

SOCIAL DETERMINANTS IN THE CONSUMPTION OF PSYCHOACTIVE SUBSTANCES IN UNIVERSITY STUDENTS IN 2016

DETERMINANTES SOCIALES EN EL CONSUMO DE SUSTANCIAS PSICOACTIVAS EN ESTUDIANTES UNIVERSITARIOS EN 2016

DETERMINANTES SOCIAIS NO CONSUMO DE SUBSTÂNCIAS PSICOATIVAS EM ESTUDANTES UNIVERSITÁRIOS 2016

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Abstract: In this article we present the results of an investigation aimed to describe the social determinants associated with the consumption of psychoactive substances (SPA) in students of a public university in Colombia, in face-to-face modality. A descriptive, quantitative, cross-sectional study was carried out with a sample of n = 341 students; stratified sampling was used, with random selection, applying the questionnaire used in the II Andean Epidemiological Study on Drug Use in the University Population, Project PRADICAN (Illicit Anti-Drug Program in the Andean Community), with prior authorization of the study participants. A descriptive analysis was carried out and the relative frequencies were calculated. The results showed that 61% of the respondents belong to the socioeconomic stratum 1, the lowest one; 77.4% are dedicated exclusively to their studies and 22.6% work in addition to studying. The relationship with their parents is good (90%). 56% have substance consuming friends and 20.5% have close relatives who use illegal SPA. The results allowed to establish that the coverage of the support programs offered by the university through University Welfare should be increased in order to positively intervene the identified determinants, design and develop strategies to generate a culture of self-care and prevention of SPA consumption.

Keywords: Inequity in health, adolescents, students, illicit drugs.

Resumen: En este artículo se dan a conocer los resultados de una investigación que tuvo como objetivo describir los determinantes sociales asociados al consumo de sustancias psicoactivas (SPA) en estudiantes de una universidad pública de Colombia, modalidad presencial diurna. Se realizó un estudio descriptivo, cuantitativo, transversal, con una muestra de n= 341 estudiantes; se realizó muestreo estratificado, con selección aleatoria y se aplicó el cuestionario utilizado en el II Estudio Epidemiológico Andino sobre Consumo de Drogas en la Población Universitaria, Proyecto PRADICAN (Programa Antidrogas Ilícitas en la Comunidad Andina), previa autorización de los participantes de estudio. Se realizó un análisis descriptivo y se calcularon frecuencias relativas. Los resultados mostraron que el 61% de los encuestados pertenecen al estrato socioeconómico 1, el más bajo; el 77,4% se dedica exclusivamente a sus estudios; el 22,6% trabaja además de estudiar. La relación con sus padres es buena (90%). 56% tienen amigos consumidores y el 20,5% tienen familiares cercanos consumidores de SPA ilegales. Los resultados permitieron establecer que se debe aumentar la cobertura de los programas de apoyo que ofrece la universidad a través de Bienestar Universitario para intervenir positivamente los determinantes identificados, diseñar y desarrollar estrategias que permitan generar cultura de autocuidado y prevención del consumo de SPA.

Palabras Clave: Inequidad en salud, adolescente, estudiantes, drogas ilícitas.

Resumo: Este artigo divulgou os resultados de uma investigação que teve como objetivo descrever os determinantes sociais associados ao uso de substâncias psicoativas (SPA) em estudantes de uma universidade pública, modalidade dia. Foi realizado um estudo descritivo, quantitativo, transversal, com uma amostra de n = 341 alunos; amostragem estratificada foi realizada com seleção aleatória, foi aplicado o questionário do Estudo Epidemiológico II Andino sobre Uso de Drogas na Cidade Universitária, Projeto PRADICAN (Programa de Combate às Drogas ilegal na Comunidade Andina), a aprovação prévia dos participantes do estudo. Uma análise descritiva foi realizada, as frequências relativas foram calculadas. Os resultados mostraram que 61% dos respondentes pertencem ao estrato socioeconômico 1; 77,4% são dedicados exclusivamente a seus estudos; 22,6% trabalham além de estudar. O relacionamento com os pais é bom (90%). 56% têm amigos do consumidor e 20,5% têm parentes próximos que usam SPA ilegal. Os resultados permitiram estabelecer que a cobertura dos programas de apoio oferecidos pela universidade através do Bem-Estar Universitário deve ser ampliada para intervir positivamente nos determinantes identificados; conceber e desenvolver estratégias para gerar uma cultura de autocuidado e prevenção do consumo de SPA.

Palavras-chave: Desigualdade em saúde, adolescentes, estudantes, drogas ilícitas.

INTRODUCTION

According to the World Health Organization (WHO), the social determinants of health (SDH) are the conditions in which people are born, grow, live, work and age, and they include their health system. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels, which in turn depend on adopted policies (1). The SDH explain most of the inequities in health, that is, the unfair and avoidable differences in health status observed within and between countries with regard to

the health situation. The health of people is largely determined by the social conditions in which they live and work (2).

The determinants of individual health differences are different between populations (3). When we talk about social determinants, we try to understand how the causes of individual cases are related to the causes of disease incidence in the population (4). According to the report of the Pan American Health Organization (PAHO) "Epidemiology of drug use in Latin America and the Caribbean: A public health approach", at least 4.4 million men and 1.2 million women in Latin America and the Caribbean suffer from disorders caused by the use of drugs, such as dependence and other ailments, at some point in their lives. In this study it was found that disorders due to the use of drugs, have considerable repercussions on the health care systems of many countries in the region, as well as on the health and type of disability of people in the most productive years of their lives (5).

In the framework of the PRADICAN Project 2009 (Illicit Anti-Drug Program in the Andean Community) in the population between 18 and 25 years old it was found that some specific substances were used and abused, as well as signs of high drug dependence (6). The dimension Healthy Living and Non-Communicable Conditions, of the Ten-Year Public Health Plan 2012 -2021 (PDSP) of Colombia, seeks not only to improve the processes for the provision of services to the events already established, but also to intervene the determinants and conditions that promote activities that favor a healthy life (7).

The university environment is a scenario that has plenty of space, time and related groups, where in addition to training people in certain areas it can work in the promotion of healthy behaviors and intervene the unhealthy ones to which this population group is exposed to at increasingly younger ages, such as alcoholism, smoking and drug addiction, among others (8). Also, the university environment, due to its nature of interrelating social groups with different cultures, ethnicities and environments (9) can promote in the student a series of discoveries, conflicts, bewilderment, ruptures and weakening of significant relationships with people and institutions that were present during his/her training. This is part of the intellectual search and personal growth molding his personal identity that will expose him/her to stressful life events, becoming in some cases a starting point for the use of addictive substances (9,10). It is known that the sum of several components or risk factors may predispose a vulnerability to drug use: the availability and access to these substances, the excess of free time, family discussions, parental patterns of drug consumption, identification with peers, consumption by imitation, the need to evade stressful situations and the use of drugs as an alternative to alleviate symptoms of mental origin, among others (11). In addition, other factors are family dysfunctionality, academic status, socioeconomic status, lack of knowledge and attitudes about drugs, as well as social pressure and influences from their environment (12).

According to the WHO report "The social determinants of health: the proven facts" the economic and social circumstances associated with poverty affect health for life; in addition, the psychosocial aspects contribute to generate those differences. Good health means also reducing levels of failure in education and employment and improving the quality of housing. Social support and good relationships are fundamental because they make people feel

protected, loved, esteemed and valued. Drug use is a response to social disintegration and also contributes to accentuate inequalities in the health field. People often take refuge in the consumption of psychoactive substances to not feel the harshness of the economic and social situation they are living. However, it leads to a downslide in social mobility, intensifying the conditions that first led to consumption. According to this report, the consumption of psychoactive substances is related to poor housing, low income, being a single-parent family and unemployment (13).

This study was motivated by the certainty of the incursion in the consumption of psychoactive substances in the university environment and the complexity of this situation. There is a variety of approaches, ideological and cultural positions, which among other problems may affect academic performance and university dropout.

The goal of this study was to describe the social determinants associated with the consumption of psychoactive substances (PAS) in students attending a public university in Colombia, in face-to-face modality, day shift only.

METHODOLOGY

Type of study: Cross descriptive with quantitative approach. The population was comprised of students from 23 academic programs of a Public University of the Department of Córdoba, Colombia, day shift, face-to-face mode (N = 10,207).

Sample: A sample was calculated with $n = 341$, taking into account the criteria of $N = 10.207$, $z = 1.96$, $p = 0.50$, $q = 0.50$ e $e = 0.05$. Stratified sampling was carried out in order to achieve an equal percentage participation of each program. The sample units were randomly selected; the information was collected, with prior authorization, through the instrument used in the II Andean Epidemiological Study on Drug Use in the University Population, Project PRADICAN (6). The students were interviewed in the university campus in their regular schedule. The instrument was self-administered, after reading and signing the informed consent. The information was refined and tabulated in a database for its statistical treatment through the free license SPSS program.

For the category of social determinants, the approach used was the one proposed by the WHO Commission on Social Determinants of Health (2008); in relation to structural determinants, they refer to the attributes that generate or strengthen the stratification of a society and define the socioeconomic position of the people. They also configure the health of a social group based on the location within the social hierarchies of power, prestige and access to resources. In this study, the following determinants were analyzed: Social position: understood as improvements in income and education, which have a favorable relationship with health and place people in a social hierarchy; it was valued through the variables of socio-economic stratum, housing situation while studying, and income while studying.

Gender: this structural determinant is important, along with social position and ethnic group,

due to the influence it has on the establishment of hierarchies in the division of labor, allocation of resources and distribution of benefits. For the present study the classification was "masculine" and "feminine".

Another determinant that was taken into account was the access to education, from which employment opportunities, family income and participation in social protection programs are derived; this variable was controlled in the study because all the participants are students of a tertiary or higher education level.

When evaluating the structural determinant related to employment, it is considered important to have a job for the development of an adequate quality of life; lacking a job significantly limits the ability of the person to participate in the family economy. In this study, work was considered as an independent and important variable in addition to the study. According to WHO, structural determinants operate through intermediate determinants. These intermediate determinants are distributed according to social stratification and determine the differences in exposure and vulnerability to conditions harmful to health. These categories were assessed using the following variables: Material circumstances: housing and neighborhood quality, financial means to acquire healthy foods, appropriate clothing, etc. and the physical work environment; it was assessed using the variable "housing situation while studying".

With regard to psychosocial circumstances, understood as psychosocial factors of tension, life circumstances and stressful relationships, support and social networks, they were valued by these variables: how they support themselves, relationship with the mother, relationship with the father and activities in their free time.

The behavioral and biological factors considered were nutrition, physical activity, tobacco consumption, drugs and alcohol; biological factors also include genetic factors (3). The assessment was carried out using the following variables: tobacco and alcohol consumption, as well as illegal psychoactive substances, motivation for drug consumption, people with whom he usually consumes drugs and perception of his professional future. With regard to social cohesion, which is the existence of mutual trust and respect among the various groups and sectors of society which contributes to the way in which people value their health, it was valued through the fact of having friends and family members that use illegal psychoactive drugs. Finally, in relation to the health system, which is understood as exposure and vulnerability to risk factors, access to health services and programs to mediate the consequences of diseases, it was valued through the variables: how would you rate drug consumption, how easy it would be to get drugs in college and access to University Welfare benefits (3).

RESULTS

In the distribution of the study sample by age groups it was found that 46.3% is between 15 and 19 years old; 49.6% is between 20 and 24 years old; 2.9% is between 25 and 29 years old 2.9%; and those over 30 years old represent 1.2%. According to the location by semester, it was found that 68.2% of the respondents are between the first and fifth semester, and 31.8%

in the fifth semester onwards. Regarding marital status, 91.5% are single, living without a partner.

Regarding the structural social determinants, in the subjects consuming illegal psychoactive substances it was found that 61% belong to the socioeconomic stratum 1, the lowest, followed by 27.9% of stratum 2; stratum 3 is represented only by 9.4% (Table 1). Regarding the housing situation while studying, 58.9% live with their parents, 19% live in a relative's house, while 14% live with companions and / or friends. When evaluating who pays for their studies, 79.5% said that the studies are paid for by their parents, followed by 14.4% who work to support their studies. 40.5% of the study subjects were women and 59.5% men. Regarding employment, 77.4% do not work, and only 22.6% of respondents are working in addition to studying (Table 1).

Table 1. Structural social determinants

Determinants	Category	Percentage
Socioeconomic stratum	Stratum 1	61%
	Stratum 2	27,9%
	Stratum 3	9,4%
Housing situation while studying	Lives with parents	59%
	Lives with a family member	19%
	Lives with friends/classmates	14%
Who pays for their studies	Their parents	79,5%
	Work to pay for studies	14,4%
Gender	Masculine	59,5%
	Feminine	40,5%
Acces to work	Works and studies	22,6%
	Does not work, just studies	77,4%

Source: Personal Coleccion (2017)

In the analysis of the intermediate determinants, with respect to psychosocial circumstances such as activities in their free time, 34% carry out activities such as studying and reading, 28.4% use of social networks and in equal proportion (18.8%) practice sports and talking with friends. Regarding the support network, 90% of the respondents affirmed that they have a good relationship with their mother and 69.8% with their father. 16.7% declared to have a fair relationship with their father and a 7 % a fair relationship with their mother. (Table 2) The behavioral and biological factors were assessed using the variables tobacco and alcohol consumption. 69.5% of the respondents reported that they had used legal PAS and 29% reported having used illegal PAS (Table 2), their motivation being curiosity at 5.6%, followed by the influence of friends at 4.7%. In addition, a report of legal PAS consumption was found starting at 6, 7 and 8 years old with an equal proportion of 0.3%, with a consumption habit of once a month (47.5%). The perception of the professional future was valued in a very optimistic and optimistic way, with 49.9% and 44.6% respectively. When assessing social cohesion, 56% reported having friends who use illegal psychoactive substances, marijuana being the most consumed (38.1%). 20.5% report that they have close relatives who use illegal PAS (Table 2).

Table 2. Intermediate social determinants

Determinants	Category	Percentage
Use of free time	Study and read	34%
	Social networks	28,4%
	Practice sports	18,8%
	Talk with friends	18,8%
Relationship with parents	Good with mother	90%
	Good with father	70%
Use of psychoactive substances	Legal	69,5%
	Illegal	29%
Has friends that use illegal PSA	Yes	56%
	No	14%
	Does not know	30%
Has family member that use illegal PSA	Yes	20,5%
	No	54,3%
	Does not know	25,2%

Source: Personal Coleccion (2017)

Finally, in relation to the health system, respondents rated drug consumption in the university as very serious and serious (37% and 30.2% respectively), and 39.9% said that it was easy to obtain drugs there. Regarding the benefits by University Welfare, it was evidenced that it offers socio-economic management and promotion activities such as accommodation, food vouchers, sponsor plan, deferred enrollment, and monitoring; it also promotes and supports health, cultural, physical activity and sports programs.

DISCUSSION

Lalonde in 1974 established a conceptual framework for the factors that were considered to determine the health status; Tarlov considers social determinants as characteristics within which life takes place, including healthy behaviors and lifestyles, level of income, social position, education, work and working conditions, access to adequate health services and physical environments. which have a clear impact on health (13, 14, 19). According to the WHO, a large part of preventable health inequities could be explained from the social determinants (2). For this study, the structural determinants refer to those attributes that strengthen the stratification of a society and define the socioeconomic position of the individual, finding in this respect that the study subjects mostly belong to the lowest socioeconomic strata 1 and 2. These findings are in agreement with other studies carried out in university students (9,16). Social stratification determines the health condition or the opportunity to be healthy; the lower the position of the people, the greater is the risk of getting sick and dying. The WHO also affirms that poverty and social change are environmental risk factors, which increase the possibility of the consumption of psychoactive substances (5, 15).

In relation to the housing situation while studying, most of the students live with their parents. In 79.5% of the cases the studies are paid for by them, followed by 14.4% who have to work to support their studies, a situation that can generate economic insolvency and reflects the social inequality gap between the students. It is considered that low income also manifests in other circumstances, such as limitation to continue with their studies, a deficitary diet and inappropriate relationships of economic dependence between students and their parents or partners.

In addition to the socioeconomic context, gender was taken into account as a structural determinant (1); in this study, 59.5% were men. According to the WHO, the consumption of illicit substances is predominantly a male activity, much more than the consumption of cigarettes or alcohol, which also has a higher prevalence among the younger ones(15). In addition, in a study conducted on the "Consumption of psychoactive substances in a private university in Pasto, Colombia", (16) differences were found between men and women in the consumption of these substances, as well as the study by Ortiz and Clavero called "Styles of consumption of addictive substances according to gender. An approach from discourse analysis" (17). They showed that the socially negative differences, assigned to female consumers, are greater than those of men, which produce inequalities that impact on a deterioration in health, development and well-being.

In the determinant access to employment it can be seen that 77.4% does not work and 22.6% is working in addition to studying; the lack of employment limits the population's ability to participate in the economy and increases social inequalities (2). However, due to the fact that most of the respondents carry out their studies on a full-time day shift, they are considered to need economic family support to pay for their studies, because they would not have enough time to both work and study, an aspect in favor of the population subject of study. The percentage of working students can be associated to the socioeconomic stratum to which they belong and to the fact of living in the house of a relative or friend. Regarding the intermediate determinants related to psychosocial circumstances, such as how they use their free time, most students reported to perform activities such as studying, reading, and using social networks (4).

When analyzing the support network, the majority of the respondents stated that they had a good relationship with the mother and father, family, friends, study, work and neighbors companions, who are significant social supports of the people. However, of all these the most important is the family; family breakdown, for any reason, can bring about serious health problems, which indicates that family support plays an important role in the living conditions of the study participants and is a reference for young people (16).

The behavioral and biological factors were assessed through the variables: age and consumption of tobacco and alcohol; in this respect 46.3% is between 15 and 19 years old; and 49.6% is between 20 and 24. Age as an intermediate determinant is considered an influencing factor, because adolescence is considered as a group of vulnerability given its special conditions of biological development and associated risks. 69.5% of respondents have consumed legal PAS, and 29% report having used illegal PAS, their motivation being curiosity; these findings are in agreement with the results of the investigation carried out by Tirado, Et al (11).

The age to start using psychoactive substances, in a study conducted by Cogollo-Milanés, et al, (20), was on average between 16 and 17 years of age; however, in this investigation a report of consumption of legal PAS, such as alcohol, from 6 to 7 years was evidenced. It is of great concern that consumption begins at such an early age; there is a high probability of continuing it, with the risk of developing dependence (21) and complications for the long-term health.

Regarding the intermediate determinant of social cohesion, 56% reported having friends who use illegal psychoactive substances, marijuana being the most consumed (38.1%), a fact that coincides with the study carried out by Cárdenas, where marijuana is the illegal psychoactive substance that presents a higher prevalence of consumption among adolescents and young people (10). 20.5% say that they have close relatives who use illegal PAS; in a study conducted on the polydrug use of drugs and its relationship with the family and social context in university students, a concordance was found between the polydrug use of the participants and that of their close referents (4, 16).

Authors such as Vega, Solar, Irwin (2), state that some social factors and processes that

influence the health of the population significantly affect the most vulnerable groups and therefore contribute to increase the differences in relation to the level of health between social groups. Regarding the availability of illegal PAS within the university, it was found that 39.9% of respondents say it is easy to get them, which facilitates the consumption, finding that 69.5% of respondents have consumed legal PAS, and 29% report having used illegal PAS.

Finally, the support received by university students, coming from governmental institutions and the different programs offered by the university, favors not only the lifestyles, but also in the lifestyles for the prevention of the consumption of these substances.

CONCLUSIONS

Based on the information analyzed in university students, the conclusions are the following: the low socioeconomic stratum reflects a great vulnerability; the great majority of the study subjects are socially disadvantaged, which determines serious weaknesses for subsistence and satisfaction of basic needs as a result of low family income; more than half live with their parents, and another percentage live with relatives or friends. It was also evidenced that these young people study in daytime, full time, and a percentage of them must work to pay for their studies. All these conditions expose them to stressful situations, which in some cases become a focus for the initiation of the use of addictive drugs. The sociodemographic and health situation of these students is analogous to that of the majority of students at other public universities. The findings of this research make visible the living conditions of these young people, and the permanent exposure to friends and close relatives who consume illegal psychoactive substances, as well as the vulnerability due to age; however, there was evidence of strength in the relationship between them and their parents, bearing in mind that these are significant social supports.

Young people at an early age often resort to the use of alcohol and illegal psychoactive substances as a diversion, a situation that can influence the risk of developing dependence and complications for their long-term health; in addition, the students stated that it is easy to obtain these substances within the university. The results show the need to intervene the circumstances, form and conditions in which university students live by developing strategies, activities and projects that favor participation in cultural and sports activities, promoting the culture of self-care and prevention of the consumption of PAS.

BIBLIOGRAPHIC REFERENCES

1. Organización Mundial de la Salud. Consulted 5 March 2017 http://www.who.int/topics/social_determinants/es/
2. Vega J, Solar O, Irwin A. Equidad y determinantes sociales de la salud: conceptos básicos, mecanismos de producción y alternativas para la acción. Equipo de Equidad en Salud de la Organización Mundial de la Salud

3. Organización Panamericana de la Salud. Salud en las Américas. Determinantes e inequidades en salud. Capítulo 2. Consulted 5 March 2016 en https://www.paho.org/salud-en-las-americas-2012/index.php?option=com_docman&view=download&category_slug=sa-2012-volumen-regional-18&alias=163-capitulo-2-determinantes-e-inequidades-salud-163&Itemid=231&lang=en
4. Organización Mundial de la Salud. Cerrando la brecha: La política de acción sobre los Determinantes sociales de la salud. Conferencia Mundial sobre los Determinantes Sociales de la Salud. Río De Janeiro-Brasil. 2011
5. Organización Panamericana de la Salud. Epidemiología del uso de drogas en América Latina y el Caribe: Un enfoque de salud pública. 2009
6. II Estudio Epidemiológico Andino sobre Consumo de Drogas en la Población Universitaria Informe Colombia, 2012. Proyecto “Programa Anti- Drogas Ilícitas de la Comunidad Andina - PRADICAN”. 2013
7. Ministerio de Salud y Protección Social. Plan decenal de Salud Pública 2012-2021. Dimensión Vida Saludable y Condiciones No Transmisibles. Available at: <https://www.minsalud.gov.co/plandecenal/Paginas/dimension-vida-saludable.aspx>
8. Ministerio de salud y de la Protección Social. Lineamientos para la promoción de modos, condiciones y estilos, de vida saludable relacionados con las Enfermedades No Transmisibles. Entorno universitario.
9. Quimbayo Díaz J, Olivella Fernández M. Consumo de marihuana en estudiantes de una universidad colombiana. Rev. De Salud Pública. 2013; 15 (1) 32-43.
10. Cárdenas Pachón E. Comportamiento del consumo de sustancias psicoactivas entre los jóvenes de la Fundación Universitaria del Área Andina, Seccional Pereira, 2009-2010. Rev. Avances en enfermería 2012; 30 (3) 60-69
11. Tirado A, Álvarez M, Velásquez J, Gómez L, Ramírez C, Vargas A. Prevalencia y factores de riesgo para el consumo y dependencia de drogas en estudiantes de una universidad de Medellín, Colombia, 2009. Rev. Facultad Nacional Salud Pública. 2012; 30 (1) 38-44
12. Castrillo J, Ortiz A, De la Salas Rodríguez K, Eguis Valencia R, Galves Rondón D, Caro de Pallares S, et al. Conocimientos, actitudes y prácticas relacionados con el consumo de sustancias psicoactivas en estudiantes de enfermería de una universidad del departamento del Atlántico (Colombia) 2012. Rev Salud Uninorte. 2012; 28 (2); 322-334.
13. Organización Mundial de la Salud. Europa. Los Determinantes Sociales de la Salud: los hechos probados. Richard Wilkinson y Michael Marmot. 2003. Available at: <http://www.mspsi.es/profesionales/saludPublica/prevPromocion/promocion/desigualdadSalud/docs/hechosProbados.pdf>
14. Lalonde, M. A. New Perspective on the Health of Canadians. Ottawa, Information Canada, 1974. Disponible en <http://www.phac-aspc.gc.ca/ph-sp/pdf/perspect-eng.pdf>
15. Organización Mundial de la salud. Neurociencia del consumo y dependencia de sustancias psicoactivas. 2004.
16. Córdoba-Paz, E. G., Betancourth-Zambrano, S., & Lised, E. T. (2017). Consumo de sustancias psicoactivas en una universidad privada de pasto, colombia/

- psychoactive substances at a private university from pasto, colombia. *Psicogente*, 20 (38) doi:<http://ezproxyucor.unicordoba.edu.co:2075/10.17081/psico.20.38.2552>
17. Ortiz, P., Clavero, E., Estilos de consumo de sustancias adictivas en función del género. Una aproximación desde el análisis de discurso. *Rev. Acta sociológica*, 2014; 64: 121-144
 18. Hernández-Serrano O, Font-Mayolas S, Gras M. Policonsumo de drogas y su relación con el contexto familiar y social en jóvenes universitarios. *Rev Adicciones*, 2015; 27 (3): 205-213.
 19. Tarlov A. Social determinants of health: the sociobiological translation. In Blane D, Brunner E, Wilkinson R. *Health and social organization*. Londres: Routledge. 1996.
 20. Cogollo-Milanés, Z., Arrieta-Vergara, K., Blanco-Bayuelo, S., Ramos-Martínez, L., Zapata K., Rodríguez-Berrio Y. Factores psicosociales asociados al consumo de sustancias en estudiantes de una universidad pública. *Rev. salud pública*, 2011; 13 (3): 470-479.
 21. Medina- Mora ME, Peña- Corona MP, Cravioto P, Villatoro J, Kuri P. Del tabaco al uso de otras drogas: ¿el uso temprano de tabaco aumenta la probabilidad de usar otras drogas? *Salud pública Méx.* 2002; 44 (1):109-115.