RELATIONSHIP BETWEEN DRUG USE AND CHILD MALTREATMENT AMONG UNDERGRADUATE STUDENTS OF A UNIVERSITY IN COLOMBIA

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ABSTRACT: This research examines the relationship between drug use among students of a public university in Villavicencio, Colombia, and child maltreatment, using as a theoretical reference bio-ecological perspective. A retrospective exploratory study was conducted with a sample of 313 undergraduate students. 10.2% of respondents reported having been maltreated during their childhood and the most widely used form of violence was physical violence followed by psychological violence. 56.9% of the surveyed students have used psychoactive substances at some point in life, and its onset between 13 and 18 years. There is evidence of child maltreatment with manifestations of physical aggression, as well as the consumption of psychoactive substances, but there is not a statistically significant relationship between maltreatment during childhood and the use of psychoactive substances in the studied sample.

DESCRIPTORS: Child abuse. Substance-related disorders. Students. Universities.

DROGAS E SUA RELAÇAO COM MAUS-TRATOS NA INFÂNCIA PARA ALUNOS DE GRADUAÇÃO DE UMA UNIVERSIDADE DA COLÔMBIA

RESUMO: Esta pesquisa analisa a relação entre o uso de drogas entre estudantes de uma universidade pública em Villavicencio, Colômbia, e sua relação com maus-tratos na infância, utilizando como referencial teórico a perspectiva bioecológica. Estudo exploratório retrospectivo, com uma amostra de 313 alunos de graduação. Dos entrevistados, 10,2% relataram ter sido abusados na infância, e os maus-tratos físicos e psicológicos foram os mais relatados. 56.9% dos estudantes entrevistados usou substância psicoativa, em algum momento da vida, com início entre 13 e 18 anos. Houve evidências de maus-tratos na infância com manifestações de violência física, bem como o consumo de substâncias psicoativas, mas não houve relação estatisticamente significativa entre maus-tratos durante a infância e o uso de substâncias psicoativas na amostra estudada.

DESCRITORES: Maus-tratos infantis. Transtornos relacionados ao uso de substâncias. Estudantes. Universidades.

RELACIÓN ENTRE EL CONSUMO DE DROGAS Y MALTRATO INFANTIL ENTRE ESTUDIANTES UNIVERSITARIOS DE LA UNIVERSIDAD EN COLOMBIA

RESUMEN: Esta investigación examina la relación entre el uso de drogas en estudiantes de una Universidad Pública en Villavicencio, Colombia, y su relación con el maltrato durante la niñez, utilizando como referente teórico la perspectiva bioecológica. Estudio exploratorio retrospectivo, con una muestra de 313 estudiantes de pregrado. El 10.2% de los encuestados refiere haber sido maltratado en la Infancia y la violencia de mayor uso fue la violencia física seguida de la violencia psicológica. El 56.9% de las estudiantes encuestados han consumido sustancias psicoactivas en algún momento de la vida, y su inicio entre los 13 y los 18 años. Se evidencia maltrato en la infancia con manifestaciones de agresiones físicas, al igual que el consumo de sustancias psicoactivas, pero no se observa una relación estadísticamente significativa entre maltrato durante la infancia y el consumo de sustancias psicoactivas en la muestra estudiada.

DESCRIPTORES: Maltrato infantil. Trastornos relacionados con sustancias. Estudiantes. Universidades.

INTRODUCTION

It is widely known that the abuse of alcohol and other legal and illegal drugs is a global health issue that can be approached under different and supplementary perspectives. One of these perspectives is that of reducing the offer of and demand for drugs. One aspect of the evidence-based strategies to reduce the demand is to identify factors that increase the probability or risk of drug abuse.

Many authors have found that exposure to maltreatment in childhood is a risk factor associated with drug consumption.[1-3] However, Latin America and the Caribbean have not conducted in-depth surveys on this topic.

This multicenter survey will employ Bronfenbrenner's Bioecological Theory of Human Development to explore the relation between drug use and abuse and maltreatment during childhood, with a selected sampling of university undergraduate students

JUSTIFICATION

According to data presented by the National Institute of Legal and Forensic Medicine[4], in Colombia the rate of child maltreatment is estimated at 69 children/100,000 inhabitants.

In 2008, 9.1% of respondents had used illegal drugs such as marijuana, cocaine, crack cocaine, ecstasy, heroin, LSD, and mold.[5] As in most countries in the world, marijuana is the most widely consumed illegal substance, with an 8% lifetime prevalence. The study also found that young adults aged 18 to 24 years reported higher consumption of alcohol (46%), followed by the 25–34-year-old group (43%); alcohol consumption was lower among older people.[6-9]

Nonetheless, the risk of alcohol consumption is common among individuals aged 18 to 24 years, the age group of the university undergraduate students surveyed, and most of them reported a higher prevalence of consumption of illegal substances.[10]

Therefore, the survey investigated the link between use and abuse of drugs and maltreatment in childhood among undergraduate students in a university in Villavicencio, Colombia.

MATERIALS AND METHODS

This is a cross-sectional retrospective study, with a sampling of 313 undergraduate students from a university in Villavicencio, Colombia. Samplings were selected through the randomized probabilistic method. It employed a questionnaire comprising four instruments to explore the relation between drug use and abuse and maltreatment during childhood. The instruments were as follows: the Questionnaire on Adverse Childhood Experiences (ACE); the Kessler Scale of Psychological Disorders (K10) to evaluate the Psychological Distress; questions selected from the CICAD-OEA questionnaire on drug use; and a socio-demographic questionnaire. The Statistical Package for the Social Sciences (SPSS) software, version 15 was used to design the database and further analysis. A descriptive statistical analysis was performed, with absolute and relative frequencies of categorical variables and central tendency measures (average and median); and dispersion measures (standard deviation) were calculated for the numerical variables. Contingency tables and a chi-square test were performed to analyze the association between maltreatment in childhood and drug use and abuse. Lastly, a binomial test was performed to determine the certainty of opinions.

RESULTS

Overview of results

In the city of Villavicencio, Meta, 313 undergraduate students from the selected university were interviewed, consisting of 188 men (60.1%) and 125 women (39.9%); 48.6% belonged mainly to socio-economic strata 3. Ages ranged from 18 to 30 years old, and the majority of the population surveyed was between 18 and 21 years of age (74.1%).

Maltreatment during childhood

There was a 10.2% prevalence, of which physical violence accounted for 25.2%, and 16.9% of those interviewed had wounds or scars on their bodies. The psychological violence manifested in insults or attitudes that made them feel fear accounted for 30.9%, and 3.5% described other forms of maltreatment. Regarding sexual violence, 1.9% of the respondents had been sexually abused, with sexual intercourse reported in 0.6% of these cases.

Drug abuse

Among the students interviewed, 56.9% had taken psychoactive substances at some point in their lives, starting at between 13 and 18 years of

age (46%). Regarding illegal psychoactive substances, the highest consumption in the last 12 months and 30 days was cannabis, followed by cocaine and prescription drugs. In relation to legal psychoactive substances, alcohol was the most widely used within the last 12 months and the last 30 days respectively. Concerning frequency of use of illegal substances, for cannabis we found 10.1% of consumption once a month, similarly to cocaine at 2.8%, and medically prescribed drugs, also at 2.8%. In terms of use of alcohol, the percentage was 51.7%, while tobacco consumption was 25.8%. However, the figures for alcohol abuse and tobacco abuse were 5.1% and 18%, respectively. When asked about the use of psychoactive substances by their friends, 78.3% of the respondents supported the consumption of legal and illegal substances, corroborating the CEBRID6 statement that "being an adolescent is a population group of high incidence of the consumption of drugs." The illegal substance most widely used among friends was cannabis (35.1%), followed by cocaine (11.8%), while the legal substances most widely consumed were alcohol (70.6%) and cigarettes (57.8%).

Relation between drug use and abuse and maltreatment during childhood

When analyzing the consumption of psychoactive substances against any form of maltreatment, we found a 1.17 prevalence with a 95% confidence interval ranging from 0.0 to 2.4, leading to the conclusion that, among the population surveyed, there is no statistically significant difference of influence or relation between maltreatment and the consumption of psychoactive substances.

DISCUSSION

Regarding the socio-demographic characterization, the male gender reported higher prevalence (60.1%) than the female gender (39.9%), despite the data from DANE7, according to which the prevailing population in Villavicencio is female and belongs mainly to socio-economic strata 3 (152; 48.6%). Ages ranged from 18 to 30 years old, and the majority of the population surveyed is 18 to 21 years of age (74.1%).

Regarding education level, DANE reports that 36% of the population has a secondary or vocational school education. This study has corroborated the fact that parents (nearly 93%) have concluded secondary or vocational school, with mothers having concluded secondary or vocational schools accounting for 31.9% as opposed to fathers at 24%. When asked about divorce or separation in the nuclear family, 43.1% of respondents reported coming from single-parent families. Disorders related to the use of alcohol result in a heavy load on the family, causing large-scale interpersonal conflicts, domestic violence, inappropriate behaviors on the part of fathers, abuse and neglect of children, separation and divorce, and financial and legal difficulties.[8]

Many authors have identified exposure to maltreatment in childhood as a risk factor associated to drug consumption[9], with prevalence of 10.2% (32 individuals). Seventy-nine respondents (25.2%) reported to have suffered from this conduct, which left wounds or scars on the bodies of 16.9%. Psychological violence manifested in insults or attitudes that made them feel fear was reported at 30.9%, while 3.5% referred to maltreatment in other unspecified ways. Regarding sexual violence, 1.9% of the respondents reported being sexually abused, with sexual intercourse reported in 0.6% of these cases.

Domestic spaces are where most aggressions against women take place, with harmful consequences for their mental and physical health, and these are also associated with drug consumption. Analyzing intra-familial violence, it was found among 15.3% of the individuals, including beatings and being threatened with firearms in 4.8%.[10]

According to the standard measures of psychological distress (Kessler scale) used in this study, most of the students present minimum to mild levels of psychological distress; this fact corroborates other studies that have shown that impulsivity, emotional suffering, and physiological and genetic predispositions[11] are important data that affect drug consumption.

Among the students interviewed, 56.9% have taken psychoactive substances at some point in their lives, starting at ages 13 to 18 years (46%). Regarding illegal psychoactive substances, the highest consumption in the last 12 months and 30 days respectively was cannabis, followed by cocaine and prescription drugs. In relation to legal psychoactive substances, alcohol was the most widely used in the last 12 months and in the last 30 days respectively.

According to the National Study on Consumption of Psychoactive Substances in Colombia, 9.1% of the respondents had taken illegal drugs

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such as marijuana, cocaine, crack cocaine, ecstasy, heroin, LSD, and molds, at least once in their lives. As in most countries of the world, marijuana is the most widely consumed illegal substance, with an 8% lifetime prevalence. This study has corroborated these findings. The opposite occurred with the Epidemiological Andean Study on Consumption of Synthetic Drugs among University Population[12] in 2009, according to which synthetic drugs were widely used by undergraduate university students, while this study has not evidenced significant consumption.

The illegal substance most used and abused by university undergraduate students is cannabis, while alcohol is the legal substance most used and abused by university undergraduate students.

This study reported absence from classes for 27% of participants, followed by family failures (14%), and putting health in risk with dangerous activities, unprotected sex, etc., evidencing that consumption is a risk factor where individuals cannot fulfill their labor, school, and domestic obligations. The everyday use of those substances in risky situations can lead to legal and social problems, according to the Diagnosis and Statistical Handbook of Mental Disorders.[13]

Regarding the influence of friendships on the use of psychoactive substances, it was found that 55.3% of the respondents had their first experience with these substances alone, and this social behavior is also manifested in the continuous use of these substances at 57.8%. When asked about the use of psychoactive substances by friends, 78.3% of respondents indicated having friends who use drugs, and they even support the consumption of legal and illegal substances: "these are the strongest influences to use drugs, followed by the influence of their family members."[14:4]

The illegal substance most widely used among friends is cannabis (35.1%), followed by cocaine (11.8%), while the legal substances most widely consumed are alcohol (70.6%) and cigarettes (57.8%). When analyzing the consumption of psychoactive substances against any form of maltreatment, we found a 1.17 prevalence, with a 95% confidence interval ranging from 0.0 to 2.4, leading to the conclusion that, among the population surveyed, there is no statistically significant difference of the influence or relation of maltreatment with consumption of proactive substances.

Applying a binomial analysis of correlated factors, it was found that there is no difference that could rank each variable as factor of tendency of risk or protection in the consumption of psychoactive substances. In fact, violence against mothers RP=1.5 (IC95%=0.2-2.9); religious beliefs RP=2.2 (IC95%=0.6-3.8); family support 0.8 (IC95%=-0.2–1.8) were considered stronger factors. This is corroborated by the simple linear regression model that finds only a square R of 6.2%

CONCLUSIONS

Maltreatment in childhood is evidenced by manifestations of physical attacks, as is the consumption of psychoactive substances, but there is no statistically significant direct relationship between maltreatment and the consumption of psychoactive substances. Among families, the presence of biological risks such as: mental disease; consumption of alcohol and drugs; and factors of social risk such as intra-familiar violence and separation of parents, with the establishment of single-parent families was found. Among the respondents, 10.2% said they had suffered maltreatment in childhood. Physical violence was the most frequent type of violence reported in childhood, followed by psychological violence. It is worth mentioning that 50% of the population affected by maltreatment had undergone psychological treatment. The results of this study cannot be extended to other undergraduate students in Villavicencio or in Colombia.

Limitations of the study

The sampling technique does not allow for generalizing the results to all universities or to the population of Colombia as a whole. The students were requested to provide retrospective data on events that could have taken place in their childhood and adolescence; this recollection may be affected by the interference and deterioration of memory. It is also worth mentioning that there could be a tendency towards over-reporting or underreporting maltreatment and use and abuse of drugs according to the perception of each student.

Recommendations

Universities should provide for further analysis of the phenomenon of drug use in the plan of studies and lines of research and strengthen university workshops on well-being in programs aimed to cope with the phenomenon of drug use.

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