

## THE USE OF DRUGS BETWEEN UNIVERSITY STUDENT AND THE RELATION WITH ABUSE DURING CHILDWOOD AND ADOLESCENCE

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**ABSTRACT:** Panama, country of traffic between drugs producers and consumers, generating emergent economy, culture of violence and maltreatment in the family and community, being vulnerable children and adolescents due long term exposition to maltreatment, presenting risk behaviors such as drugs use and abuse. To determine independence or relationship between drug use and abuse and maltreatment during childhood and adolescence in university students of an university in panama city. Quantitative study, transeccional correlacional design, stratified sampling 377 students of 12 faculty by proportional distribution, using "drugs use and abuse and adverse experience during childhood" questionnaire. The test chi square independence test proved no independence between drug use and abuse with maltreatment, highlighting sexual abuse during childhood and adolescence. Maltreatment indicators for drug use and abuse were: mistreated mother, separation and divorce of parents of the student, the influence of university student peer consumers.

**DESCRIPTORS:** Child abuse. Street drugs. Students. Universities.

## O USO DE DROGAS ENTRE OS ESTUDANTES UNIVERSITÁRIOS E SUA RELAÇÃO COM O MALTRATO DURANTE A INFÂNCIA E A ADOLESCÊNCIA

**RESUMO:** Panamá, país de trânsito para produtores e consumidores de drogas, gera economia emergente, cultura de violência e maltrato na família e a comunidade, sendo meninos e dolescentes vulneráveis ao uso e exposição prolongada ao abuso de drogas. Para determinar a independência ou a relação entre o uso e abuso de drogas durante a infância e adolescência em estudantes de uma universidade na cidade do Panamá. Método quantitativo aplicado, projeto transaccional, busca, de amostragem, amostra de 377 alunos de 12 faculdade por aposição proporcional estratificada. Instrumento aplicado "uso de questionário de drogas e experiências negativas da infância". O teste de qui-quadrado, teste de independência, encontrado não independência entre uso e abuso de drogas após o abuso tais como abuso sexual, com p-valor associado 0,021, 95% nível de confiança, com uma significância de  $p < 0,05$ ; Eles são outros determinantes para consumo posterior: mãe agredida, separação ou divórcio dos pais, pares de altos problemas.

**DESCRIPTORIOS:** Maus-tratos infantis. Drogas ilícitas. Estudantes. Universidades.

## EL USO DE DROGAS ENTRE LOS ESTUDIANTES UNIVERSITARIOS Y SU RELACIÓN CON EL MALTRATO DURANTE LA NIÑEZ Y LA ADOLESCENCIA

**RESUMEN:** Panamá, país de tránsito para productores y consumidores de drogas, generando economía emergente, cultura de violencia y maltrato en la familia y comunidad, siendo niños y adolescentes vulnerables al uso y abuso de drogas por exposición prolongada al maltrato. Se determina independencia o relación entre uso y abuso de droga con el maltrato durante la niñez y la adolescencia en estudiantes en una universidad en la ciudad de Panamá. Se aplicó el método cuantitativo, diseño transeccional, correlacional, muestreo estratificado, muestra de 377 estudiantes de 12 facultades por afijación proporcional. Instrumento aplicado: "Cuestionario Uso de Drogas y Experiencias Adversas de la niñez". La prueba chi-cuadrado, test de independencia, comprobó no independencia entre uso y abuso de drogas posterior al maltrato como abuso sexual, con p-valor asociado 0,021, al 95% nivel de confianza, con significancia de  $p < 0,05$ ; determinantes para consumo posterior: madre maltratada, separación o divorcio de padres, pares consumidores.

**DESCRIPTORES:** Maltrato a los niños. Drogas ilícitas. Estudiantes. Universidades.

### INTRODUCTION

Panamá is located in a geographic region that favors the transit between psychoactive substance producers in South America and major consumers in North America and Europe. The phenomenon of drug trafficking and consumption goes beyond territory, cultural boundaries, traditions and, many times, even religious beliefs, creating an unlawful economic system that gives rise to a violent and repressive society, with negative impacts on the family and the community, fostering maltreatment of children and adolescents and, over time, changing their growth and development. Moreover, the influence of social, family, and personal conflicts, the search for identity, and the need for children and adolescents to belong result in a population group that suffers from emotional distress and is vulnerable to risk behaviors<sup>1</sup> such as further drug use and abuse. In this regard, Zunzunegui, Morales, and Martínez state that child maltreatment may be embedded in the families and socio-cultural context of children, and may lead adolescents to inappropriate behaviors.<sup>2</sup> The aforementioned is in line with the results of studies that point out that maltreatment in childhood is a risk factor for further consumption of drugs.<sup>3</sup>

This survey aimed at determining the independence or correlation between drug use and abuse and maltreatment in childhood and adolescence among students from a university in Panama City. This is a useful study because results could be used as evidence to reformulate public policies on the prevention of drug use and abuse and maltreatment in childhood. On the other hand, it may contribute to promoting the reorganization and improvement of the content of drug treatment programs as a response to the reality experienced by the population. The information generated by this survey is expected to facilitate the reorgani-

zation of the curricula, incorporating the topics of legal and illegal drugs and maltreatment into university syllabuses, making these more realistic and dynamic. The social relevance of this information lies in the creation of healthy educational, labor, and family contexts through civic education, as it allows for the design and implementation of educational strategies and social and health policies that enable understanding of and intervention on the issue. This survey was coordinated by the CICAD and the Centre for Addiction and Mental Health (CAMH) in Toronto, Canada.

### Overview of maltreatment and drug use and abuse

Muchas veces es imposible y difícil conocer con eMany times the exact magnitude or dimension of maltreatment are difficult if not impossible to measure due to underreporting of cases, but we know that this is a global, complex, multidimensional, multifactorial, and dynamic phenomenon that is not isolated, involving the activation of several bio-psychosocial factors. Child maltreatment is a deep-rooted practice in all geographic, political, social, and cultural human contexts, causing physical and psychological impacts on the vulnerable population. It is an issue neither of wealth nor poverty, but rather a disease of society.<sup>4</sup>

According to the World Health Organization, child maltreatment or abuse comprises all kinds of physical and emotional maltreatment, sexual abuse, abandonment, neglect, commercial exploitation, or any other type of maltreatment that causes actual or potential damage to health, survival, and the development and dignity of children in the context of a relationship of responsibility, trust, or power.<sup>5</sup> Childhood is when the framework of the world and its relationships

is built and, thus, the exposure of children to different kinds of maltreatment may make them perceive the world as a hostile place where one is either a victim or an attacker, associating this event with the abuse of psychoactive substances in the future.<sup>6</sup>

Data for Panama show that, from 2004 to 2008, there were 25,691 cases of children and adolescent maltreatment, of which 55.6% (14,273) were due to neglect or abandonment, 9.1% (2,332) due to sexual abuse, 7.4% (1,919) due to physical maltreatment, 1.3% (340) due to psychological maltreatment, and 26.6% (6,827) corresponding to other kinds of maltreatment.<sup>5</sup> Repeated physical abuse is associated to neurological sequelae and damage to the white nerve fibers that gather at the front part of the brain, connecting to the deeper brain structures of the limbic system (emotional system), which then start receiving wrong messages.<sup>7</sup> Violent reactions such as physical punishment can predispose the victim to repeating this behavior in the future with a spouse and children or siblings and acquaintances. This aggressiveness is attributable to parents that maltreat their children, causing damage to their brains, and many times this phenomenon is imperceptible and asymptomatic.<sup>5</sup> Generally, slapping or beating a child may cause damage to the prefrontal area with no damage to the skull and, thus, the face and head of the child present no signs or symptoms, while simultaneously permanently damaging their capacity to process emotional stimuli and to make accurate social decisions.

Drug use refers to the use of any psychoactive substance, either legal or illegal while drug abuse is the progressive use and includes adverse physical or psychological results. According to the Diagnostic and Statistical Handbook of Mental Disorders (DSM-IV TR), abuse stands for the routine use of substance for more than 12 months, in such a way that the individual is unable to comply with their obligations at work, school, or home.<sup>8</sup> The routine use of those substances in risk situations could lead to legal and social problems.<sup>9</sup>

Many times during preadolescence and adolescence, the situational, university, or extra-curricular environment of youngsters makes them prone to trying several drugs. High levels of drug abuse have been found among young adults in this stage of development when they typically tend to try several different drugs.<sup>10-11</sup> The consumption of alcohol and drug use among students and their peers is at critical levels among the university

population.<sup>11</sup> We should bear in mind that these students are the future leaders of society and, thus, understanding the facts that influence and favor this kind of behavior is a must to rescue them. According to studies performed in Panama, 45% of high school students reported that it is easy to buy any drug in the country, adding that more than 25% of adolescents have been offered drugs at least once in their lives.<sup>12</sup>

## METHODOLOGY

Se aborda este estudio desde el paradigma empiricista. This study employed an empirical approach, applying a quantitative method with a cross-sectional and correlational design, and was performed from June through July 2011. The universe of the survey comprised all students enrolled at the central campus of a university in Panama City in the first half of 2011. In this study, the causes and effects had already occurred or were ongoing, and the researcher gathered information, observed, and reported while the participant recalled the situation experienced. The survey used stratified sampling of 377 university students of both genders, aged 18 years or older, from 12 colleges. The sampling was distributed among the colleges based on the following criteria of inclusion, among others: candidates were active students duly enrolled at the university and 18 years of age or older, thus legally considered to be adults. The tool used was the questionnaire "Drug use and childhood experiences," (DCEQ, CICAD CAMH 2010-2011) comprising three instruments: the Adverse Childhood Experiences (ACE) questionnaire,<sup>13</sup> the Kessler scale of psychological distress (K10),<sup>14</sup> and the CICAD-OAS questionnaire on drug use and abuse. Furthermore, a demographic datasheet was also applied. Regarding data collection, students were asked to complete the questionnaire for 30-35 minutes in the classroom, after reading and signing the informed consent required by the ethical and national ruling authorities. The Statistical Package for the Social Sciences (SPSS), version 19, was used to analyze data, applying descriptive and inferential statistics to pose proofs of hypotheses applying the chi-square test of independence between drug use and abuse and maltreatment in childhood and adolescence, with a confidence level of 95%,  $p < 0.05$ .

It followed the ethical guidelines established by organizations such as the Research Ethics Board (REB) of the Centre for Addictions and Mental Health (CAMH) and of the ethics boards of the university that was the object of the survey in Pa-

nama City. No incentives or direct benefits were given to participants, who were informed about their option to refuse or withdraw their participation at any time. Participants were also informed about the risks that were considered be minimum or negligible, such as concern or anxiety related to the recollection of their experiences that, many times, were negative. The researchers arranged for the assistance of counselors and other health professionals from the university to resolve this. The study respected human rights and followed the Nuremberg codes and the Helsinki Declaration.<sup>15-16</sup>

## RESULTS

The results found that university students started consuming drug at the age of nine; among the 377 students (100%), the group of 18 to 25 years of age prevailed, with 96.3% (363). These were young adults in the full development of their university lives while the remaining 3.7% (24) were older than 25 years old. Women prevailed at 60.2% (227), followed by men at 39.8% (150), indicating that the female group was preparing for future empowerment in the production and governmental sectors, probably aiming at becoming the future leaders of the country. The socio-economic status presented the following tendency: very low 2.4% (9); low 13.5% (51); middle 64.2% (242); high-middle 15.6% (59); very high 2.4% (9); and 1.9% (7) did not reply.

### Drugs

Regarding the perception of consumption of psychoactive substances at any point in life, 59.9% (226) agreed that they had used drugs, while 39.5% (149) stated that they had never used drugs, and 0.6% (2) did not reply. The prevalence of consumption of psychoactive substances within the last 30 days was 42.6% (161), where 32.8% (124) referred to legal drugs, with the consumption of alcohol at 23.5% (89), followed by tobacco at 9.2% (35). For illegal drugs, the prevalence was 9.8% (37), among which prescribed drugs were at 5.6% (21); inhalants at 1.6% (6); cannabis at 1.1% (4); and cocaine, ecstasy, and heroin at 0.5% (2). Please refer to Table 1.

**Table 1 - Prevalence of Illegal and Legal Drug Consumption in the Last 30 Days Among Students at a University in Panama City, 2011**

	Total		Female		Male	
	n	%	n	%	n	%
<b>Legal drugs</b>						
Tobacco	35	9,2	16	4,2	19	5,0
Alcohol	89	23,5	47	12,3	42	11,1
<b>Sub-total</b>	<b>124</b>	<b>32,8</b>	<b>63</b>	<b>16,6</b>	<b>61</b>	<b>16,1</b>
<b>Illegal drugs</b>						
Cannabis	4	1,1	1	0,3	3	0,8
Cocaine	2	0,5	1	0,3	1	0,3
Ecstasy	2	0,5	-	-	2	0,5
Heroin	2	0,5	-	-	2	0,5
Heroin	6	1,6	2	0,5	4	1,1
Inhalants	21	5,6	15	3,9	6	1,6
<b>Prescribed drugs</b>	<b>37</b>	<b>9,8</b>	<b>19</b>	<b>5,0</b>	<b>18</b>	<b>4,8</b>
<b>Sub-total</b>	<b>161</b>	<b>42,6</b>	<b>82</b>	<b>21,7</b>	<b>79</b>	<b>20,9</b>
<b>Total</b>						

The prevalence of consumption of psychoactive substances for the last 12 months was 28.6% (108), for legal drugs 21.2% (80), and for illegal drugs 7.4% (28). Alcohol, at 15.6% (59), was the most consumed legal drug, at 9.5% (36) among women and 6.1% (23) among men. Alcohol consumption was followed by the consumption of tobacco at 5.6% (21), where men were the main consumers at 3.2% (12) followed by women at 2.4% (9). Please refer to Table 2.

**Table 2 - Prevalence of Illegal and Legal Drug Consumption in the Last 12 Months Among Students at a University in Panama City, 2011**

	Total		Female		Male	
	n	%	n	%	n	%
<b>Legal drugs</b>						
Tobacco	21	5,6	9	2,4	12	3,2
Alcohol	59	15,6	36	9,5	23	6,1
<b>Sub-total</b>	<b>80</b>	<b>21,2</b>	<b>45</b>	<b>11,9</b>	<b>35</b>	<b>9,3</b>
<b>Illegal drugs</b>						
Cannabis	7	1,9	3	0,8	4	1,1
Cocaine	1	0,3	-	-	1	0,3
Ecstasy	1	0,3	-	-	1	0,3
Heroin	1	0,3	-	-	1	0,3
Inhalants	3	0,8	-	-	3	0,8
Prescribed drugs	15	4	10	2,7	5	1,3
<b>Sub-total</b>	<b>28</b>	<b>7,4</b>	<b>13</b>	<b>3,4</b>	<b>15</b>	<b>4</b>
<b>Total</b>	<b>108</b>	<b>28,6</b>	<b>58</b>	<b>15,4</b>	<b>50</b>	<b>13,2</b>

Regarding the frequency of drug consumption of the total cohort (377) of students, only 51.7% (195) replied. Of the 100% (195) of the students affirming frequency of consumption, 50.8% (99) consume from six to seven days a week; 24.1% (47) consume from four to five days a week; 14.8% (29)



consume from two to three days a week; 6.2% (12) consume one day a week. Please refer to Table 3. consume one or three times a month; and 4.1% (8)

**Table 3 - Distribution of the Frequency of Consumption of Legal and Illegal Drugs in the Last 30 Days by Students at a University in Panama City, 2011**

Psychoactive substance	Drug consumption frequency											
	Total		6 to 7 days a week		1 day a week		2 or 3 times a week		4 to 5 days a week		1 or 3 times a month	
	n	%	n	%	n	%	n	%	n	%	n	%
Tobacco	37	19	11	5,6	5	2,6	11	5,6	7	3,6	3	1,5
Alcohol	118	60,5	70	35,9	2	1	11	5,6	29	14,9	6	3,1
Cannabis	7	3,6	4	2,1	-	-	1	0,5	2	1,0	-	-
Cocaine	3	1,5	1	0,5	-	-	-	-	2	1,0	-	-
Ecstasy	1	0,5	-	-	-	-	-	-	-	-	1	0,5
Inhalants	3	1,5	1	0,5	-	-	-	-	1	0,5	1	0,5
Prescribed drugs	26	13,3	12	6,2	1	0,5	7	3,5	6	5,2	-	0,0
<b>Total</b>	<b>195</b>	<b>100</b>	<b>99</b>	<b>50,8</b>	<b>8</b>	<b>4,1</b>	<b>29</b>	<b>14,8</b>	<b>47</b>	<b>24,1</b>	<b>12</b>	<b>6,2</b>

**Maltreatment in childhood and adolescence**

AAbuse: of the 377 (100%) students, 91% (343) reported no maltreatment; 9% (34) perceived maltreatment, of which 5.8% (22) were women and 3.2% (12) were men. When analyzing maltreatment, we should consider that manifestations of abuse may happen as an isolated event or may be a combination of several events. An analysis of the forms of abuse through the application of the "adverse childhood experiences" questionnaire revealed that 21.5% (81) of the respondents alleged to have experienced emotional abuse; 31.3% (118) reported physical abuse; and 4.8% (18) reported sexual abuse. Please refer to Table 4.

**Neglect**

ERegarding neglect, 34.5% (130) reported emotional neglect, 65% (245) made no reference to neglect, and 0.5% (2) did not reply. Physical neglect was experienced by 32% (129); 67.3% (254) did not report neglect, and 0.7% (3) did not reply.

**Dysfunctional Home**

Of the 100% (377) of students participating in the sampling, 64.7% (244) did not report separation or divorce of their parents; 35.5% (133) reported parental separation and, of these, 13.8% (52) affirmed consuming drugs, while the remaining 21.5%

(81) stated that they did not consume drugs.

**Tabla 4 - Distribution of the Presence or Absence of Maltreatment as Abuse in Childhood and Adolescence by Gender of Students at a University in Panama City, 2011**

Types of abuse	Total		Female		Male	
	n	%	n	%	n	%
<b>Emotional abuse</b>						
With	21,5		47	12,5	33	22
Without	78,5	178,9	47,5	117	31	
<b>Sub-total</b>	<b>100</b>	<b>227</b>	<b>60,2</b>	<b>150</b>	<b>39,8</b>	
<b>Physical abuse</b>						
With	118	31,3	68	18,0	50	13,3
Without	259	68,7	159	42,2	100	26,5
<b>Sub-total</b>	<b>377</b>	<b>100</b>	<b>227</b>	<b>60,2</b>	<b>150</b>	<b>39,8</b>
<b>Sexual abuse</b>						
With	18	4,8	13	3,4	5	1,3
Without	359	95,2	214	56,8	145	38,5
<b>Sub-total</b>	<b>377</b>	<b>100%</b>	<b>227</b>	<b>60,2</b>	<b>150</b>	<b>39,8</b>

**Hypotheses testing**

*Correlation between drug use and abuse and maltreatment in childhood and adolescence among university students*

Drug use and abuse against maltreatment as sexual abuse: The chi-square statistical test pointed out a value of 5.310, gl: 1, asymptotic significance of 0.021, below 0.05 (confidence level of 95%,  $p < 0.05$ ); that is, it was significant. Drug use and abuse are not independent from maltreatment such as sexual abuse in childhood and adolescence among university students.

Drug use against maltreatment as parents' separation or divorce: The chi-square statistical test pointed out a value of 6.242, gl: 1, asymptotic significance of 0.012; significance was below 0.05, confidence level of 95%,  $p < 0.05$ . Use and abuse of psychoactive substances are not independent from maltreatment such as divorce or separation of the parents of university students in childhood and adolescence.

### *Correlation between maltreatment and psychological distress*

Maltreatment such as abused mother and psychological distress: The chi-square statistical test pointed out a value of 2.066, gl: 2; asymptotic significance is 0.002 (below 0.05), with a confidence level of 95%,  $p < 0.05$ , indicating that maltreatment such as witnessing the abuse of a mother is not independent from psychological distress.

### *Influence of peers who are consumers on students who use and abuse drugs*

Drug use and abuse against influence of peers who are consumers: The chi-square statistical test pointed out a value of 39.338, gl: 1, with an asymptotic significance of 0.000 (below 0.05), and a confidence level of 95%,  $p < 0.05$ . This means that drug use and abuse among university students is not independent from the influence of peers who are consumers.

## **DISCUSSION**

One participating university student reported to have started using drugs at nine years of age. Early consumption of drugs such as alcohol and tobacco usually happens during adolescence or early youth; the consumption of legal drugs typically tends to increase as people get older.<sup>17</sup> Social acceptance and consumption approved by parents and shared with children during family social events and as a routine during weekends promote the first use of drugs.<sup>18</sup> Following are

some of the potential explanations for the early consumption: 1) easy access to legal and illegal drugs; 2) low economic cost of drugs; and 3) access of minors to acquisition of legal drugs (alcohol and tobacco) in commercial facilities.

Adolescents and young adults were the prevailing age group in the study (18 to 25 years of age); this group is vulnerable to drug use and abuse as they are in the initial stage of the vital cycle characterized by the search for identity and belonging (acceptance). Thus they are more easily influenced by their peers who consume drugs than by their parents. Moreover, in this stage students face several social changes, the pressures of the context of university life, and socio-cultural conflicts inherent to the socio-political reality of the country. Two hundred forty-two (64.2%) of the students participating in the study belonged to the middle socio-economic class; this group is also vulnerable to drug use and abuse because: 1) the low cost of drugs, which makes them accessible to this age group of the population, evidencing how easily drugs can be purchased in Panama; and 2) the middle socio-economic class today holds purchasing power enough to afford the costs of drugs. In other regions, the consumption of illegal substances was higher among adolescents belonging to the middle class than among those of the lower class.

Of the 377 (100%) students participating in the study, more than half (59.9%, 226) referred to having consumed psychoactive substances at some point in their lives; however, surveying the consumption of legal and illegal drugs and analyzing this in terms of general consumption in 30 days and one year respectively, it was found that 71.3% (269) of students effectively consume psychoactive substances, of which 42.6% (161) use psychoactive substances (prevalence in the last 30 days), while 29.6% (108) abuse drugs (prevalence in the last 12 months). Regarding the psychoactive substance most consumed in the last 30 days and in one year, the survey found that alcohol leads both groups, and the consumption among women and men is very similar, indicating a tendency to equalize consumption. This tendency is in line with the findings of the United Nations Office on Drugs and Crime,<sup>18</sup> namely that disparity of consumption between genders is decreasing in some well-established illegal drug markets, notably among youth.

Tobacco is ranked second in consumption,

in line with the global tendency. Regarding illegal drugs, there is a change in the traditional trend of consumption of cannabis; in fact, prescribed drugs are ranked first, followed by inhalants, with cannabis third. This trend is probably due to the increased control over the introduction of raw materials to process drugs; thus prescribed drugs and inhalants that are available at home are more accessible. Women are the main consumers of prescribed drugs, and this tendency could be due to: 1) the lack of awareness about self-medication; 2) lack of good medical controls on the use of medications with no prescription; and 3) the fact that oftentimes these drugs cause addiction. In Brazil, women widely use benzodiazepines with no medical prescription; Mexico also faces the same reality, reporting an increase in the consumption of these drugs.<sup>18</sup> Regarding the tendency of prevalence of illegal drug consumption in the last year, figures indicate that 7.4% (28) of the university student population in Panama have reached a range similar to that for illegal drugs among university populations in the Andean countries. Please note the following figures for Andean countries: 4.6% in Bolivia; 16.6% in Colombia; 10.1% in Ecuador; and 5.6% in Peru.<sup>19</sup>

During the study development it was found that university students present difficulties in conceptualizing the terms "abuse" and "physical abuse." Physical abuse to them is the traditional punishment, and sexual abuse remains a taboo in that sector of the population of Panama. The survey clearly shows that dysfunctional homes during childhood and adolescence affect the consumption of legal and illegal drugs among the university population in Panama, and the associated aspects are: separation or divorce among parents and abuse of the mother.<sup>20-21</sup> Surveys indicate that these aspects are associated with first use, frequency, and intensity of substance consumption among adolescents.<sup>22-24</sup> Divorce shortens family cohesion and promotes conflicts among family members, resulting in less effective relationships<sup>25-26</sup> that lead to low acceptance and insufficient behaviors of control over adolescents, in addition to poor support of parents. Regarding abused mothers, this behavior can become a cyclical repetitive experience adopted by the child.<sup>27-28</sup>

## CONCLUSIONS

The survey proved the non-independence between drug use and abuse and exposure to maltreatment. Therefore, maltreatment such as

sexual abuse, abuse of the mother, and parents' separation or divorce are determinant indicators for drug use and abuse.

The study proved that the educational level of students' parents is an indicator associated with drug use and abuse.

The peers of university students who consume drugs influence drug use and abuse among their fellow students.

Among university students who consume drugs and who participated in the study and answered the question on frequency of consumption, half reported a frequency of consumption of psychoactive substances of six to seven days a week.

The highest frequency of drug consumption was for the period of six to seven days a week with 50.8% (99); that is, half of the university students consume some psychoactive substance (legal or illegal) every day.

## Limitations

The researchers acknowledge a lack of updated statistical data and underreporting of cases of maltreatment to governmental spheres. The students' cognitive system failure regarding long-term memory to recall past experiences when answering the questionnaire on adverse maltreatment experiences was also a factor, as was the cultural taboo that prevents some students from answering accurately about sexual abuse and drug consumption.

## Recommendations

Through the Ministries of Education, Health, and Human Development the government should design and implement campaigns to raise awareness among student populations regarding the physical and psychosocial problems that give rise to the consumption of legal and illegal drugs.

The university should incorporate the conceptualization and the topic of prevention and promotion of drug use and abuse and maltreatment into the syllabuses of the courses of several colleges.

The government should approach drug consumption and maltreatment phenomena as a public health issue.

In-depth surveys should be conducted on the topic to generate knowledge to subsidize the formulation and implementation of dynamic and



innovative programs of promotion and prevention of drug use abuse and maltreatment.

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