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COMMON MENTAL DISORDER AMONG ALCOHOL AND DRUG ABUSERS: A CROSS-SECTIONAL STUDY

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ABSTRACT

Objective: to estimate the prevalence of the probability of common mental disorders among abusers of alcohol and other drugs.

Method: a cross-sectional study. The sample was made up of 234 individuals undergoing treatment and rehabilitation for chemical dependence in private clinics and in a Psychosocial Care Center in the Southeast area of the state of Goiás, Brazil. Instruments on sociodemographic profile, use of licit and/or illicit drugs, and a questionnaire that tracks common mental suffering were applied.

Results: the outcome variable was the probability of common mental disorder, with 37.2% of the total of the sample. Association between the probability of common mental disorders and the female gender (odds ratio=4.06; 95% CI 1.56-10.56), age ≤25 years old (odds ratio=3.00; 95% CI 1.41-6.38), and use of marijuana in life (odds ratio=2.83; 95% CI 1.38-5.78) were found.

Conclusion: the study showed an association between the use and abuse of drugs and risk for common mental disorders.

DESCRIPTORS: Substance-related disorders. Psychiatric nursing. Prevalence. Mental disorders.

TRANSTORNO MENTAL COMUM ENTRE INDIVÍDUOS QUE ABUSAM DE ÁLCOOL E DROGAS: ESTUDO TRANSVERSAL

RESUMO

Objetivo: estimar a prevalência da probabilidade de transtorno mental comum entre indivíduos que abusam de álcool e outras drogas.

Método: estudo transversal. A amostra constituiu-se de 234 indivíduos em tratamento e reabilitação de dependência química em clínicas em um Centro de Atenção Psicossocial na região sudeste do Estado de Goiás. Foram aplicados instrumentos sobre perfil sociodemográfico, consumo de drogas lícitas e/ou ilícitas, e o questionário que rastreia sofrimento mental comum.

Resultados: a variável desfecho foi a probabilidade de transtorno mental comum, com 37,2% do total da amostra. Houve associação da probabilidade para transtorno mental comum com sexo feminino (odds ratio=4,06; IC95% 1,56-10,56), idade ≤25 anos (odds ratio=3,00; IC95% 1,41-6,38) e uso de maconha na vida (odds ratio=2,83; IC95% 1,38-5,78).

Conclusão: o estudo revelou a associação entre uso e abuso de drogas com o risco para transtorno mental comum.

DESCRIPTORIOS: Transtornos relacionados ao uso de substâncias. Enfermagem psiquiátrica. Prevalência. Transtornos mentais.

TRASTORNO MENTAL COMÚN ENTRE PERSONAS QUE ABUSAN DE ALCOHOL Y DROGAS: ESTUDIO TRASVERSAL

RESUMEN

Objetivo: estimar la prevalencia de probabilidad de trastorno mental común entre sujetos que abusan de alcohol y otras sustancias.

Método: estudio trasversal. La muestra se constituyó de 234 sujetos en tratamiento y rehabilitación por la dependencia química en clínicas y en un Centro de Atención Psicosocial en la región sudeste del Estado de Goiás, en Brasil. Fueron aplicados instrumentos sobre el perfil sociodemográfico, el consumo de drogas lícitas y/o ilícitas y el cuestionario que rastrea el sufrimiento mental común.

Resultados: la variable de resultado fue la probabilidad de trastorno mental común, con 37,2% del total de la muestra. Hubo una asociación de la probabilidad para Trastorno Mental Común, con el sexo femenino (odds ratio=4,06; IC95% 1,56-10,56), la edad ≤ 25 años (odds ratio=3,00; IC95% 1,41-6,38) y el uso de marihuana (odds ratio=2,83; IC95% 1,38-5,78).

Conclusión: el estudio reveló una asociación entre el uso y abuso de sustancias con el riesgo para trastorno mental común.

DESCRIPTORES: Trastornos relacionados con sustancias. Enfermería psiquiátrica. Prevalencia. Trastornos mentales.

INTRODUCTION

The relationship between the number of cases of illness and the number of people associated with the use and abuse of alcohol and illicit drugs corresponds to 5.4% worldwide.¹ During the last three years, approximately 243 million people aged between 15 and 64 years made use of illicit drugs. Of these, one in each 200 people of the worldwide adult population is a regular user of drugs or has disorders associated with the use/dependence of drugs, that is, 27 million individuals are in this situation.²

Regarding disorders as an illness that affects the population, common mental disorders (CMD) stand out. Understood by the presence of different symptoms for at least seven days, the main symptoms identified are irritation, anxiety, difficulty in concentration, problems in conciliating sleep, excessive concern especially with health, obsessions and compulsions, depressive mood, and phobia. The evaluation of these symptoms enables early diagnosis and follow up of depressive, anxiety, phobia, panic, and obsessive-compulsive disorders, which are characterized as types of CMD.³

The prevalence of CMD ranges worldwide and is very common in the general population.^{4,5} Previous studies conducted in Brazil showed a significant prevalence of CMD in the general population, specifically in primary health care. In Central Brazil, the highest probability of CMD was present in one-third of the population interviewed (31.47%), followed by a higher prevalence in the Southeast region (51.9% to 53.3%), the Northeast region (64.3%) and the South region (57.7%).^{6,7} In the United States, a lower prevalence was found, especially of depressive disorder (7%), specific phobia (7% to 9%), panic disorder (2% to 3%), obsessive-compulsive disorder (1.2%), and anxiety (11%).^{4,5}

Regarding the association of CMD with the use and abuse of drugs (licit and illicit), differ-

ent geographic areas worldwide have discussed this situation. Countries such as Brazil, England, Greece, South Africa, and other countries from Latin America and the Caribbean, found relevant associations regarding the coexistence of CMD and drug abuse.^{3,7-10}

The fact that CMD show a high prevalence in the worldwide population indicates the need for further studies, especially to evaluate the probability of CMD associated with the use of licit and illicit psychoactive substances, thus favoring public knowledge and the development of health policies with a focus on the subject in question.^{8-9,11} Therefore, the objective of the present study was to estimate the prevalence of the probability of CMD among abusers of alcohol and other drugs.

METHOD

A cross-sectional study was conducted in six chemical dependency rehabilitation clinics and in a Psychosocial Care Center (CAPS, as per its acronym in Portuguese) located in the Southeast area of the state of Goiás, in Central Brazil. The data were collected from August 2013 to February 2014. The field researchers were students of the healthcare area previously trained by researchers with extensive experience in mental health.

The inclusion criteria for individuals who were undergoing treatment and rehabilitation were: being 18 years or older, and having used or making use of illicit drugs (marijuana, cocaine, crack, solvents, inhalants, honey oil, ecstasy, LSD, among others) and/or licit drugs (alcohol and tobacco). Those who were sedated or showed an altered mental status, as well as individuals with a medical diagnosis of serious and persistent mental disorders were excluded.

The data were obtained by means of individual interviews in a private place, conducted by field researchers. The individuals were invited to

participate in the study and were later asked to sign an informed consent form. Digital instruments with technological resources that approached questions on sociodemographic characteristics, pattern of use of licit and/or illicit drugs, and the Self-Report Questionnaire 20 (SRQ-20) were applied.

The SRQ-20 instrument was validated in Brazil and adapted according to the cut-off point in 2008, with indications of active search for CMD probability. The version of 20 items was used, in which responses can be "yes" or "no" and the final score is given by means of the sum of affirmative responses, receiving 1 point each. The scores obtained range from zero (no probability) to 20 (strong probability) points.¹²

The outcome variable of the study was the CDM probability indicated by the score ≥ 7 through the SRQ-20. The predictor variables were sociodemographic characteristics, gender, age, marital status (living with or without a companion), religion (reporting to have or not a religion), education level (>7 years or ≤ 7 years of education), type of home (own property or not), occupation (with or without a steady income), report of use and abuse of drugs (cocaine, marijuana, and alcohol) in the last 12 months, and prostitution (characterized as exchange of money for sexual relations).¹³

The data obtained by digital means were stored in a network and used to create a worksheet

in Excel®. After that, they were transferred to the Statistical Package for the Social Sciences 22.0 (SPSS) software. Prevalence for CMD probability was estimated with a confidence interval of 95% (95% CI). Univariate analysis between the outcome and the predictor variables was carried out. Variables with $p < 0.10$ were submitted to the logistic regression model. The odds ratio (OR) was used as effect measure. The chi-square test was applied for verification of differences between ratios. Values of $p < 0.05$ were considered statistically significant. The Hosmer-Lemeshow test indicated the quality of the multiple analysis model.

The research project was approved by the research ethics committee of the Federal University of Goiás under protocol N. 162/2012, and guided by the Resolution N. 466/2012 of the National Health Council.

RESULTS

In this study, 234 individuals were interviewed. Of these, 34 (14.5%) reported being users of licit drugs (alcohol and tobacco), 20 (8.5%) of illicit drugs and 180 (77%) of both. Of the total sample, 87 (37.2%) individuals presented a higher probability to develop CMD (95% CI 30.8-44.0). Table 1 presents the prevalence of CMD probability and associated factors.

Table 1 - Prevalence of common mental disorder probability in abusers of alcohol and other drugs, and associated factors, Central Brazil, 2014. (n=234)

Variable	Probability of common mental disorder		Gross OR (95% CI)	P value	Adjusted OR [†] (95% CI)	P value
	N/Total*	(%)				
Gender						
Male	67/204	(32.8)	1.0		1.0	
Female	20/30	(66.7)	4.09(1.81-9.22)	0,00	4.06(1.56-10.56)	0.00
Age (years)						
>30	34/118	(28.8)	1,0		1,0	
26-30	20/50	(39.2)	1.59(0.8-3.17)	0.18	1.58(0.71-3.53)	0.25
≤ 25	31/66	(46.9)	2.18(1.17-4.09)	0.01	3.00(1.41-6.38)	0.00
Marital status:						
Living without a companion	22/81	(27.2)	1.0		1.0	
Living with a companion	65/153	(42.5)	1.98(1.10-3.55)	0.02	1.67(0.84-3.34)	0.14
Religion						
Has a religion	16/38	(42.1)	1.0			
Does not have a religion	71/196	(36.2)	0.78(0.38-1.58)	0.49		

Variable	Probability of common mental disorder		Gross OR (95% CI)	P value	Adjusted OR† (95% CI)	P value
	N/Total*	(%)				
Education level (years)						
>7	48/149	(32.2)	1.0		1.0	
≤7	39/85	(45.9)	1.78(1.03-3.08)	0.03	1.74 (0.93-3.27)	0.08
Current home is						
Own property	60/177	(33.9)	1.0		1.0	
Not own property	27/57	(47.4)	1.75(0.95-3.21)	0.06	1.66(0.84-3.31)	0.14
Occupation						
With a steady income	57/173	(32.9)	1.0		1.0	
Without a steady income	30/61	(49.2)	1.96(1.08-3.56)	0.02	1.28(0.65-2.52)	0.46
Prostitution						
No	64/189	(33.9)	1.0		1.0	
Yes	23/45	(51.1)	2.04(1.05-3.94)	0.03	1.35(0.62-2.93)	0.44
Used cocaine in life						
No	50/121*	(41.3)	1.0			
Yes	36/112*	(32.1)	0.67(0.39-1.15)	0.14		
Used marijuana in life						
No	18/71	(21.4)	1.0		1.0	
Yes	66/163	(78.6)	2.00(1.03-3.94)	0.02	2.83(1.38-5.78)	0.00
Used alcohol in life						
No	33/94*	(35.1)	1.0			
Yes	53/139*	(38.1)	1.13(0.66-1.96)	0.63		

Multiple analysis model: gender, age, marital status, education level, current home, occupation, prostitution, use of marijuana in life. *Valid responses; † Adjusted OR. OR: odds ratio (probability); 95% CI: confidence interval of 95%.

According to the multiple analysis, the following variables remained associated with the probability of CMD: female gender (p=0.00; OR=4.06; 95% CI 1.56-10.56); age ≤25 years (p=0.00; OR=3.00; 95% CI 1.41-6.38); and use of marijuana in life

(p=0.00; OR=2.83; 95% CI 1.38-5.78). The result of the Hosmer-Lemeshow test was 0.898. Regarding the SRQ-20 instrument, Figure 1 represents the positive responses among the 234 individuals who presented a score ≥7 in the face of the questions investigated.

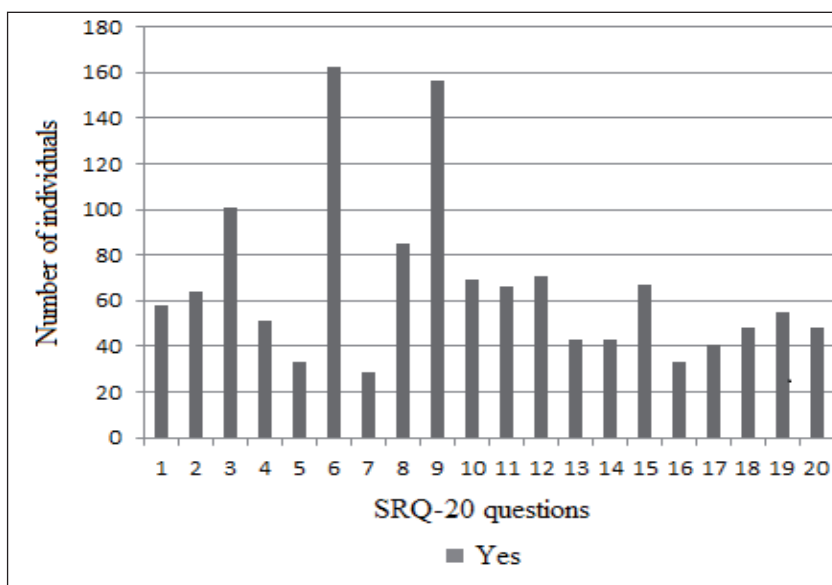


Figure 1 - Affirmative responses given to the 20 questions of the Self-Report Questionnaire 20 by individuals who were abusers of alcohol and other drugs, Central Brazil, 2014. (n=234)

1) Do you often have headaches? 2) Is your appetite poor? 3) Do you sleep badly? 4) Are you easily frightened? 5) Do your hands shake? 6) Do you feel nervous, tense, or worried? 7) Is your digestion poor? 8) Do you have trouble thinking clearly? 9) Do you feel unhappy? 10) Do you cry more than usual? 11) Do you find it difficult to enjoy your daily activities? 12) Do you find it difficult to make decisions? 13) Is your daily work suffering? 14) Are you unable to play a useful part in your life? 15) Have you lost interest in things? 16) Do you feel that you are a worthless person? 17) Has the thought of ending your life been on your mind? 18) Do you feel tired all the time? 19) Do you have uncomfortable feelings in your stomach? 20) Are you easily tired?

The questions that had the highest number of affirmative responses were: "Do you feel nervous, tense, or worried" (69.2%) and "Do you feel unhappy" (66.6%). On the other hand, the question that presented the lowest number of affirmative responses was: "Is your digestion poor" (12.3%).

DISCUSSION

Estimates show that CMD affect people from all regions of the world.^{4-5,7-8} Of 174 studies, with a sample of 829,673 individuals from 63 countries, 155 showed that the prevalence of CMD was significant in 59 countries (17.6%; 95% CI 16.3-18.9%).⁹

Anxiety and depression were found among CMD in people undergoing treatment for drug abuse. In Latin American countries, anxiety and depression range in this population, with records of 48.5%/42.4% in Brazil, 44.9%/28% in Chile, and 59.8%/3.8% in Uruguay.¹⁰

At the same time, in the same country, high prevalence of CMD is found in the general population, in different geographic areas, and with significant differences. The Central region of Brazil showed the lowest percentage found in this population (31.47%), followed by the Southeast region (51.9% to 53.3%), the South region (57.7%), and the Northeast region (64.3%), with the highest probability.⁶⁻⁷ The present study showed a prevalence very similar to that found in the Central region (37.2%), corroborating the literature (31.47%), regardless of where the individual interviewed is located.⁶

Individuals who are undergoing treatment for use and abuse of drugs, both in a CAPS or in special clinics, present higher probabilities of CMD. For example, in South Africa, a high prevalence of different types of mental disorders (96%) was

found, and most individuals (63.2%) presented at least two diagnoses associated with the use of psychoactive substances.⁹

Regarding gender, a higher prevalence of association between CMD and women was found among individuals who were abusers of alcohol and other drugs. A meta-analysis carried out in 59 countries showed that women presented higher rates of CMD, especially mood (7.3%; 95% CI 6.5%-8.1%) and anxiety (8.7%; 95% CI 7.6%-9.8%) disorders, when compared with men.¹¹ However, considering the population of drug abusers, the prevalence is higher among men (7.5%; 95% CI 6.7%-8.4%), when compared with the prevalence rate among women (2.0%; 95% CI 1.6%-2.5%).⁷ Disorders caused by the use of drugs, regardless of their type, presented a cumulative incidence of 16.78% (95% CI 15.18-18.54), being 20.50% among men and 13.39% among women in South Africa.¹⁴ In pregnant women, the use of marijuana was associated with a higher probability for the development of depression.⁸

Regarding age, this study showed that age ≤25 years was associated with a higher probability of developing CMD in the population studied. This fact is corroborated by a previous study conducted with Africans of both genders, in which the mean age of 23.6 years presented a higher probability for comorbidity in the presence of psychoactive substances abuse, when compared with young non-users.¹⁵ Another fact found was the early use of illicit substances, especially marijuana, which showed higher probability for its use at the age of 16 years (27.4%), with risk of depression 2.2 times higher among those who had used the drug more than 60 times, when compared with cannabis users.⁸

The association between the use of marijuana at some time in life and the higher probability of developing CMD unveiled in this study corroborates the data from the scientific literature, when showing that individuals who had already used marijuana had a higher prevalence compared to those who did not use it for social phobia (OR=2.9; 95% CI 1.1-7.5), post-traumatic stress disorder (8.1%) (95% CI 2.3-29.2), major depressive disorder (OR=3.1%; 95% CI 1.8-5.5), and any anxiety or mood disorder (OR=2.2%; 95% CI 1.3-3.6).¹⁵

Similar to these results, previous studies showed an association between marijuana and mental disorders, with a probability of developing depression ranging from 1.17 to 1.62, and a probability of 1.68 of developing anxiety in users, when compared to non-users of the drug.¹⁶⁻¹⁷

CONCLUSION

The prevalence of the probability of CMD in users of alcohol and other drugs was higher than that found in studies carried out in the general population. An association between the use and abuse of drugs in users with a higher probability to develop CMD and the variables female gender, age ≤ 25 years, and use of marijuana was found.

Some limitations of the present study include its cross-sectional design, which prevents inferences in the causal association among occurrences, since the data on exposure and outcome are evaluated simultaneously. Another limitation was the data based on information offered by the participants interviewed, which might not be reliable in some instances. In addition, the sample of this study was made up of individuals undergoing treatment and rehabilitation in a specific field, which might affect the generalization of the results for other circumstances. Nonetheless, this study contributed to discussions and studies evaluating the exposure to CMD that coexist with the use of licit and illicit substances, which is a complex subject that requires further studies with the purpose of producing knowledge.

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