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Sociodemographic Characteristics, Patterns of Crack Use, Concomitant Substance Use Disorders, and Psychiatric Symptomatology in Treatment-Seeking Crack-Dependent Individuals in Brazil

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Abstract

Crack cocaine (crack) dependence is a severe disorder associated with considerable morbidity and mortality, constituting a major public health problem in Brazil. The aim of this study was to improve understanding of the profile of treatment-seeking crack-dependent individuals. We recruited 65 crack-dependent individuals from among those seeking treatment at an outpatient clinic for alcohol and drug treatment in the city of São Paulo, Brazil. Assessments, conducted between August 2012 and July 2014, focused on sociodemographic characteristics, the pattern/history of crack use, treatment history, concomitant substance use disorders, psychiatric symptomatology, and impulsivity. In the study sample, males predominated, as did unemployment, homelessness, and low levels of education. On average, the participants had smoked crack for 10 years. Most had previously been treated for crack dependence. Concomitant DSM-IV diagnoses of dependence on other substances were common, dependence on tobacco and alcohol being the

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most prevalent. Participants presented significant psychiatric symptomatology and impulsivity with nearly half of the sample presenting psychotic symptoms, 90% presenting depressive symptoms and 80% presenting anxiety symptoms. Most treatment-seeking crack-dependent individuals in Brazil are living in extremely poor social conditions and are struggling with the severe, chronic and comorbid features of this disorder.

Keywords

Crack dependence; ambulatory treatment; profile features; Brazil

Introduction

The demand for treatment for crack cocaine (crack) dependence, which has become a severe health concern in Brazil, has increased significantly in recent decades (Ferri et al. 1997; Dunn et al. 1996). Observational studies have been conducted to improve understanding of crack-dependent individuals. Such studies have reported that the prevalence of crack use is higher in urban regions, where socially vulnerable young men are at high risk (Santos Cruz et al. 2013; Duailibi, Ribeiro & Laranjeira 2008). Crack users are often multiple drug users in whom crack is the drug of choice (Guindalini et al. 2006). Crack use is associated with a number of severe psychiatric comorbidities, such as alcohol dependence, mood disorders (e.g., major depressive disorder), anxiety disorders, antisocial personality disorder, and suicidal ideation (Narvaez et al. 2014; Paim Kessler et al. 2012; Zubaran et al. 2010). Crack cocaine use has been found to be an important predictor for psychiatric emergency service visits in Brazil (da Cruz et al., 2014). In comparison with the general population, crack users are more likely to live or have lived on the streets, as well as to have been exposed to violence, hospitalization, prostitution, and risky sexual behaviors (Moreira, Barbosa, Laranjeira, & Mitsuhiro, 2014; Narvaez et al. 2014; Carvalho & Seibel 2009; Dunn & Laranjeira 1999). Crack use is also associated with school dropout, unemployment, involvement in illegal activities, drug trafficking, conflicts with the police, and incarceration (Narvaez et al. 2015; Oliveira & Nappo 2008; Dunn et al. 1996). Mortality among crack-dependent individuals is 12 times higher than in the general population (Ribeiro et al. 2004). Although some studies have provided important information on the profile of crack users, they have not distinguished between crack users with and without a confirmed diagnosis of crack-dependence, nor have they focused on treatment-seeking crack users. The aim of this study was to provide additional knowledge on the sociodemographic characteristics, patterns of crack use, concomitant substance use disorders, and psychiatric symptomatology in crack-dependent individuals who report recent crack use and seek outpatient treatment in Brazil.

Methods

Between August 2012 and July 2014, 81 crack users seeking treatment at the Vila Maria Specialized Medical Outpatient Clinic for Alcohol and Drug Treatment, in the northern region of the city of São Paulo, Brazil, were screened for eligibility. The inclusion criteria were being 18–65 years of age and having been diagnosed with crack dependence according

to the DSM-IV-TR (American Psychiatric Association 2002). Polydrug users were eligible for enrollment if crack was their drug of choice. The exclusion criteria were having been abstinent from crack for four weeks or more prior to intake, not being able to attend treatment sessions at least 3 times per week and having a *DSM-IV* diagnosis of schizophrenia. A total of 21 participants were excluded from the study for the following reasons: being abstinent from crack for more than 4 weeks (5); for not having crack as the first drug of choice (6); for being diagnosed with schizophrenia (3) (confirmed using SCID-I); and for not being able to attend treatment at least 3 times per week (7). Therefore, the final study sample comprised 65 participants. All participants provided written informed consent. The study was approved by the Research Ethics Committee of the Federal University of São Paulo and by the Ethics Committee of the Brazilian National Ministry of Health.

Assessments were conducted in a private room at the Vila Maria Specialized Medical Outpatient Clinic for Alcohol and Drug Treatment. The intake interview lasted up to 90 minutes and included the collection of data related to sociodemographic characteristics, the history/pattern of drug use, and treatment history. Social class was assessed using the Brazilian Economic Classification Criteria (ABEP 2012). Substance use diagnoses were made and psychotic symptoms were identified through the use of the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID; First et al. 1997), the Beck Depressive Inventory II (BDI-II; Gorenstein, Argimon & Werlang 2011), the Beck Anxiety Inventory (BAI; Cunha 2001), and the Barratt Impulsiveness Scale (BIS-11; von Diemen et al. 2007). After the intake assessments, the participants provided a urine sample to assess recent crack and marijuana use, as well as a breath sample to assess recent alcohol use. Statistical analyses were performed with the IBM SPSS Statistics software package, version 22.0 (IBM Corporation, Armonk, NY, USA).

Results

The majority (87.7%) of the crack-dependent individuals in our sample were male (Table 1). The mean age of the participants was 35 years. Most (69.2%) were single, and 10.8% were divorced. The mean level of education was 9.3 years of schooling; 35.4% of the sample had dropped out before completing 9 years of schooling; and only 29.2% had graduated from high school (12 years of schooling). The sample comprised individuals from all social classes—approximately one third from the middle class, approximately one third from the lower or lower-middle class, and approximately one third from the upper-middle or upper class. The majority (83.1%) of the participants were unemployed, only 4.6% being formally employed. Nearly one fourth (23.1%) reported living on the streets at the time of the intake assessments.

The mean age at the onset of crack use was 22 years, and the mean duration of continuous crack use was 12 years. In a normal day of crack use, participants reported smoking an average of 12 crack rocks.¹ Of the 65 participants, 26 (40%) reported using crack 5 days

¹Although the quantity of cocaine in each crack rock can vary considerably, we reported the number of rocks of crack rather than the number of grams, because crack in Brazil is sold in rocks and not in grams of cocaine. Consequently, crack users commonly report the number of rocks smoked and do not know how to determine the number of grams of cocaine smoked.

per week in the last three months, and 11 (16.9%) reported using crack less than once per week during the same period. On average, the last crack use occurred 7 days before the intake assessment, and approximately half of the participants submitted a crack-positive urine sample at intake. Over 60% reported sleeping on the streets due to crack use, and nearly 90% reported frequenting “Crackland”² to consume crack. Regarding the history of treatment for crack dependence, nearly half (47.7%) of the participants had attended self-help meetings, 61.5% had received outpatient treatment, and 84.6% had been admitted to an inpatient treatment facility. The mean number of previous treatment attempts was 4.2 (sd = 5.1).

Concomitant DSM-IV diagnoses of dependence on other substances were common among the participants, with 69.2% meeting the criteria for multiple substance dependence. The most common concurrent substance use disorder was tobacco use, with 90.8% having been diagnosed with tobacco dependence. Alcohol dependence was observed in 66.1% of the sample, and marijuana dependence was observed in 12.3%.

Psychiatric symptomatology was also common (Table 1). Nearly half of the sample presented at least one psychotic symptom during the intake assessment. The mean BDI-II score was high 24.5 (sd = 12.1), over 90% of the sample presenting at least mild depression and over one third presenting severe depression. The presence of anxiety symptoms was also significant, the mean BAI score being 20.7 (sd = 13.5): over 80% of the sample presented at least mild anxiety, and approximately 30% scored in the severe anxiety range. The level of impulsiveness, as assessed with the BIS-11, was also high, with the mean overall impulsiveness score being 79.1 (sd = 5.9), and mean domain scores of 22.1 (sd = 2.4) for attentional impulsiveness, 27.4 (sd = 3.5) for motor impulsiveness, and 29.7 (sd = 3.9) for non-planning impulsiveness.

Discussion

Our findings offer some important insights into the demographics, history, and pattern of crack use, as well as concomitant substance use disorders and psychiatric symptomatology indicators, in crack-dependent individuals seeking treatment in the city of São Paulo. Our sample was composed predominantly of men with a relatively low level of education, and high rates of unemployment and homelessness. Other authors have also identified a strong association between crack use and socioeconomic marginalization in major cities in Brazil (Santos Cruz et al. 2013; Duailibi, Ribeiro & Laranjeira 2008; Dunn & Laranjeira 1999). Our results also indicate that treatment-seeking crack-dependent individuals in the city of São Paulo come from a variety of social classes, thus suggesting that, although social vulnerability might be a risk factor for crack use, crack dependence is a severe disorder that has spread to all socioeconomic spheres of Brazilian society.

The high quantity and frequency of crack use reported by the participants, together with the fact that most of them reported having used crack continuously for more than 10 years and

²“Crackland” is a region of downtown São Paulo where thousands of crack users living under extremely vulnerable social conditions gather to consume crack openly in the streets.

the evidence of numerous failed treatment attempts, highlight the severe, compulsive, and chronic nature of this disorder. Those findings also indicate the lack of efficacy of the existing centers in treating crack dependence and advocate for the need to incorporate evidence-based treatments such as contingency management (Miguel et al. 2016 Miguel et al. 2017).

In agreement with previous findings (da Cruz et al., 2014; Moreira, Barbosa, Laranjeira, & Mitsuhiro, 2014; Narvaez et al. 2014; Paim Kessler et al. 2012; De Oliveira et al. 2009; Falck et al. 2004; Falck et al. 2002), the high prevalence of concomitant substance use disorders, psychiatric symptomatology, and impulsivity observed in our sample indicates the highly comorbid nature of crack dependence. These findings further suggest that treatment facilities charged with treating crack-dependent individuals should consider combining pharmacological and psychosocial evidence-based treatments designed to address other substance use disorders, mood disorders, and anxiety disorders, as well as neurorehabilitation to improve impulse control. Incorporating these interventions into treatment protocols might increase the efficacy of those protocols in treating this complex disorder.

Our study has several limitations. First, the sample was small and comprised only individuals seeking treatment at one outpatient clinic. As such, the profile observed in this study might differ from that of crack-dependent individuals receiving treatment in other regions of the country or in different treatment contexts. Second, our sample was composed exclusively of crack users who reported recent crack use, had a confirmed DSM-IV diagnosis of crack dependence, and were seeking treatment for that dependence. Therefore, the prevalence of the features evaluated here might be different among crack users who are not seeking treatment, do not meet the DSM-IV criteria for a diagnosis of crack dependence, or have been abstinent from crack for more than one month, with possibly less severe health and social conditions. Third, only participants that could attend treatment three times per week were included in the study. This exclusion criteria might have limited our findings by not considering those that, for various reasons (i.e., work, distance to the treatment facility) could not attend treatment 3 times per week.

Despite these limitations, our study suggests important markers of the demographics, patterns of crack use, concomitant substance use disorders, and psychiatric symptomatology in treatment-seeking crack-dependent individuals in Brazil, thus contributing to a better understanding of the social and clinical profile of such individuals. There is a great need for randomized clinical trials designed to evaluate treatments for crack dependence, in order to develop effective treatments for this complex and severe disorder.

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References

- Associação Brasileira de Empresas de Pesquisa. Critério Brasil: Critério de Classificação Econômica Brasil 2012: Dados com base no Levantamento Sócio Econômico 2010- IBOPE. Available in: <http://www.abep.org/criterio-brasil>.
- American Psychiatric Association Manual diagnóstico e estatístico de transtornos mentais: texto revisado (DSM-IV-TR) [DSM-IV-TR: Diagnostic and statistical manual of mental disorders]. Porto Alegre: Artimed; 2002.
- Carvalho HB, Seibel SD. 2009 Crack cocaine use and its relationship with violence and HIV. *Clinics (Sao Paulo)* 64 (9): 857–66. [PubMed: 19759879]
- Cunha JA. Manual da versão em português das Escalas Beck. São Paulo: Casa do Psicólogo; 2001.
- De Oliveira LG, Barroso LP, Silveira CM, Sanchez ZV, De Carvalho Ponce J, Vaz LJ, Nappo SA. Neuropsychological assessment of current and past crack cocaine users. *Substance Use & Misuse*. 2009;44(13):1941–57. [PubMed: 20001290]
- Duailibi L, Ribeiro M, Laranjeira R. Profile of cocaine and crack users in Brazil. *Caderno de Saúde Publica*. 2008;24(4):545–57.
- Dunn J, Laranjeira R. Cocaine--profiles, drug histories, and patterns of use of patients from Brazil. *Substance Use & Misuse*. 1999;34(11):1527–48. [PubMed: 10468106]
- Dunn J, Laranjeira RR, Da Silveira DX, Formigoni ML, Ferri CP. Crack cocaine: an increase in use among patients attending clinics in Sao Paulo: 1990–1993. *Substance Use & Misuse*. 1996;31(4): 519–27. [PubMed: 8851815]
- Falck RS, Wang J, Carlson RG, Eddy M, Siegal HA. The prevalence and correlates of depressive symptomatology among a community sample of crack-cocaine smokers. *Journal of Psychoactive Drugs*. 2002;34(3):281–8. [PubMed: 12422938]
- Falck RS, Wang J, Siegal HA, Carlson RG. The prevalence of psychiatric disorder among a community sample of crack cocaine users: an exploratory study with practical implications. *The Journal of nervous and mental disease*. 2004;192(7):503–7. [PubMed: 15232321]
- Ferri CP, Laranjeira RR, da Silveira DA, Dunn J, Formigoni ML. Increase in the search for treatment by crack users in 2 outpatient clinics at the city of Sao Paulo from 1990 to 1993. *Revista Associação Médica Brasileira*. 1997;43(1):25–8.
- First MB, Spitzer RL, Gibbon M, & Williams JB User's guide for the Structured clinical interview for DSM-IV axis I disorders SCID-I: clinician version.: American Psychiatric Pub; 1997.
- da Cruz TA, da Cunha GN, de Moraes VP, Massarini R, Yoshida CM, Tengam PT, . . . Castaldelli-Maia JM (2014). ICD-10 mental and behavioural disorders due to use of crack and powder cocaine as treated at a public psychiatric emergency service: an analysis of visit predictors. *Internal Review of Psychiatry*, 26(4), 508–514. doi:10.3109/09540261.2014.928271
- Gorenstein C Wang YP, Argimon IL, Werlang BSG. Manual do Inventário de depressão de Beck - BDI-II. Beck AT SR, Brown GK, editor. Sao Paulo: Casa do Psicólogo; 2011.
- Guindalini C, Vallada H, Breen G, Laranjeira R. Concurrent crack and powder cocaine users from Sao Paulo: do they represent a different group? *BMC Public Health*. 2006;6:10. [PubMed: 16426451]
- Miguel AQ, Madruga CS, Cogo-Moreira H, Yamauchi R, Simoes V, da Silva CJ, McPherson S. Roll J, Laranjeira R. Contingency Management Is Effective in Promoting Abstinence and Retention in Treatment Among Crack Cocaine Users in Brazil: A Randomized Controlled Trial. *Psychology of Addictive Behaviors*. 2016;30(5):536–43. [PubMed: 27442691]
- Miguel AQ, Madruga CS, Cogo-Moreira H, Yamauchi R, Simoes V, Ribeiro A, da Silva CJ, Fruci A, McDonell M, McPherson S. Roll J, Laranjeira R. Contingency Management Targeting Abstinence is effective in Reducing Depressive and Anxiety Symptoms among Crack Cocaine-Dependent Individuals. *Experimental and Clinical Psychopharmacology*. 2017; 25(6):466–472. doi: 10.1037/pha0000147 [PubMed: 29251975]
- Moreira MM, Barbosa GL, Laranjeira R, & Mitsuhiro SS (2014). Alcohol and crack cocaine use in women: a 14-year cross-sectional study. *Journal of Addictive Diseases*, 33(1), 9–14. doi: 10.1080/10550887.2014.882726 [PubMed: 24467404]

- Narvaez JC, Jansen K, Pinheiro RT, Kapczinski F, Silva RA, Pechansky F, et al. Psychiatric and substance-use comorbidities associated with lifetime crack cocaine use in young adults in the general population. *Comprehensive Psychiatry*. 2014;55(6):1369–76.
- Narvaez JC, Jansen K, Pinheiro RT, Kapczinski F, Silva RA, Pechansky F, et al. Violent and sexual behaviors and lifetime use of crack cocaine: a population-based study in Brazil. *Social Psychiatry and Psychiatric Epidemiology*. 2014;49(8):1249–55. [PubMed: 24519271]
- Narvaez JC, Pechansky F, Jansen K, Pinheiro RT, Silva RA, Kapczinski F, et al. Quality of life, social functioning, family structure, and treatment history associated with crack cocaine use in youth from the general population. *Revista Brasileira de Psiquiatria*. 2015;37(3):211–218. [PubMed: 26018649]
- Oliveira LG, Nappo SA. Characterization of the crack cocaine culture in the city of Sao Paulo: a controlled pattern of use. *Revista de Saúde Publica*. 2008;42(4):664–71. [PubMed: 18641794]
- Paim Kessler FH, Barbosa Terra M, Faller S, Ravy Stolf A, Carolina Peuker A, Benzano D, et al. Crack users show high rates of antisocial personality disorder, engagement in illegal activities and other psychosocial problems. *American Journal of Addiction*. 2012;21(4):370–80.
- Ribeiro M, Dunn J, Laranjeira R, Sesso R. High mortality among young crack cocaine users in Brazil: a 5-year follow-up study. *Addiction*. 2004;99(9):1133–5. [PubMed: 15317633]
- Santos Cruz M, Andrade T, Bastos FI, Leal E, Bertoni N, Villar LM, et al. Key drug use, health and socio-economic characteristics of young crack users in two Brazilian cities. *International Journal of Drug Policy*. 2013;24(5):432–8. [PubMed: 23632130]
- von Diemen L, Szobot CM, Kessler F, Pechansky F. Adaptation and construct validation of the Barratt Impulsiveness Scale (BIS 11) to Brazilian Portuguese for use in adolescents. *Revista Brasileira de Psiquiatria*. 2007;29(2):153–6. [PubMed: 17650537]
- Zubaran C, Foresti K, Thorell MR, Franceschini P, Homero W. Depressive symptoms in crack and inhalant users in Southern Brazil. *Journal of ethnicity in substance abuse*. 2010;9(3):221–36. [PubMed: 20737347]

Table 1.

Sociodemographic characteristics, patterns of crack cocaine (crack) use, concomitant substance use disorders, and psychiatric symptomatology in treatment-seeking crack-dependent individuals in the city of São Paulo, Brazil, at intake.

VARIABLE	N = 65
Age (years), mean (SD)	35.3 (8.5)
Male sex, <i>n</i> (%)	57 (87.7)
Marital status	
Single, <i>n</i> (%)	45 (69.2)
Married, <i>n</i> (%)	13 (20.0)
Divorced, <i>n</i> (%)	7 (10.8)
Education	
Years of schooling, mean (SD)	9.3 (3.6)
< 9 years of schooling, <i>n</i> (%)	23 (35.4)
12 years of schooling, <i>n</i> (%)	19 (29.2)
Social class ^a	
A, <i>n</i> (%)	7 (10.8)
B, <i>n</i> (%)	14 (21.5)
C, <i>n</i> (%)	21 (32.3)
D, <i>n</i> (%)	3 (4.6)
E, <i>n</i> (%)	20 (30.8)
Occupation	
Unemployed, <i>n</i> (%)	54 (83.1)
Formal employment, <i>n</i> (%)	3 (4.6)
Homeless, <i>n</i> (%)	15 (23.1)
Pattern of crack use	
Age at onset of crack use (years), mean (SD)	22.7 (6.9)
Duration of crack use (years), mean (SD)	12.6 (7.4)
Quantity of crack use in the last three months.	
Crack rocks smoked per day, mean (SD)	12.3 (12.4)
Frequency of crack use in the last three months.	
Up to three days per month, <i>n</i> (%)	11 (16.9)
At least once per week, <i>n</i> (%)	15 (23.1)
Two to four days per week, <i>n</i> (%)	13 (20.0)
Five or more days per week, <i>n</i> (%)	26 (40.0)
Time since last crack use (days), mean (SD)	7.3 (8.6)
Crack-positive urine sample, <i>n</i> (%)	32 (49.2)
Impact of crack use	
Has slept on the streets due to crack use, <i>n</i> (%)	42 (64.6)
Has been to "Crackland" ^b in order to use crack, <i>n</i> (%)	58 (89.2)
Treatment history	
Attended self-help group meetings due to crack use, <i>n</i> (%)	31 (47.7)

VARIABLE	N = 65
Received outpatient treatment for crack dependence, <i>n</i> (%)	40 (61.5)
Received inpatient treatment for crack dependence, <i>n</i> (%)	55 (84.6)
Number of previous inpatient treatments, mean (SD)	2.8 (4.0)
Number of previous treatment attempts, mean (SD)	4.2 (5.1)
Concomitant substance use disorders	
Multiple substance dependence, <i>n</i> (%)	45 (69.2)
Tobacco dependence, <i>n</i> (%)	59 (90.8)
Alcohol dependence, <i>n</i> (%)	43 (66.1)
Marijuana dependence, <i>n</i> (%)	8 (12.3)
Alcohol-positive breath sample, <i>n</i> (%)	11 (16.9)
THC-positive urine sample, <i>n</i> (%)	2 (3.1)
Psychiatric symptomatology and impulsivity	
At least one psychotic symptom, <i>n</i> (%)	30 (46.1)
BDI-II score, mean (SD)	24.5 (12.1)
Mild depression, <i>n</i> (%)	18 (27.7)
Moderate depression, <i>n</i> (%)	19 (29.2)
Severe depression, <i>n</i> (%)	22 (33.8)
BAI score, mean (SD)	20.7 (13.5)
Mild anxiety, <i>n</i> (%)	15 (23.1)
Moderate anxiety, <i>n</i> (%)	15 (23.1)
Severe anxiety, <i>n</i> (%)	22 (33.8)
BIS-11 score	
Total (overall impulsiveness), mean (SD)	79.1 (5.9)
Attentional impulsiveness, mean (SD)	22.1 (2.4)
Motor impulsiveness, mean (SD)	27.4 (3.5)
Non-planning impulsiveness, mean (SD)	29.7 (3.9)

^aThe Brazilian Economic Classification Criteria questionnaire (ABEP 2012) was used in order to stratify the participants by socioeconomic class—from A to E, class A being the highest and class E being the lowest.

^bA region of downtown São Paulo where thousands of crack users living under extremely vulnerable social conditions gather to consume crack openly in the streets.

THC = delta-9-tetrahydrocannabinol (the main active substance in marijuana); BDI-II = Beck Depression Inventory II; BAI = Beck Anxiety Inventory; BIS-11 = Barratt Impulsiveness Scale, version 11.