# ENTERTAINMENT, SPIRITUALITY, FAMILY AND PEER INFLUENCE UNIVERSITARIES IN DRUG USE

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**ABSTRACT:** The aim of the study was to examine the relationship between family socio-cultural factors, entertainment and spirituality with peer influence and drug use among college students in one university in San Salvador, El Salvador. Multi centric study with a crossover design, 250 students from a university in San Salvador, El Salvador participated. Percentage analyzes were performed, tests of association and correlation. It was found that sociocultural factors family and spirituality could be protecting factors since most 80% positively value these two values. Most students do not use illicit drugs, marijuana 2%, cocaine 1% and amphetamines 1.2%, but consuming more licit drugs alcohol 42%, tobacco 21%.

DESCRIPTORS: Family. Spirituality. Narcotics. University.

# ENTRETENIMIENTO, ESPIRITUALIDAD, FAMILIA Y LA INFLUENCIA DE PARES UNIVERSITARIOS EN EL CONSUMO DE DROGAS

**RESUMEN:** El objetivo del estudio fue examinar la relación de los factores socio-culturales de familia, entretenimiento y espiritualidad y la influencia de pares y el consumo de drogas entre los estudiantes universitarios. Estudio es multicéntrico, con un diseño transversal, participaron 250 estudiantes de una universidad en San Salvador, El Salvador. Se realizaron análisis porcentuales, pruebas de asociación y correlación. Se encontró que los factores socioculturales de familia y espiritualidad podrían estar protegiendo ya que la mayoría 80% valoran positivamente estos dos valores. La mayoría de estudiantes consumen muy poco drogas ilícitas, marihuana 2%, cocaína 1% y anfetaminas 1.2%; pero consume más las drogas lícitas alcohol 42%, tabaco 21%.

DESCRIPTORES: Familia. Espiritualidad. Narcóticos. Universidade.

# DIVERSAO, ESPIRITUALIDADE, FAMÍLIA E A INFLUÊNCIA DOS PARES NA UNIVERSIDADE PARA O USO DE DROGAS

RESUMO: O objetivo do estudo foi examinar a relação entre fatores sócio-culturais da família, entretenimento e espiritualidade com a influência dos pares e uso de drogas entre estudantes universitários. Estudo multi centrico com um desenho de *crossover*, do qual participaram 250 estudantes de uma universidade privada em El Salvador. Foram realizadas análises percentuais, testes de associação e correlação. Verificou-se que fatores sócioculturais, família e espiritualidade poderiam estar protegendo, já que a maioria (80%) valorizaram positivamente esses dois valores. O uso de drogas ilícitas foi muito baixo: maconha (2%), a cocaína (1%) e as anfetaminas (1,2%); drogas lícitas, como o álcool (42%) e fumo (21%) tiveram maior consumo.

DESCRITORES: Familiares. Espiritualidade. Entorpecentes. Universitarios.

## INTRODUCCIÓN

ElDrugs are a multifactorial global phenomenon. Today, countries should seek effective solutions regarding prevention, reduction, or treatment. El Salvador is a place of drug transit and consumption and, as such, studying the phenomenon among different segments of the population is of utmost importance. The objective of this article is to understand how the sociocultural factors of family, spirituality, and entertainment are related to the influence of peers and drug consumption among university students.

El Salvador is located in Central America, occupying 20,000 km², with a population of six million inhabitants, and a density of 299 inhabitants per km². Population growth is 0.445% a year, and life expectancy is 72.3 years. Following are the prevalence rates of drug consumption for 2005 among the population at large in the age group of 12 to 71 years: alcohol (18.6%) and tobacco (14.6%). Marijuana (6.1%), cocaine (1.9%), and inhalants and solvents (1.5%) were the most widely used drugs.¹

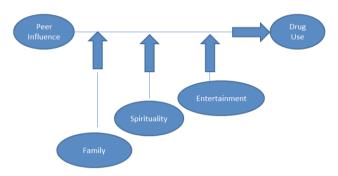
The prevalence of use of substances among undergraduate university students shows that, in the last year, prior to the 2011 survey, 40% had consumed alcohol, 21% tobacco, 3.3% marijuana, and 1.4% tranquilizers at least once in their lives, between the ages of 16 and 19.2 According to the school census performed by the SIDUC 20083, in the previous year El Salvador reported the following prevalence of use of psychoactive substances among students of the seventh, ninth, and eleventh grades: alcohol 20%; cigarettes 15%, and marijuana 3.5%.<sup>3</sup>

Regarding the consumption of multiple drugs in the last year the highest rates were found for alcohol, while for marijuana it was 1.2%.<sup>4</sup> From 30% to 40% of university students may be at risk, mainly due to weak family relations, and at least three of every 10 students know that their peers consume drugs.<sup>5</sup>

According to the first-ever study on the consumption of drugs and other issues among student populations from five universities in El Salvador, 70.8% of the students affirmed to have consumed some kind of substance in their lives. Excluding alcohol and tobacco, the most widely used substances in 2009 were: marijuana (3.3%); solvents (0.7%); cocaine (0.6%); and hashish (at slightly more than 0.5%).

The study is based on the Theory of Inte-

gral Social Control (ISC) and Integral Theoretical Focus. Social control theories attempt to explain why some individuals' behavior follows normative instructions and others do not. This link is developed in childhood, through attachment to the beloved ones (parents, teachers, friends) who serve as models according to the social rules. The social theories of learning show a clear panorama of people who cannot take action in relation to their decisions about using drugs.7 Integral theoretical focus deals with broader groups. It is widely known that groups such as family, church (or religious/spiritual context), peers, and communication means have a strong influence on individuals' decision-making processes and strongly affect their behaviors. That is to say, those individuals sharing a collective consciousness common to the members will be more or less compliant to the average of the society.8



Source: CICAD-CAMH researchers group VIVI (2011-2012)

Figur 1 - Diagram of sociocultural factors and their correlation with drug consumption among university students, 2012Conceptualización

# Conceptualization

# Influence of peers

Influence of peers is defined as to what extent an individual responds to social pressure or extrinsic motivation by peers towards behaving in a way acceptable to them, for example, in their social activities, sexual behavior, and use or not of drugs. 9-10

## Technology interaction-based entertainment

This is defined as participation in any activity involving watching an electronic screen for entertainment purposes. It can be either interactive or

non-interactive.

Entertainment based on parties and social activities

This includes any activity that implies attending social meetings, usually with food, drink and music to entertain.<sup>11</sup>

## Spirituality

This is the individual's perception of spirituality when the individual perceives himself as a spiritual and/or religious person (this can be moments of silence or personal prayer, meditation).<sup>12</sup>

# Family relations

This is the interconnection of family members to each other and how their thoughts and actions affect one another.<sup>10</sup>

# Understanding of the group of peers as a manifestation of social influence on the use of drugs

Social influence is the effect of others on individual attitudes and group behavior.13 The influence of peers is explained as the social pressure of extrinsic motivation by fellows or friends towards behaving in a way that is acceptable to them; therefore, the influence of peers on drug consumption is increasingly concerning.

The results of several studies show a strong influence of the use of substances by close friends. <sup>13</sup> On the other hand, <sup>9</sup> several investigations have provided evidence of the important role played by peers in the development of the use and abuse of substances. The university environment seems to promote this strong influence of peers, and seems to be a safe refugee to try substances.

People have an affinity with individuals or groups that share their interests and values and provide a supportive context to their viewpoints and behaviors. <sup>14</sup> Persons interested in using drugs, for example, may select as friends persons sharing similar interests, although the behavior of consuming specific drugs could be nothing but the expression of a set of social rules that determines social selection. <sup>10</sup>

Many countries are experiencing cultural imperialism through the globalization of enter-

tainment markets and communications means. Technological progress has strongly influenced entertainment as a sociocultural factor, for example, the development of music and technology industries.<sup>15</sup>

There is a general societal belief in the idea of a supernatural being for those who seek for inspiration and spiritual guidance, either continuously or in an inconsistent way. Therefore, spirituality or religiosity is the measure to which extent the individual assumes personal spirituality as a socialization agent that affects that individual's conduct.

# Main objective

Examinar los factores socio-culturales que moderan la relación entre la influencia de pares y el consumo de drogas entre los estudiantes universitarios.

# Specific objectives

To establish the correlation between influence of peers and drug consumption among university students

To investigate the moderating effect of entertainment (technology-based entertainment and entertainment at parties/social meetings) on the correlation between influence of peers and drug consumption among university students

To establish how family relations moderate the correlation between influence of peers and drug consumption among university students

To analyze to which extent spirituality moderates the correlation between influence of peers and drug consumption among university students.

## Method and design of investigation

EThis is a multicenter, descriptive, and cross-sectoral study. Two hundred fifty students from a private university in El Salvador participated: 125 students from social sciences and 125 students in the field of health sciences. The self-administered questionnaire had six sections with 81 questions. The areas included questions on socio-demographic information (seven questions), influence of peers (four questions), family relations (25 questions), entertainment (nine questions), spirituality (26 questions), and drug consumption (10 questions).

The protocol was approved by the Commission of Ethics in Research of the Centre for Addictions and Mental Health (CAMH) and by the ethics commission of the private university selected in El Salvador in 2012.

Groups from different educational backgrounds were selected and asked if they wanted to participate voluntarily in the investigation. Participants signed the Informed Consent Term (ICT) and were given the questionnaire. They were informed about the content of the ICT and their questions were clarified; moreover, participants were informed that they could leave the survey at any time. Then they signed the ICT and filled in the questionnaire, depositing both in different boxes placed in different locations around the room.

Data were analyzed using the SPSS software; percentage analysis and association tests were performed.

### **RESULTS**

The results summarize the five parts of the study: socio-demographic characterization; influence of peers; family; entertainment; spirituality; and drug use.

### Socio-demographic characterization

The study comprised university students of 18 to 24 years old, where the average age was 20 years; 29% were male and 71% were female. Ninety percent were full-time students and 10% were part-time students. Most of the students (78.4%) were single, while 18% lived with a partner. Most of the participants lived with their families (32.4%). Only 1.6% had children. Most of the students interviewed (74%) take courses in the field of health and human sciences; the remainder belong to the Social Science College. The majority of the participants were taking the second and third years of the course, ranging from the third to the 11th semester. Ninety-two percent did not work; the remaining 8% (20 students) performed duties related to bookkeeping, kitchen work, accounting, health care, or teaching; some reported having their own business.

# Influence of the group of peers

Most of the students agree that their friends help when they are in trouble (81%); 14.4% disagree; and 4% strongly disagree. Nearly 28%

answered to have few or some friends that use drugs; 8% referred to having a friend who uses drugs; 16% said many of their friends use drugs; 5.2% said none of their friends use drugs.

The majority of students (32%) disagree that most of their peers have unprotected sex, and 29.6% totally disagree that most of their friends have unprotected sex. That is to say, that six of each 10 youngsters have protected sex, while four of each 10 probably have unprotected sex. Eighteen percent of respondents agree or totally agree that most of their friends do not drive after consuming alcohol and drugs; on the other hand, 16% disagree or totally disagree, which means that these last probably drive after consuming alcohol or drugs.

At least half of the respondents (29%) totally agree that most of their friends do not smoke tobacco or cigarettes; 22% agree that most of their friends do not smoke tobacco or cigarettes; and the other half of respondents probably do. Most of the students surveyed totally agree (28%) and agree (25%) that most of their friends have more than five cigarettes in one single occasion.

# **Family**

The descriptive analysis of this segment found a very interesting positive balance of the 25 items of the measurement scale: 13 ask about negative relations; 11 ask about positive relations. All positive statements represent high percentages, for example: 73% of the students consider their family to be excellent; 75% enjoy their families; 75% consider that there is affection in their families; while 87% are proud of their families "most or all of the time." The negative extremes ranged from 1% to 4% as happens with the remaining negative statements about the family segment.

The logistic regression of the family segment with alcohol, marijuana, cocaine, and amphetamines in the last 12 months was not significant; only tobacco displayed any correlation with the family. At least seven of each 10 youngsters said that their families were excellent all the time and most of the time; at least two of each 10 said sometimes or some considerable time. Approximately 10% perceived their families as never excellent or excellent on a few occasions.

#### Entertainment

At least five of every 10 students stated that they had not attended parties in the last three months where alcohol, tobacco, or drugs may have been present. Two of 10 said that they had attended one, and two of 10 said that they had attended two to six parties in the last three months where alcohol, tobacco, or drugs may have been present. At least 10% reported to have attended seven to 20 parties.

The frequent or very frequent entertainment activities were: watch the news (83%); watch pornography (64%); and participate in social networks (68%). Following are the entertainment activities never performed: watch movies (64%) and shop online (74%). One could say that accessing e-mail is moderate, where 38% do it sometimes, while 22.5% barely and frequently do it. Fifty-four percent watch video clips very frequently and frequently, while 25% watch them on some occasions. For the correlation between entertainment and drug consumption, only the relation between "tobacco" and "watch video clips" was significant.

# Spirituality

Nearly 80% of the students stated that they have or believe in a spiritual life related to their decisions. For example, they say they agree and totally agree in counting on spiritual support in hard times, that there is a higher power, thank God for happy events, and that their lives have a purpose. Approximately 80% of the respondents agreed and totally agreed that spiritual power influences the happenings in their lives. Most of the students affirmed to have prayed five times on average in the previous week. Only 10% to 15% responded that spirituality is of no use or is not important in their lives. The results of the binary logistic regression: when relating the variables of spirituality and illegal drugs (tobacco and alcohol) in the last 12 months, there was no significant correlation. Only the consumption of cocaine in

the last 12 months proved to be related to most of the spirituality variables. For the remaining drugs, there was no significant correlation.

# **Drug consumption**

# Legal drugs

As regards consumption in the last 12 months, 21.2% reported to have used byproducts of tobacco, cigarettes, chewing tobacco, cigars, etc., while the remainder say they have not used. Fifty-eighth point four percent have not used alcoholic beverages, while 41.6% have (Table 1).

# Illegal drugs

In the last 12 months, 96.4% of respondents affirmed that they had not used marijuana and only 3.2% used it; 98.4% said they had not used cocaine, while 98.0% said they had not consumed amphetamines (Table 1). In brief, legal drugs have been more widely used in the last 12 months: 21.2% used tobacco and 41.6% used alcohol. Illegal drugs were less widely used, but there is a small margin lower than 3.3% that have used it. The behavior for the last three months was similar.

For the association of gender and substance consumption in the last 12 months, it was significant at 0.05, as follows: tobacco ( $\chi$ 2=5.29, p=0.02); alcohol ( $\chi$ 2=8.107, p=0.004); marijuana ( $\chi$ 2=11.19, p=0.034); cocaine ( $\chi$ 2=10.05, p=0.007); and amphetamines ( $\chi$ 2=6.76, p=0.034). When the same substances were correlated to gender in the last three months, a significant difference at 0.05 was found for tobacco ( $\chi$ 2=16.43, p=0.002), alcohol ( $\chi$ 2=14.33, p=0.006), and marijuana ( $\chi$ 2=19.23, p=0.000); results were not significant for cocaine or amphetamines (Table 1).

Table 1 - Consumption of legal and illegal substances according to gender in the last 12 months. San Salvador, El Salvador, 2012

|        | Alcohol* | Tobacco* | Marijuana* | Cocaine* | Amphetamines* |
|--------|----------|----------|------------|----------|---------------|
| Male   | 55.60%   | 30.50%   | 8.30%      | 4.20%    | 4.20%         |
| Female | 36.00%   | 17.40%   | 1.10%      | -        | 0.60%         |
| Total  | 41.60%   | 21.20%   | 3.20%      | 1.20%    | 1.60%         |

<sup>\*</sup> p<0.05

## Legal drugs

For the association between tobacco consumption in the last 12 months and the influence

of peers, significant differences were found for the following variables: most of my friends have unprotected sex ( $\chi$ 2=15.88, p=0.003); most of my friends do not smoke tobacco or cigarettes ( $\chi$ 2=37.82, p=0.000); most of my friends do not consume more than five cigarettes on one single occasion ( $\chi$ 2=32.28, p=0.000). The variables "my

friends help me to avoid trouble" and "most of my friends do not drive after consuming alcohol or using drugs" were not significant for 12 months (Table 2).

Tabla 2 - IInfluence of peers and consumption of tobacco in the last 12 months. San Salvador, El Salvador, 2012

| Variable         | Tobacco – most of my<br>friends have unprotected<br>sex* | Tobacco - most of my<br>friends do not smoke<br>tobacco or cigarette* | Alcohol – most of my<br>friends do not consume<br>more than five doses in one<br>single occasion* |
|------------------|--|---|---|
| Totally agree    | 10.0%  | 2.7%  | 5.8%  |
| Agree            | 7.3%   | 10.7%   | 12.7%   |
| Disagree         | 27.5%  | 34.3%   | 26.8%   |
| Totally disagree | 31.1%  | 40.7%   | 46.8%   |
| No response      | -  | -   | -   |
| Total            | 21.2%  | 21.2%   | 21.2%   |
|                  |  |   |   |

<sup>\*</sup> p<0.05.

EFor the association between alcohol consumption in the last 12 months and the influence of peers, significant differences were found for the following variables: most of my friends have unprotected sex ( $\chi$ 2=18.63, p=0.001); most of my friends do not smoke tobacco or cigarettes ( $\chi$ 2=20.75, p=0.000); most of my friends do not

consume more than five cigarettes on one single occasion ( $\chi$ 2=18.08, p=0.000). The variables "my friends help me to avoid trouble" and "most of my friends do not drive after consuming alcohol or using drugs" were not significant for 12 months (Table3).

Tabla 3 - Influence of peers and consumption of alcohol in the last 12 months. San Salvador, El Salvador, 2012

| Variable         | Alcohol – most of my<br>friends have unprotected<br>sex* | Tobacco - most of my<br>friends do not smoke<br>tobacco or cigarette* | Alcohol – most of my<br>friends do not consume<br>more than five doses in<br>one single occasion* |
|------------------|--|---|---|
| Totally agree    | 25.0%  | 24.7%   | 26.1%   |
| Agree            | 25.5%  | 33.9%   | 33.3%   |
| Disagree         | 48.8%  | 50.7%   | 52.1%   |
| Totally disagree | 55.4%  | 61.1%   | 59.6%   |
| Total            | 41.6%  | 41.6%   | 41.6%   |

<sup>\*</sup> p<0.05.

In the last three months, the influence of peers on the consumption of tobacco and alcohol reported significant differences to the following associations: Tobacco: most of my friends do not smoke or use other forms of tobacco ( $\chi$ 2=38.77,

p=0.000); Alcohol: most of my friends do not smoke or use other forms of tobacco ( $\chi$ 2=30.47, P=0.002); Tobacco: most of my friends do not consume more than five doses in one single occasion ( $\chi$ 2=46.14, P=0.000); Alcohol: most of my friends do not consume more than five doses in one single occasion ( $\chi$ 2=43.29, P=0.000) (Table 4).

Tabla 4 - Influence of peers and consumption of tobacco and alcohol in the last three months. San Salvador, El Salvador, 2012

| Variable         |       | Alcohol - most of<br>my friends do not<br>smoke tobacco<br>or other forms of<br>tobacco* | Tobacco - most of<br>my friends do not<br>consume more than<br>five doses in one<br>single occasion* | Alcohol – most of<br>my friends do not<br>consume more than<br>five doses in one<br>single occasion* |
|------------------|-------|--|--|--|
| Totally agree    | 29.2% | 29.2%  | 27.6%  | 27.6%  |
| Agree            | 22.4% | 22.4%  | 25.2%  | 25.2%  |
| Disagree         | 26.8% | 26.8%  | 28.4%  | 28.4%  |
| Totally disagree | 21.6% | 21.6%  | 18.8%  | 18.8%  |

<sup>\*</sup> p<0.05.

# Illegal drugs

For the association between consumption of cannabis, cocaine, and amphetamines in the last 12 months and the influence of peers, there was a significant difference in the variable cocaine: most of my friends do not drive after consuming alcohol or drugs ( $\chi$ 2=31.55; p=0.000); amphetamines: most of my friends do not drive after consuming alcohol or drugs ( $\chi$ 2=26.05; p=0.001); marijuana: most of my friends do not consume more than five doses on one single occasion ( $\chi$ 2=13.79; p=0.034);

cocaine: most of my friends do not consume more than five doses on one single occasion ( $\chi$ 2=15.72; p=0.015) (Table 5).

In the last three months, the influence of peers and the association "Cocaine: most of my friends do not drive after consuming alcohol or drugs" reported significant differences ( $\chi$ 2=25.98, p=0.001). There were no significant differences for the association between consumption of marijuana or cocaine in the last three months and the influence of peers.

Tabla 5 - Influence of peers and consumption of illegal drugs in the last 12 months. San Salvador, El Salvador, 2012

| Variable      |          | Cocaine - most of<br>my friends do not<br>drive after consu-<br>ming alcohol or<br>drugs * | Amphetamine -<br>most of my friends<br>do not drive after<br>consuming alcohol<br>or drugs* | Marijuana - most<br>of my friends do<br>not consume more<br>than five doses in<br>one single occa-<br>sion* | Cocaine - most<br>of my friends do<br>not consume more<br>than five doses in<br>one single occa-<br>sion* |
|---------------|----------|--|---|---|---|
| Totally agree |          | -  | -   | 1.4%  | -   |
| Agree         |          | -  | 5.3%  | -   | -   |
| Disagree      |          | 4.3%   | 0.0%  | -   | -   |
| Totally       | disagree | 11.1%  | 11.1%   | -   | 6.4%  |
| Total         |          | 1.2%   | 0.6%  | -   | 0.4%  |
|               |          |  |   |   |   |

<sup>\*</sup> p<0.05.

## **DISCUSSION**

The influence of peers has an important positive correlation, for example, as most of the students (81%) agree that their friends help them when they are in trouble. These results are associated with the theory of social control, which emphasizes the existence of liking, commitment, participation, and general beliefs referring to ties common to the group one belongs to. General beliefs refer to the respect for the moral values and rules of the society, as the group of students

evidenced to know regarding whether their peers use drugs or not, among other aspects.8

When analyzing the behaviors of peers, one could say that half of them would be developing dangerous activities such as using drugs, driving under the effects of alcohol, having unprotected sex, which are related to the influence of peers to higher or lesser degrees, while the other half would be excluded from risky behaviors.

According to the Constitution of the Republic of El Salvador, <sup>16</sup> the family is the foundation of society and, according to constitutional values, it

relies on the protection of marriage and offspring. Typically, family values are the foundation for the development of every individual, and school contributes to nurturing each person.<sup>17</sup> Adolescence and youth are the phases when barely controllable changes are generated, and some behaviors even cause serious consequences. In this group of study, family appears as a protective factor, as most of the students (70-80%) described a positive relation with their families by rating families as excellent, reliable, where they have affection and pride. Approximately 10% considered their families on the extreme of negative relations. A similar tendency was found for 2007, according to a study of risk factors6 that affirmed that 30% to 40% of students would be at risk of drug consumption. Regarding parties, half of the students did not participate in this kind of entertainment where drugs could be present.

As entertainment, access to e-mail is mainly moderate, where 38% do it sometimes, while 22.5% barely and frequently do it. Fifty-four percent watch video clips very frequently and frequently, while 25% watch on some occasions. According to the evaluation of the segment of entertainment, most of the students have access to electronic devices and the Internet, which is related to the socio-demographic characterization, as they belong to the middle class socioeconomic level; at least six in every 10 engages in technology-based entertainment activities (social networks, news, and pornography) very naturally.

Spirituality is a factor present in the lives of the students participating in the study and, like the family, is a protective factor among the student population; both are related to personal decisions.

#### CONCLUSIONS

In brief, the sociocultural factors of family and spirituality may be protecting most of the students at the university participating in the study from consuming illegal drugs, as fewer than 3.3% consume marijuana, cocaine, or amphetamines. Legal drugs are more widely used due to the Salvadoran culture that consuming alcohol and byproducts is part of celebrations, as is tobacco. As both drugs are permitted by law, their consumption is higher in this population segment, with about 40% and 20% consumption for alcohol and tobacco, respectively. The study displays that sociocultural factors of family relations and spirituality work as protectors in this

group of university students, as approximately 80% expressed that they were very dependent on their spiritual lives and families. Relationships with peers, families, and spirituality had a positive influence on most of the respondents; on the other hand, we could say that entertainment might be working as a risk factor for the use of drugs. Technology-based entertainment is enjoyed and used by most of the students (80%), and that makes sense, as the study population has more access to electronic devices and the Internet. The tendency of consumption of legal drugs is similar to that of other groups of undergraduate students and of the population at large. Among illegal drugs, cocaine showed a slight increase (0.4%), while marijuana showed a slight reduction (1.3%) in consumption when compared to other groups of undergraduate students and the population at large.

#### Recommendations

The recommendation to the university that was the object of this study is to implement a strategy to identify students who consume legal or illegal drugs and support them to reduce, abandon, or treat consumption. The student care units should develop and strengthen universal programs on prevention to sustain and expand levels of abstention.

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