Crack/cocaine users show more family problems than other substance users

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OBJECTIVES: To evaluate family problems among crack/cocaine users compared with alcohol and other substance users.

METHODS: A cross-sectional multi-center study selected 741 current adult substance users from outpatient and inpatient Brazilian specialized clinics. Subjects were evaluated with the sixth version of the Addiction Severity Index, and 293 crack users were compared with 126 cocaine snorters and 322 alcohol and other drug users.

RESULTS: Cocaine users showed more family problems when compared with other drug users, with no significant difference between routes of administration. These problems included arguing (crack 66.5%, powder cocaine 63.3%, other drugs 50.3%, $p = 0.004$), having trouble getting along with partners ($61.5\% \times 64.6\% \times 48.7\%$, $p = 0.013$), and the need for additional childcare services in order to attend treatment ($13.3\% \times 10.3\% \times 5.1\%$, $p = 0.002$). Additionally, the majority of crack/cocaine users had spent time with relatives in the last month ($84.6\% \times 86.5\% \times 76.6\%$, $p = 0.011$).

CONCLUSIONS: Brazilian treatment programs should enhance family treatment strategies, and childcare services need to be included.

KEYWORDS: Crack Cocaine; Cocaine; Alcoholism; Family Relations.

INTRODUCTION

First introduced in Brazil in the early 1990s, crack use had an almost twofold increase in its prevalence (0.4 to 0.7%) between 2001 and 2005, and its use has spread to higher socioeconomic groups (1-3). Recently, it was found that there are approximately 3 million regular users (in 2012) of cocaine in Brazil, accounting for 20% of its consumption worldwide and Brazil is also the world's largest market for crack (4).

Crack users usually have a worse prognosis, with more severe dependence, involvement with criminality, risky sexual behavior and more social impairments when compared with cocaine snorters and other substance users (5-7). However, little is known about the characteristics of the family problems associated with this substance and whether it varies between different routes of administration and other substances (8,9). This study aims to evaluate family problems among crack/cocaine users compared with alcohol and other substance users.

METHODS

Study design

A cross-sectional multi-center study was conducted between January and December 2006 in three research centers located in three Brazilian state capitals:

- Porto Alegre, at The Center for Drug and Alcohol Research (CPAD), which is based at the Hospital de Clínicas of Porto Alegre, a large teaching hospital connected with Federal University of Rio Grande do Sul (UFRGS) that has inpatient and outpatient services for alcohol and drug problems.

- São Paulo, at the Women's Drug Dependency Treatment Center (PROMUD), affiliated with the Medical School of the University of São Paulo (USP). PROMUD is located at the Psychiatric Institute of Hospital das Clínicas, the largest teaching hospital in Brazil. It is a women-only treatment program and provides mainly outpatient multidisciplinary services for alcohol- and drug-dependent patients.

- Salvador, at the Center for Drug Abuse Studies and Therapy (CETAD), a permanent extension of the Department of Pathology at the Federal University of Bahia (UFBA). Its outpatient clinic is responsible for the psychiatric and psychosocial care of drug users and their families.

Sample selection

A target sample of 741 adult substance abusers from outpatient and inpatient clinics who were in evaluation or

beginning treatment were interviewed. Inclusions from both settings were made to encompass a wider range of patient characteristics. The patients were enrolled in the study as they were admitted to the clinics and no specific recruitment was performed. The inclusion criteria were being 18 years old or older, seeking treatment for drug abuse/dependence and using at least one of these substances in the 30 days prior to the interview. In regard to inpatient subjects, the interviews referred to the period prior to admission and not to the day of the interview. Patients were divided into three groups according to their main substance of use: crack cocaine (293) and snorted cocaine (126) users who sometimes used alcohol and/or marijuana but reported cocaine as the major cause of their problems and need for treatment and users of others substances (322), mostly alcohol, sedatives and marijuana, who did not use cocaine. The exclusion criteria were any neurological or severe psychiatric illness with acute symptoms noted during the interview. Regarding data collection in all centers, eight patients were excluded.

Interviewers

The 25 interviewers were psychologists with Bachelor's degrees. The quality of the data collected was ensured to a large extent by training, field oversight supervision and support by the coordinators of the research centers.

Instruments

The sixth version of the Addiction Severity Index (ASI6): a semi-structured interview that gathered information about the problems and severity of many aspects of life that are related to psychoactive use. For this study, all questions about demographics (G), schooling (E), treatment setting (H), substance use (D), and family problems (F) in the last six months were selected. The ASI6 has already been translated into Brazilian Portuguese (10).

Procedure and analyses

Data were entered in an Access database and exported to SPSS (Statistical Package for the Social Sciences) version 14.0, which was used to perform the analyses.

Categorical variables were described by absolute frequencies, and the percentages were compared by the Chi-squared test. Quantitative variables with a symmetric distribution were described by the mean and standard deviation and compared using ANOVA. Those with an asymmetric distribution were presented as the median and interquartile ranges and compared by the Kruskal-Wallis test. Statistically significant data were adjusted for age, gender, treatment setting, living with partner and schooling by logistic regression.

Ethics

The study was conducted in accordance with the Declaration of Helsinki (1975, revised in 1989) and was approved by the Institutional Review Board of the Hospital de Clínicas de Porto Alegre (protocol 05-460) and by the respective IRBs of each participating site. All participants were informed about the study and procedures, agreed to participate and signed the informed consent form. Patients and interviewers received approximately 15 dollars for each interview to cover expenses for food and transportation.

■ RESULTS

In our demographic findings, cocaine users were predominantly male and younger (mean age 31.1 for crack users) compared with non-cocaine PAS users, with no difference between crack and snorted cocaine users. The three groups were similar with regard to marital and economic status, ethnicity, educational level and treatment setting. The third group comprised mainly alcohol, sedative and marijuana users. This group also had a higher median for years consuming alcohol compared with crack and snorted cocaine users (15, 5 and 10 years, respectively). Marijuana use was significantly more prevalent among crack cocaine users compared with the other two groups (65%, 28.6% and 22.8%, respectively). There were no significant differences concerning other substances, such as sedatives, stimulants and hallucinogens.

As shown in Table 1, cocaine users showed more family problems than other drug users, with no significant difference between crack and snorted cocaine users. These problems included arguing and having problems getting along with partners and the need for additional childcare services in order to attend treatment. Additionally, the majority of crack/cocaine users had spent time with relatives in the last month. However, after logistic regression, differences in ''having trouble getting along with'' were no longer statistically significant.

■ DISCUSSION

Our results show that crack cocaine users have more family problems than other substance users and describe

Table 1 - Family problems among 741 crack, cocaine and other drug users.

Variable	Crack cocaine users last 30 days n = 293		Powder cocaine users last 30 days n = 126	Non-cocaine PAS users last 30 days n = 322	p-value
	Mean	Adjusted odds ratio CI95%	Mean	Mean	
Arguing	66.5*	1.70 (1.04-2.79)	63.3*	50.3**	0.004
Having trouble getting along with partner	61.5*	1.48 (0.91-2.40)	64.6*	48.7**	0.013
Need for additional childcare services in order to attend treatment	13.3*	2.81 (1.35-5.82)	10.3*	5.1**	0.002
Spent time with relatives in the last month	84.6*	1.50 (0.93-2.42)	86.5*	76.6**	0.011

Categorical variables described by their n (%) and compared by the Chi-squared test.
*and ** represent statistically significant differences between groups.
PAS: psychoactive substance.
The means were adjusted for age, gender, treatment setting, living with partner and schooling (logistic regression).

what those problems are. To our knowledge, this is the first study in Brazil to compare crack users to cocaine snorters and other substance users.

In our sample, crack and cocaine users have a mean age of greater than 30 years, which is not in agreement with the literature, as crack users are usually described as being less than 30 years of age and younger than cocaine snorters (9). Because our data were collected in 2006, a period when crack use was starting to increase and our sample comprised mostly former cocaine snorters who were shifting to crack, this may explain the difference in demographics (2,3,9).

Data regarding family problems suggest that crack users remain attached to their family members, which is in contrast with previous studies that have shown that this population has higher rates of living on the streets and coming from broken homes (9). Perhaps, this is a consequence of the recent changes in the profile of crack users in Brazil, with increasing numbers of users from higher socioeconomic groups, especially those who seek treatment (2,9,11,12). However, the results also suggest that these relationships are conflicted because most of the patients complained of arguing with family members. This emphasizes that treatment programs should be prepared to assess and treat family conflicts. This is an important observation because most services in Brazil do not provide this type of service (13).

Having no one to take care of their children may be an important barrier for patients in regard to treatment attendance. The need for additional childcare services in a sample comprising mostly men was a surprising finding that indicates that these services should not be provided only by treatment programs dedicated exclusively or mostly to women.

The limitations of this study include its cross-sectional design and clinical sample of mostly men.

Brazilian treatment programs should enhance family treatment strategies, as they are poorly developed in most services (13). Childcare services need to be included because their absence may be a barrier to treatment retention.

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■ AUTHOR CONTRIBUTIONS

Moura HF was responsible for the study conception, literature review and manuscript writing. Benzano D was responsible for the study conception and statistical analyses. Pechansky F and Kessler FH were responsible for study conception and coordination.

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