

Identification of psychoactive substance use among individuals diagnosed with schizophrenia*

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The objective was to identify the consumption of substances among people diagnosed with schizophrenia undergoing treatment and to verify its association with sociodemographic and clinical characteristics. Questionnaires were applied in 45 patients. Substances most commonly consumed throughout life: 67% (n = 30) tobacco; 73% (n = 33) alcohol; 22% (n = 10) marijuana. 62% of the sample made problematic use of at least one drug. There was an association between problematic drug use and financial satisfaction, impulsiveness and experiences of discrimination. Problematic use of tobacco was associated with street living. Knowing characteristics related to the use of drugs among people in treatment for schizophrenia helps to propose strategies of care directed to this population.

Descriptors: Comorbidity; Schizophrenia; Substance-Related Disorders.

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Identificação do consumo de substâncias psicoativas entre indivíduos com esquizofrenia

Este estudo teve por objetivo identificar o consumo problemático de substâncias em uma amostra de 45 pessoas diagnosticadas com esquizofrenia, tratadas em Centro de Atenção Psicossocial II, e verificar a associação desse consumo a características sociodemográficas e clínicas dos participantes. Estudo transversal. Foram aplicados questionários sobre as substâncias mais consumidas ao longo da vida: tabaco (67%), álcool (73%) e maconha (22%). Dos participantes, 62% faziam uso problemático de pelo menos uma droga. Encontrou-se associação entre uso problemático de substâncias e satisfação financeira, impulsividade e experiências de discriminação. Conhecer as características relacionadas ao uso de drogas entre pessoas em tratamento para esquizofrenia auxilia a propor estratégias de cuidado para essa população.

Descritores: Comorbidade; Esquizofrenia; Transtornos Relacionados ao Uso de Substâncias.

La identificación del consumo de sustancias entre los individuos con diagnóstico de esquizofrenia

El objetivo fue identificar el uso de sustancias entre las personas diagnosticadas con esquizofrenia y verificar la asociación entre el consumo y las características sociodemográficas y clínicas. Estudio transversal. Se utilizaron cuestionarios en 45 pacientes con diagnóstico de esquizofrenia. Las sustancias de mayor consumo en la vida: 67% tabaco; 73% alcohol; 22% marihuana. 62% de la muestra hicieron uso problemático de al menos una sustancia. Se encontró una asociación entre el uso problemático de drogas y la satisfacción financiera, la impulsividad y las experiencias de discriminación. Identificar las características relacionadas con el consumo de drogas entre personas que reciben tratamiento para la esquizofrenia ayuda a propuesta de estrategias de atención dirigida a esta población.

Descriptores: Comorbilidad; Esquizofrenia; Trastornos Relacionados con Sustancias.

Introduction

Over the past 20 years, drug use among people diagnosed with mental disorders has been the focus of various clinical investigations⁽¹⁻²⁾. Among these studies, those involving the population diagnosed with schizophrenia and other psychotic disorders can be highlighted⁽³⁾.

A study conducted in the United States on dual diagnosis in the general population showed that among the participants diagnosed with schizophrenia, 47.0% met the criteria for some type of problematic use of

alcohol or other drugs⁽⁴⁾. Another study conducted with people diagnosed with schizophrenia found that 54.0% of the participants were diagnosed with problems related to alcohol and other drugs⁽⁵⁾. In Brazil, a study carried out with psychiatric patients showed that among the participants diagnosed with schizophrenia, the percentage of people that presented problematic use of drugs was 8%, this being 5.3% problematically using alcohol and 2.7% problematically using other drugs⁽⁶⁾. Another national study found that people diagnosed with schizophrenia who were problematically using drugs were significantly younger than people with this same

diagnosis that did not use drugs⁽⁷⁾. The authors did not find significant differences regarding gender and length of hospitalization.

Although the percentage of drug use among people diagnosed with schizophrenia is higher than in the general population, the literature emphasizes that absolute numbers are small⁽⁸⁾. The types of drugs consumed and the patterns of consumption in this population are varied. However, alcohol, tobacco and cannabis are the substances of which the consumption most stands out, although they vary in percentage in the studies, according to cultural aspects and the research methods employed^(6,9).

It is important to highlight that one of the hypotheses to explain drug use among people with schizophrenia may be associated with the possible relief that the drug can provide in relation to depressive and anxious symptoms, in the seeking or maintenance of euphoria, as a strategy of self-medication and for improvements in self-confidence and social skills⁽¹⁰⁾. Another issue to be considered is that drugs have been used in virtually all known cultures, being a cultural resource used by the general population. It is emphasized that alcohol consumption is a common habit among these cultures, the consumption of which may be more socially legitimized when compared to other substances, so that its consumption can be related to a feeling of normality⁽¹⁰⁾. Therefore, among patients with a diagnosis of schizophrenia, alcohol consumption may be associated with socialization strategies, although it may also be a tactic for forgetting traumatic situations, at least while the people are under its influence⁽¹¹⁾.

Cigarette smoking, in turn, appears to be a common practice in psychiatric settings, assuming ritual and daily habit characteristics. The cigarette seems to be related to stress relief, providing a sense of control of one's own life for people with a great experience of institutionalization⁽¹²⁾. Although tobacco use is reported as a substance that does not influence the mental health of people with psychiatric diagnoses, a recent study has linked cigarette smoking to psychotic experiences, describing it as a variable that intervenes in the results when these experiences are related to the consumption of cannabis, widely studied⁽¹³⁻¹⁶⁾. Cannabis, in qualitative studies, has been related to a perspective of energy and creativity, when under the effects of the drug, with it also being related to the reduction of auditory hallucinations⁽¹⁷⁻¹⁸⁾.

Although many users perceive some benefits from substance use, this consumption may exacerbate positive and negative symptoms, resulting in a set of impairments in cognition and in affective, biological,

and interpersonal functions^(10,19). Thus, it is argued that these individuals may present a worse prognosis when compared to people who only have one of the disorders, which makes treatment difficult⁽²⁰⁾. In mental health services, it is therefore important to rapidly identify people who seek treatment with symptoms that meet the diagnostic criteria for schizophrenia and present problematic use of substances. Integrated care for the individual can have beneficial effects for the treatment and development of the disorder.

The aim of this study was to identify drug use among people diagnosed with schizophrenia and to verify its association with sociodemographic and clinical characteristics.

Method

This quantitative, descriptive, cross-sectional study was carried out in a Psychosocial Care Center II (CAPS II) of a city in the state of São Paulo. The convenience sample consisted of 45 patients diagnosed with schizophrenia who met the following inclusion criteria: being actively monitored in the selected service; having a diagnosis of schizophrenia; and being over 18 years of age.

Three instruments were used for the data collection: 1) Sociodemographic and clinical information form (sex, age, marital status, religion, occupational and educational status, family income, people living with, satisfaction with the community of residence, children under 18, problems with alcohol and other substances in the family, psychiatric diagnosis, psychiatric hospitalizations, use of medication, experience of living on the street, legal problems and experience of discrimination); 2) Screening Questionnaire for the Use of Alcohol, Tobacco and Other Substances (ASSIST)⁽²¹⁻²²⁾, 3) Barratt Impulsiveness Scale (BIS-11)⁽²³⁾.

The ASSIST was developed by the World Health Organization. It is a structured questionnaire, consisting of eight questions that investigate the consumption of nine substances (tobacco, alcohol, cocaine, stimulants, sedatives, inhalants, hallucinogens, cannabis and opiates)⁽²¹⁻²²⁾. These questions track the consumption of psychoactive substances, identifying use in life, use in the last three months, problems related to the consumption, risk of harm, dependence and injecting use. Each response corresponds to a score, which ranges from 0 to 4, with the total sum ranging from 0 to 20. The score from 0 to 3 indicates low risk use, from 4 to 15 abusive use and above 16 possible dependence. In the evaluation of the internal consistency of the Portuguese version of the instrument, the value of

Cronbach's α found was 0.80 for alcohol and tobacco, 0.79 for cannabis and 0.81 for cocaine⁽²¹⁾.

The BIS-11 was used to assess impulsiveness. This instrument was adapted for use with adults in Brazil⁽²³⁾. It is a self-report scale, composed of 30 items that describe manifestations of impulsiveness. The total score of the instrument ranges from 30 to 120 and the cut-off point of 72 is used to classify low or high impulsiveness⁽²⁴⁾.

Patients were contacted in the service by members of the research team and invited to participate. The instruments were applied in a room provided by the service and the time for collection varied between 30 and 45 minutes. It should be noted that all information was collected during the interview with the patient, with the exception of the current diagnosis, which was taken from the medical records that report the information regarding the consultation of the day.

The data were organized in an Excel spreadsheet and submitted to statistical analysis. The descriptive and inferential analyses were carried out using the Statistical Package for the Social Sciences (SPSS), version 16. The frequencies and the respective percentages were calculated for the categorical variables. Fisher's exact test was used for the inferential analysis. The participants were divided into the With Problematic Use of Drugs group, which included those who scored positive for the problematic use of at least one of the drugs evaluated through ASSIST ($n=9$) and the Without Problematic Use of Drugs group. It should be noted that those who scored positive only for tobacco, a substance with pharmacological and cultural characteristics that, although causing dependence and diverse clinical consequences, has little influence on the psychosocial functioning of individuals, were not included in the With

Problematic Use of Drugs group. The associations between these two groups and the sociodemographic and clinical variables were investigated. The level of significance considered was 5% ($p \leq 0.05$).

The project was approved by the Research Ethics Committee of FFCLRP-USP on May 30, 2012 (CAAE - 00670512.9.0000.5407).

Results

The 45 participants reported higher means for tobacco (10.1, $SD=12$) and alcohol (4.1, $SD=8$) consumption. Regarding the pattern of consumption, with the exception of opioids, the participants reported having used all the other substances at least once in their lifetime. Regarding abusive use, this pattern was more prevalent for tobacco use (36%), followed by alcohol (7%) and cannabis (7%). Regarding dependence, 13% were related to tobacco, 7% alcohol and 2% to amphetamines/ecstasy (Table 1). It was found that 28 people (62.2%) presented problematic use of at least one substance, when tobacco was included.

Considering the sociodemographic characteristics, the majority of the participants were male (53%), without a partner (82%), lived with family members (75%), did not work (84%), had no income and were not satisfied with their financial situation (60%). For the test of association between the use of drugs and the sociodemographic and clinical characteristics, participants were divided into those with problematic use of at least one drug ($n=9$, 20%) and those without. A significant association was found only between problematic use of drugs and dissatisfaction with the financial situation ($p=0.016$), according to Table 2.

Table 1: Mean ASSIST score for each of the drugs evaluated and frequency and percentage of different consumption patterns ($n=45$)

Substance	Score M (SD)	Use in Life		Abusive use		Probable dependence	
		Yes N(%)	No N(%)	Yes N(%)	No N(%)	Yes N(%)	No N(%)
Tobacco	10.1 (12)	30 (67)	15 (33)	16 (36)	29 (64)	6 (13)	39 (88)
Alcohol	4.1 (8)	33 (73)	12 (27)	3 (7)	42 (93)	3 (7)	42 (93)
Cannabis	0.7 (3)	10 (22)	35 (78)	3 (7)	42 (93)	0	45 (100)
Cocaine/Crack	0.2 (1)	4 (9)	41 (91)	1 (2)	44 (98)	0	45 (100)
Amphetamines/ecstasy	0.8 (6)	2 (4)	43 (96)	0	45 (100)	1 (2)	44 (98)
Inhalants	0.0 (0)	3 (7)	42 (93)	0	0	0	45 (100)
Hallucinogens	0.1 (1)	1 (2)	44 (98)	1 (2)	44 (98)	0	45 (100)
Opioids	0.0 (0)	0 (0.0)	45 (100)	0	45 (100)	0	45 (100)
Use of at least one drug	-	38 (84)	7 (16)	19 (42)	26 (58)	9 (20)	36 (80)

The majority of the participants reported having a family member who problematically used drugs (51%), had no difficulties in taking the prescribed medication (73%), had undergone psychiatric hospitalization (80%), had high impulsiveness (52%), had no experience of having been subjected to violence

(53%) or discrimination (57%), had not lived on the streets (84%) and had no history of problems with the police (78%). As shown in Table 03, there was a significant association between the problematic use of drugs and impulsiveness ($p=0.02$), and the experience of discrimination ($p=0.003$).

Table 2 - Sociodemographic characteristics of psychiatric patients according to the presence or absence of problematic drug use

Variable	N valid	Problematic use of drugs		P-value	OR 95% CI
		No N(%)	Yes N(%)		
Sex	45			0.27	2.8 (0.6-13.0)
Female		15 (71)	06 (29)		
Male		21 (88)	03 (12)		
Marital status	45			0.65	1.4 (0.2-8.6)
Without partner		30 (81)	07 (19)		
With partner		06 (75)	02 (25)		
Lives with family members	45			0.67	0.6 (0.1-2.8)
No		08 (73)	03 (27)		
Yes		28 (82)	06 (18)		
Religious practice	45			0.46	2.2 (0.4-12.3)
No		14 (87)	02 (13)		
Yes		22 (76)	07 (24)		
Works	45			0.62	1.8 (0.3-11.1)
No		31 (82)	07 (18)		
Yes		05 (71)	02 (29)		
Own income	45			0.42	2.4 (0.5-10.9)
No		27 (84)	05 (16)		
Yes		09 (69)	04 (31)		
Satisfaction with financial situation	43			0.016*	1.5 (1.2-1.9)
No		18 (68)	09 (33)		
Yes		16 (100)	0 (0)		

* $p<0.05$

Table 3. Clinical characterization and social impairment of the participants according to the presence or absence of the problematic use of drugs

Variables	N valid	Problematic use of drugs		P	OR (CI)
		No	Yes		
Drug use by family member	45			0.28	2.5 (0.5-11.6)
No		16 (73)	06 (27)		
Yes		20 (87)	03 (13)		
Difficulties in using medications	45			0.55	1.3 (0.2-7.6)
No		26 (79)	07 (21)		
Yes		10 (83)	02 (17)		
Psychiatric Hospitalizations	45			0.35	2.5 (0.5-12.9)
No		06 (67)	03 (33)		
Yes		30 (83)	06 (17)		
Impulsiveness	44			0.02*	10.7 (1.2-94.7)
Low		20 (95)	01(5)		
High		15(65)	08(35)		

continues...

Table 3: Continuation

Variables	N valid	Problematic use of drugs		P	OR (CI)
		No	Yes		
Experience of violence	45			0.59	1.1 (0.3-4.9)
No		19 (79)	05 (21)		
Yes		17 (81)	04 (19)		
Experience of discrimination	44			0.003†	0.1(0.1-0.5)
No		24 (96)	01 (04)		
Yes		11(58)	08(42)		
Experience of living on the streets	45			0.13	0.2 (0.0-1.4)
No		32(84)	06 (16)		
Yes		04 (57)	03 (43)		
History of problems with the police	45			0.65	1.0 (0.2-5.8)
No		28 (80)	07 (20)		
Yes		08 (80)	02 (20)		

* $p < 0.05$; † $p < 0.005$

Discussion

The results showed that the most prevalent drugs mentioned by the participants were tobacco, alcohol and cannabis. The majority of the patients (49%) reported problematic use of tobacco, in agreement with other studies that showed a high prevalence of smoking among psychiatric patients⁽²⁵⁾. These studies relate the prevalences found to relief from the side effects of the psychotropic medication⁽²⁵⁾. When considering that patients who report problematic drug use are usually referred to the Center of Psychosocial Care for Alcohol and Drug of the city, the number of people being treated for schizophrenia and presenting problematic use of drugs was high, representing 20% of the sample.

Concerning the sociodemographic variables, the majority of the participants were not working at the time of data collection (84%), had no income (71%) and were dissatisfied with their financial situation (60%). This dissatisfaction was associated with the problematic use of drugs. It can be hypothesized that the most dissatisfied people came from families with lower economic conditions, which may have greater repercussions on unemployment. In addition, individuals with schizophrenia may experience difficulties in developing work activities, both because of conditions related to the symptomatology or due to social stigma and lack of consolidated public policies that encourage income generation, as in the solidarity economy.

Another important fact was that 46.6% of the interviewees had previously suffered some type of violence, this being physical, sexual, psychological and/or property violence. Although no association was found between having experienced violent situations and the problematic use of drugs, the literature states that the occurrences of violence that occurs in childhood

and adolescence may be an element that increases the susceptibility for the unfolding of psychopathological clinical conditions, including the problematic use of psychoactive substances⁽²⁶⁾.

Among the participants, 43.2% said they had previously experienced discrimination, due to their clinical condition, personal characteristics or socioeconomic level. The perception of discrimination was associated with the problematic use of substances. People diagnosed with schizophrenia or who make use of substances often suffer from stigma and prejudice. Thus, when these two problems are related stigmatization appears to increase⁽²⁷⁾. The mental health service is one of the health facilities in which social stigma is more present among users, influencing the treatment and quality of life of the patients, directly or indirectly⁽²⁸⁾. The individual who has a diagnosis of schizophrenia and who uses drugs adds another stigma to that already existing due to the disease, now of a moral connotation, related to the consumption⁽²⁹⁾.

Among the clinical variables studied, there was an association between impulsiveness and the problematic use of drugs. Impulsive behavior occurs when the individual makes decisions without thinking about the possible consequences. Drug use seems to contribute to the relief of some symptoms, such as mood swings, however, also appears to worsen psychotic symptoms and lead to a worse prognosis. Thus, many users, even knowing the relief that the substance can cause, stop consuming drugs because they remember the bad effects they have experienced. More impulsive individuals could have more difficulty controlling the behavior of consumption, focusing on the initial relief⁽⁷⁾.

The main limitation of the study was the collection of information on drug use through means of self-reports.

It is known that the issue of drugs is still difficult to talk about. To minimize this difficulty, the instruments were applied in a private room, in the presence of only the researchers, who were neutral in relation to the service. The presence of family members or professionals was not allowed, as they could possibly intimidate the user.

Final considerations

The present study sought to identify substance use in people with schizophrenia undergoing treatment in community mental health services. The results showed the problematic use of substances among these patients, especially the problematic use of tobacco, alcohol and cannabis. It is also important to note that the consumption found is part of a broader context that reflects the increase of the autonomy of the patients in community services. It is essential to emphasize the importance of mental health professionals adopting an open posture to talk about the issue with their patients, a curious attitude to understand the reasons that lead these people to consumption and a collaborative posture to negotiate reduction strategies or cessation of consumption with the user, as well as strategies to reduce the possible harm arising from it.

Dissatisfaction with the financial situation, the experience of discrimination and impulsiveness were characteristics that were shown to be associated with the problematic use of drugs. In treatment, it is important to address the various dimensions of the lives of the individuals, since these relate to their health. Financial difficulties and situations of stigma and discrimination are important triggers for stress and, consequently, mental illness. Skills training, such as impulsiveness control, can also help in reflecting on behaviors and decisions that impact the physical and mental health of the individual.

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