education		never	1 or 2 times	ever			Total	
				month	every week	daily or almost daily		
Education	Primary	19	0	2	6	101	128	
	High school	85	1	0	18	141	245	
	University	37	0	2	4	60	103	
	4	0	0	0	0	4	4	
Total		141	1	4	28	306	480	

Intensity: Strong desire to use cannabis								Total
Education		never	1 or 2 times	ever			Total	
				month	every week	daily or almost daily		
Education	Primary	92	1	1	0	34	128	
	High school	109	1	0	5	130	245	
	University	49	0	0	1	53	103	
	4	2	0	0	0	2	4	
Total		252	2	1	6	219	480	

Intense strong desire to use tranquilizers								Total
Education		never	1 or 2 times	ever			Total	
				month	every week	daily or almost daily		
Education	Primary	70	1	13	12	30	2	128
	High school	215	1	8	6	13	2	245
	University	84	0	3	9	6	1	103
	4	2	0	0	1	1	0	4
Total		371	2	24	28	50	5	480

Intense strong desire for hallucinogenic use								Total
Education		never	1 or 2 times	ever			Total	
				month	every week	daily or almost daily		
Education	Primary	114	2	2	1	7	2	128
	High school	209	2	8	10	15	1	245
	University	78	0	5	1	19	0	103
	4	4	0	0	0	0	0	4
Total		405	4	15	12	41	3	480

Origin Variable

Table 7 shows that the origin variable, with respect to the intensity of consumption of alcohol, cannabis, tranquilizers and hallucinogens, for all cases the level of significance (p) (0.00) is less than 0.05, therefore the null hypothesis is rejected and the alternative hypothesis that the variables are dependent and there is a significant relationship between them is accepted.

Table 7
Chi-square Significance for the Variable Origin and Intensity of Consumption

Variables	Significance value(p)
Origin Intensity of Tobacco Use	0.29
Origin Alcohol Consumption Intensity	0.00
Origin Intensity of Cannabis use	0.00
Origin Intensity of Coca consumption	0.52
Origin Intensity of amphetamine use	0.08
Origin Intensity of use Inhalants	0.20
Origin Intensity of consumption Tranquilizers	0.00
Origin Intensity of consumption Hallucinogens	0.00
Origin Intensity of Opiate use	0.65

Table 8 It is worth noting that for daily or almost daily intensity, alcohol and tranquilizers show a higher frequency of consumption in patients from rural areas.

Table 8
Contingency Tables for the Variables Origin and Intensity of Consumption

		Intensity: Strong desire to consume alcohol					Total
Origin		never	1 or 2 times	ever	every week	daily or almost daily	
				mont h			
Rural		34	0	2	8	155	199
Urban		107	1	2	20	151	281
Total		141	1	4	28	306	480

		Intensity: Strong desire to use cannabis					Total
Origin		never	1 or 2 times	ever	every week	daily or almost daily	
				mont h			
Rural		130	1	1	1	66	199
Urban		122	1	0	5	153	281
Total		252	2	1	6	219	480

		Intense strong desire to use tranquilizers					Total
Origin		never	1 or 2 times	ever	every week	daily or almost daily	
				mont h			
Rural		122	2	16	18	39	199

	Urban	249	0	8	10	11	3	281
Total		371	2	24	28	50	5	480
Intense strong desire for hallucinogenic use								Total
			ever					
			1 or 2	mont	every	daily or		
		never	times	h	week	almost		
Origin	Rural	181	2	4	3	7	2	199
	Urban	224	2	11	9	34	1	281
Total		405	4	15	12	41	3	480

Marital Status Variable

Table 9 shows that the marital status variable, with respect to the intensity of consumption of alcohol, cannabis, coca and tranquilizers, the level of significance (p) (0.00, 0.00, 0.04 and 0.00 respectively) is less than 0.05, therefore the null hypothesis is rejected and the alternative hypothesis that the variables are dependent and there is a significant relationship between them is accepted.

Table 9
Chi-square Significance for the Variable Marital Status and Intensity of Consumption

Variables	Significance value(p)
Marital status Intensity of Tobacco Use	0.95
Marital status Alcohol Consumption Intensity	0.00
Marital status Intensity of Cannabis use	0.00
Marital status Intensity of Coca consumption	0.04
Marital status Intensity of amphetamine use	0.97
Marital status Intensity of use Inhalants	0.51
Marital status Intensity of consumption Tranquilizers	0.00
Marital status Intensity of consumption Hallucinogens	0.10
Marital status Intensity of Opiate use	0.21

Table 10 In general, it is noteworthy that, with the exception of daily alcohol consumption and weekly and daily consumption of tranquilizers, where the highest values are shown in married patients, for all substances the greatest intensity in the strong desire to consume is associated with single marital status, which shows that this can be considered a risk to increase the intensity of consumption.

Table 10
Contingency Tables for the Variables Marital Status and Intensity of Consumption

Intensity: Strong desire to consume alcohol	Total
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		never	1 or 2 times	ever y mont h	every week	daily or almost daily		
Marital status	married	28	0	2	6	135	171	
	bachelor	99	1	1	20	110	231	
	divorced	7	0	1	2	38	48	
	widower	0	0	0	0	11	11	
	common- law marriage	7	0	0	0	12	19	
Total		141	1	4	28	306	480	
Intensity: Strong desire to use cannabis							Total	
		never	1 or 2 times	ever y mont h	every week	daily or almost daily		
Marital status	married	110	1	0	2	58	171	
	bachelor	85	1	1	4	140	231	
	divorced	39	0	0	0	9	48	
	widower	7	0	0	0	4	11	
	common- law marriage	11	0	0	0	8	19	
Total		252	2	1	6	219	480	
Strong desire to consume coca							Total	
		never	1 or 2 times	ever y mont h	every week	daily or almost daily		
Marital status	married	108	0	1	3	59	0	171
	bachelor	140	1	1	5	82	2	231
	divorced	20	0	0	1	26	1	48
	widower	11	0	0	0	0	0	11
	common- law marriage	5	0	0	2	12	0	19
Total		284	1	2	11	179	3	480
Intense strong desire to use tranquilizers							Total	
		never	1 or 2 times	ever y mont h	every week	daily or almost daily		
Marital status	married	111	1	10	15	33	1	171
	bachelor	209	1	9	2	7	3	231
	divorced	30	0	4	9	5	0	48
	widower	3	0	0	2	5	1	11

common-law marriage	18	0	1	0	0	0	19
Total	371	2	24	28	50	5	480

Variable Occupancy

Table 11 shows that the occupation variable, with respect to the intensity of consumption of tobacco, alcohol, coca, amphetamines, inhalants, tranquilizers, hallucinogens and opiates, the level of significance (p) (0.00 for all but: alcohol 0.02; amphetamines 0.01; and inhalants 0.05) is less than 0.05, therefore the null hypothesis is rejected and the alternative hypothesis that the variables are dependent and there is a significant relationship between them is accepted.

Table 11

Chi-square Significance for the Variable Occupation and Intensity of Consumption

Variables	Significance value(p)
Occupation Intensity of Tobacco Use	0.00
Occupation Alcohol Consumption Intensity	0.02
Occupation Intensity of Cannabis use	0.43
Occupation Intensity of Coca consumption	0.00
Occupation Intensity of amphetamine use	0.01
Occupation Intensity of use Inhalants	0.05
Occupation Intensity of consumption Tranquilizers	0.00
Occupation Intensity of consumption Hallucinogens	0.00
Occupation Intensity of Opiate use	0.00

Table 12 shows that for all substances, the highest intensity in the strong desire to consume is associated with patients who are privately employed, followed by those with other occupations and the unemployed.

Table 12

Contingency Tables for the Variables Occupancy and Intensity of Consumption

Intensity Strong Desire for Consumption											
Occupation		Every week/ Daily or almost daily Tobacco		Weekly/ Daily or almost daily Alcohol		Weekly/ Daily or almost daily Coca		Weekly/ Daily or almost daily Ampheta mine		Weekly/ Daily or almost daily Inhalants	
		Public Employee	1	21	3	21	4	9	0	0	0
Private Employee	4	74	11	131	6	95	2	2	1	5	
unemployed	1	46	12	47	1	21	1	0	2	0	
other	0	42	2	107	0	54	1	5	0	3	

Total		6	183	28	306	11	17 9	4	7	3	8
Intensity Strong Desire for Consumption											
		Weekly/ Daily or almost daily Tranquillizers		Every week/ Daily or almost daily Hallucinoge ns		Weekly/ Daily or almost daily Opiates					
Occupati on	Public Employee	5	2	0	2	1	0				
	Private Employee	17	13	2	18	6	5				
	unemploye d	5	9	7	5	2	1				
	other	1	26	3	16	3	17				
Total		28	50	12	41	12	23				

Variable Length of Stay

Table 13 shows that the variable length of hospitalization, with respect to the intensity of alcohol, amphetamine and opiate consumption, for all cases the level of significance (p) (0.00) is less than 0.05, therefore the null hypothesis is rejected and the alternative hypothesis that the variables are dependent and there is a significant relationship between them is accepted.

Table 53

Chi-square Significance for the Variable Length of Hospitalization and Intensity of Consumption

Variables	Significance value(p)
Length of Stay Intensity of Tobacco Use	0.51
Length of Stay Alcohol Consumption Intensity	0.00
Length of Stay Intensity of Cannabis use	0.94
Length of Stay Intensity of Coca consumption	0.19
Length of Stay Intensity of amphetamine use	0.00
Length of Stay Intensity of use Inhalants	0.95
Length of Stay Intensity of consumption Tranquilizers	0.50
Length of Stay Intensity of consumption Hallucinogens	0.14
Length of Stay Intensity of Opiate use	0.00

In this sense , **Table 14** In general, it is appreciable that the highest intensity index of strong desire to consume is associated with patients with three and five months of hospitalization.

Table 54

Contingency Tables for the Variables Length of Hospitalization and Intensity of Consumption

Intensity: Strong desire to consume alcohol							Total
Length of Stay		never	1 or 2 times	ever	every week	daily or almost daily	
				month			
1 month		0	0	0	1	2	3
2 months		26	0	1	7	47	81
3 months		68	0	2	7	167	244
4 months		4	0	0	5	3	12
5 months		36	1	1	3	66	107
6 months		7	0	0	5	21	33
Total		141	1	4	28	306	480

Intense strong desire for amphetamine use							Total
Length of Stay		never	every month	ever	daily or almost daily		
				week			
1 month		3	0	0	0	0	3
2 months		78	2	0	0	1	81
3 months		237	0	1	5	1	244
4 months		11	0	0	0	1	12
5 months		105	0	1	1	0	107
6 months		30	0	2	1	0	33
Total		464	2	4	7	3	480

Strong desire for opioid use							Total
Length of Stay		never	1 or 2 times	ever	every week	daily or almost daily	
				month			
1 month		2	0	1	0	0	0 3
2 months		72	0	1	5	3	0 81
3 months		225	1	1	3	14	0 244
4 months		12	0	0	0	0	0 12
5 months		99	0	1	4	2	1 107
6 months		29	0	0	0	4	0 33
Total		439	1	4	12	23	1 480

Economic Income Variable

Table 15 shows that the economic income variable, with respect to the intensity of coca and tranquilizer consumption, the level of significance (p) (0.00 and 0.04 respectively) is less than 0.05, therefore the null hypothesis is rejected and the alternative hypothesis that the variables are dependent and that there is a significant relationship between them is accepted. The others are not statistically significant.

Table 55

Chi-square Significance for the Variable Economic Income and Consumption Intensity

Variables		Significance value(p)
Economic Income	Intensity of Tobacco Use	0.10
Economic Income	Alcohol Consumption Intensity	0.48
Economic Income	Intensity of Cannabis use	0.18
Economic Income	Intensity of Coca consumption	0.00
Economic Income	Intensity of amphetamine use	0.96
Economic Income	Intensity of use Inhalants	0.39
Economic Income	Intensity of consumption Tranquilizers	0.04
Economic Income	Intensity of consumption Hallucinogens	0.43
Economic Income	Intensity of Opiate use	0.17

Table 16. In summary, the table reflects the presence of representative values of greater intensity in the strong desire to consume both for patients with a salary equal to the basic salary and for those who have a salary lower than this. Arguably, those represented in any of these groups experience a greater desire to consume than those who have a higher than basic salary.

Table 56
Contingency Tables for the Variables Economic Income and Consumption Intensity

		Frequency of strong desire for coca consumption					Total	
		never	1 or 2 times	every month	every week	daily or almost daily		
Economic Income	equal to the basic salary	69	0	1	6	81	3	160
	higher than the basic salary	51	1	1	4	30	0	87
	less than the basic salary	164	0	0	1	68	0	233
Total		284	1	2	11	179	3	480

		Frequency of strong desire to use tranquilizers					Total	
		never	1 or 2 times	every month	every week	daily or almost daily		
Income economic	equal to the basic salary	135	1	7	8	9	0	160
	higher than the basic salary	65	1	4	9	7	1	87
	less than the basic salary	171	0	13	11	34	4	233
Total		371	2	24	28	50	5	480

Discussion

The intensification of drug use causes the person's brain, where the production of dopamine is generated, which being a chemical component of generating pleasure, well-being and ecstasy, allow the person who consumes it to need higher doses to achieve the same effects,

the body becomes accustomed to the substance and begins a loss of control towards ourselves, Its collateral effects are reflected in the individual, family and social areas, the intensity of consumption comes to control the person's life.

In the present research regarding the significance of Chi-square for the Age Variable (early, middle and late adulthood) and the Intensity of Consumption, the data reported that the consumption of tobacco, alcohol, coca, tranquilizers, hallucinogens and opiates, for all cases the level of significance (p) (0.00) is less than 0.05, there is an appreciable marked intensity of consumption associated with a younger age, Thus, for all substances, patients between the ages of 18 and 30 years (early adulthood) show a greater intensity in the strong desire to consume daily or almost daily, compared to a study carried out in Colombia by Gonzalez, statistically significant differences are observed by stage of the life cycle in the level of risk against the consumption of cannabis and stimulants. whose highest risk appears in young people (Average Range=380.39 in cannabis; Average Range=328.37 for stimulants) in adults (Average Range=352.17 for cannabis; average range=307.07 for stimulants) (González-Cortés et al., 2023).

Regarding the Chi-square significance for the Sex Variable and the Intensity of Consumption, the substances most severely consumed are alcohol, cannabis and tranquilizers, the level of significance (p) (0.04; 0.00 and 0.00 respectively) is less than or equal to 0.05, with a significant incidence of the male sex in daily or almost daily consumption in each of the substances. Compared to a study conducted by Contreras Olive where alcohol and/or marijuana consumption was higher in females with statistically significant results ($X^2 = 11.528$; $p = 0.000$). Opioid use did not show differences in terms of sex, and emerging drug use was higher in men than in women ($\chi^2 = 4.724$; $p = 0.017$) (Contreras Olive et al., 2020).

Regarding the Chi-square significance for the Education and Intensity of Consumption Variable, it is shown that alcohol, cannabis, tranquilizers and hallucinogens, the level of significance (p) (0.00, 0.00, 0.00 and 0.02 respectively) is less than 0.05, therefore, it can be verified that, the lower the educational level, the greater the intensity of consumption, so for all these substances the intensity of the strong desire to consume daily or almost daily was associated with the level of Primary and secondary education differs from a study carried out in Montevideo by Berrocal where he states that drug consumption is high at the university level, and 39.9% said that it is easy to get drugs at the university.

Concerning the Chi-square significance for the Variable Origin and Intensity of Consumption of substances with statistical significance is alcohol, cannabis, tranquilizers and hallucinogens, for all cases the level of significance (p) (0.00) is less than 0.05, being valid to highlight that for daily or almost daily intensity, alcohol and tranquilizers show a higher frequency of consumption in patients from rural areas, related to a study carried out in Mexico on drug use in students, it is observed that consumption "sometimes" in rural communities (39.6%) is significantly lower than that reported in urban communities (55.7%); Similarly, alcohol consumption in the last year (37.2% urban, 26.1% rural) (Velázquez et al., 2016).

Relevant to the Chi-square significance for the Variable Marital Status and Intensity of Consumption of substances such as alcohol, cannabis, coca and tranquilizers, the level of significance (p) (0.00, 0.00, 0.04 and 0.00 respectively) is less than 0.05, therefore, it is appreciable that the intensity, with the exception of daily alcohol consumption and weekly and daily consumption of tranquilizers where the higher values are shown in married patients, For all substances, the greater intensity in the strong desire to consume is associated with the single marital status, which shows that this can be considered a risk to increase the intensity of consumption, differs from a study highlighted by Asunción Santos

where the percentage of divorced or widowed is significantly higher (40% women vs. 20.87% men) consumers (Santos-de Pascual et al., 2020).

Also related to the Chi-square significance for the Variable Occupation and Intensity of Consumption of tobacco, alcohol, coca, amphetamines, inhalants, tranquilizers, hallucinogens and opiates, the level of significance (p) (0.00 for all but: alcohol 0.02; amphetamines 0.01; and inhalants 0.05) is less than 0.05, highlighting that for all substances the highest intensity in the strong desire to consume is associated with patients who are private employees, followed by those with other occupations and the unemployed, with daily or almost daily consumption, compared to a study carried out in Costa Rica by Urday Regarding occupation, only 21% reported that they study and work, while a significant majority (79%) only study (Urday-Concha et al., 2019).

Regarding the Chi-square significance for the Economic Income and Intensity of Consumption Variable, the drugs with the greatest association are coca and tranquilizers, the level of significance (p) (0.00 and 0.04 respectively) is less than 0.05, the presence of representative values of greater intensity in the strong desire for consumption both for patients with a salary equal to the basic one and for those who have a salary lower than this. It could be said that those represented in any of these groups experience a greater desire to consume than those who have a salary higher than the basic salary, similar data found in a study carried out by Palma where it stands out that around 90% were from families with a medium or low family wealth index (Palma et al., 2022).

Conclusions

1. The intensity of drug use in the participating population is varied and influenced by factors such as accessibility and amount of use, identifying associated risk factors, and promoting informed decision-making to maintain a healthy balance.
2. Drug use from the intensity investigated highlights the importance of individual responsibility and informed decision-making, because its consequences affect physical and mental health, preventing the user from leading a daily life and good relationships.
3. The intensity of drug use occurs with higher percentages in men than in women, having an impact on relationships and daily responsibilities, it is necessary to consider how biological, social and cultural factors can influence consumption patterns.
4. It is also highlighted in the research that consumption intensifies at an early age due to environmental influences, peer pressure and lack of knowledge increases the vulnerability of young people, making it important to develop prevention strategies, emotional support and the active participation of the community to reduce the impact.

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