

## CRACK CRAVINGS IN USERS UNDERGOING TREATMENT IN PSYCHOSOCIAL CARE CENTERS

*Nadja Cristiane Lappann<sup>1</sup>*  
*Jacqueline Simone de Almeida Machado<sup>2</sup>*  
*Felipe Viegas Tameirão<sup>3</sup>*  
*Maria Luísa Nogueira Benjamim<sup>4</sup>*

The aim of this study is to evaluate cravings in crack users undergoing treatment in Psychosocial Care Centers. This was a descriptive cross-sectional study with a quantitative approach. The sample was made up of 20 crack users and data were collected using the Cocaine Craving Questionnaire-Brief. The profile identified was characterized as young single men with a low level of schooling. Higher scores for cravings were found in those who had been using crack for more than three years, and the shorter the period of abstinence from the drug, the greater the craving. Cravings are a significant variable in treating drug addicts, helping to prevent relapse.

Descriptors: Cocaine Crack; Behavior, Addictive; Mental Health; Questionnaires.

<sup>1</sup> PhD, Professor, Universidade Federal de São João Del Rei, Divinópolis, MG, Brazil.

<sup>2</sup> MSc, Professor, Universidade Federal de São João Del Rei, Divinópolis, MG, Brazil.

<sup>3</sup> Specialist, Professor, Universidade Presidente Antonio Carlos, Bom Despacho, MG, Brazil.

<sup>4</sup> Undergraduate student, Universidade Federal de São João Del Rei, Divinópolis, MG, Brazil.

### Correspondence

Nadja Cristiane Lappann  
Universidade Federal de São João Del Rei  
Av. Sebastião Gonçalves Coelho, 400 Sala 301.1 Bloco D.  
Chanadour  
CEP: 35501-296, Divinópolis, MG, Brasil  
E-mail: nadjacb@terra.com.br

## **CRAVING PELO CRACK NOS USUÁRIOS EM TRATAMENTO NO CENTRO DE ATENÇÃO PSICOSSOCIAL**

O objetivo deste trabalho é avaliar o craving em usuários de crack em tratamento no Centro de Atenção Psicossocial. Realizou-se estudo descritivo transversal com abordagem quantitativa. A amostra foi composta por 20 usuários de crack e, como instrumento de coleta de dados, foi utilizado o Cocaine Craving Questionnaire-Brief. O perfil verificado caracteriza-se como homem jovem, solteiro e com baixo grau de escolaridade. Observa-se maior escore do craving para os que usam crack há mais de três anos e que, quanto menor o período abstinência do crack, maior o craving pela droga. O craving é uma variável importante a ser observada no tratamento do dependente químico favorecendo a prevenção de recaída.

Descritores: Cocaína Crack; Comportamento Aditivo; Saúde Mental; Questionários.

## **CRAVING (ANSIA) POR EL CRACK EN LOS USUARIOS EN TRATAMIENTO EN EL CENTRO DE ATENCIÓN PSICOSOCIAL**

El objetivo de este trabajo es validar el craving (ansia) en usuarios de crack en tratamiento en el Centro de Atención Psicossocial. Se realizó un estudio descriptivo transversal con abordaje cuantitativo. La muestra fue compuesta por 20 usuarios de crack y, como instrumento de la colecta de datos, fue utilizado el Cocaine Craving Questionnaire-Brief. El perfil verificado se caracteriza como hombre joven, soltero y con bajo grado de escolaridad. Se observa mayor puntuación de craving para los que usan crack hace más de tres años y que, cuanto menor es el período de abstinencia de crack, mayor el craving por la droga. El craving es una variable importante a ser observada en el tratamiento del dependiente químico favoreciendo la prevención de recaídas.

Descriptorios: Cocaína Crack; Conducta Adictiva; Salud Mental; Cuestionarios.

### **Introduction**

Crack is cocaine hydrochloride processed with other substances and comes in the form of “rocks” that can be smoked. The effect begins to be felt within 5 to 10 seconds of smoking, stimulating the central nervous system (CNS). However, these stimulating effects are short lived, and in five to ten minutes the user falls into a deep CNS depression; at this moment, due to anxiety and cravings, he or she feels the compulsion to consume another dose. Potential for drug abuse and addiction is considerably higher when cocaine is

administered via the lungs than via other routes (oral, nasal, intravenous), as the drug’s actions is both more intense and of shorter duration<sup>(1)</sup>.

Due to their addiction, the life of the crack user is limited to consuming the drug and sleeping, eating, affection, sense of responsibility and even survival lose all meaning<sup>(2)</sup>, and due to the feeling of urgently needing the drug and lack of financial conditions in general, participating in illegal activities (selling drugs, robberies and assaults), exchanging sex for crack or money and running the risk of contracting sexually transmitted diseases<sup>(3)</sup>. Such characteristics impact

negatively on the crack user's health and social functioning.

The concept of cravings refers to the intense desire to consume a particular drug or to repeat the experience of effects of a particular drug or can even be understood as a subjective emotional state influenced by expectations associated with a positive result<sup>(1,4)</sup>.

Cravings can be classified as a response to abstinence, a response to the lack of pleasure, a response conditioned to drug-related-stimuli and as an attempt to intensify the pleasure of specific activities<sup>(5)</sup>. Various models have been used to explain cravings, including behavioral, psychosocial, cognitive and neuro-biological<sup>(1)</sup>. Faced with the evidence of the multiple dimensions of the problem, the need for treatment that uses diverse references is underlined<sup>(1)</sup>. It is known that cravings for crack trigger a binge pattern of consumption (pattern of intense, continuous and repetitive use of crack) due to the compulsions triggered by the drug. Such compulsion gives rise to risky behavior that negatively affects the user's health and social relationships<sup>(6)</sup>.

Cravings are a critical factor in developing compulsive drug use and addiction and for relapse after abstinence<sup>(6)</sup>. It is therefore an important factor to be observed when treating drug addiction, as it leaves the user susceptible to drug abuse, relapse and abandoning treatment, even with the firm intention to stay clean and/or after long periods of abstinence<sup>(7)</sup>. Studies on cravings and on managing them, then, become more relevant to more efficacious drug addiction treatment<sup>(1)</sup>.

Concerning crack addiction, in particular, users describe uncontrollable cravings, leading the majority of them to become compulsive users, with a pattern of daily consumption of up to nine days in a row, coming to an end only when physical and/or financial resources run out<sup>(3)</sup>.

The aim of this study, then, is to alleviate cravings in crack users undergoing intensive and semi-intensive treatment in CAPS centers in the west of Minas Gerais State.

## Materials and method

This was a transversal, exploratory study, using quantitative research methodology, in Psycho-Social Care Centers - *Centros de*

*Atenção Psicossocial* (CAPS) in Itaúna, Pará de Minas, Formiga, Bom Despacho, Campo Belo and Divinópolis, municipal hubs of the six health micro regions that make up the Western macro-region of Minas Gerais state. The data were collected over a typical week in each CAPS, between April and July 2011.

An intentional sample was composed of 20 users diagnosed as addicted to crack using the CID-10 criteria, aged 18 and over, undergoing intensive (monitored daily according to their current clinical situation) or semi-intensive (frequent monitoring according to their current clinical situation) in CAPS for problems stemming from crack use. The data were collected using the *Cocaine Craving Questionnaire-Brief* (CCQB) – version adapted for *crack*<sup>(8)</sup> and validated in Brazil<sup>(9)</sup>.

The data were organized according to absolute and percentage frequency. The results were analyzed using descriptive statistics. The project was approved by the Research Ethics Committee of the Hospital São João de Deus (report n° 37/2011).

## Results

The socio-demographic characteristics of the sample characterize the profile of the crack user as young, male, single and with a low level of schooling. It was found that use of other psycho-active substances began eight years before crack use and the mean length of time using these other substances was approximately three times the length of time using crack. A length of abstinence from crack use of 81.15 days (Table 1) was found.

The data in table 2 illustrate the relationship of cravings according to the length of time using psycho-active substances, using crack and abstinence. Regarding length of time using, in the sample higher scores for cravings were observed in those drug addicts who had been using psychoactive substances for more than six years (37.5) or using crack for more than three years (38.27). As for abstaining from crack use, the shorter the period, the greater the craving for the drug. Those patients who reported abstinence of  $\leq$  five days had higher scores for cravings (48.63). On the other hand, crack users with the lowest scores for cravings (22) had been abstaining from the drug for more than eight months.

Table 1 – Characterizing crack users in intensive or semi-intensive treatment in the CAPS (N=20)

	f	%
Socio-demographic characteristics		
Age*	17-48	31.55
Sex†		
Male	13	65
Female	7	35
Marital status†		
Married	3	15
Separated	6	30
Single	10	50
Widowed	1	5
Schooling†		
Illiterate	1	5
Incomplete elementary	13	65
Completed elementary	1	5
Incomplete high school	3	15
Completed high school	2	10
History of psycho-active substance use*		
Age started using	10-42	19.90
Length of time using	2-32	11.65
History of crack use*		
Age started using	15-43	28
Length of time using (years)	1-6	3.6
Length of abstinence (days)	1-365	81.15

\* Variables shown as mean (minimum value – maximum value).

† Variables shown as frequency (f) and percentage (%).

Table 2 – Cravings for crack according to length of time using psycho-active substances, of using crack and of abstinence (N=20)

	f	Time*	Craving
Length of time using psycho-active substances			
≥6 years	11	18.73 (6-32)	37.5
≤5 years	9	3.89 (2-5)	36.22
Length of time using crack			
≥3 years	15	4.2 (3-6)	38.27
≤2 years	5	1.8 (1-2)	33
Length of abstinence			
≤5 days	8	3.5 (1-5)	48.63
10 – 30 days	5	17 (10-30)	36.8
45 – 180 days	3	95 (45-180)	26
≥240 days	4	302.5 (240-265)	22

\* Variables shown as mean (minimum value –maximum value).

## Discussion

The characteristics of the crack users in this study, young, single and with low levels of schooling, are similar to those found in other investigations<sup>(10-12)</sup>. The profile is characteristic of the productive layer of the Brazilian population that, in this case, through crack use, can potentially find themselves compromised by the

negative consequences using this drug<sup>(12-13)</sup>. In general, crack users also have a history of consuming other drugs<sup>(12-13)</sup>. A common sequence among the youngest users (= 30 years old) is that of cigarettes and/or alcohol, marihuana, snorting cocaine and crack. On the other hand, among older users (>30 years old), a sequence of cigarettes and/or alcohol, marihuana, intravenous medications, snorting cocaine, injecting cocaine and, finally, crack is more commonplace<sup>(14)</sup>. Taking crack has harmful effects, especially on the respiratory tract, the cardiovascular system, renal function, the central nervous system and the digestive system<sup>(15)</sup>.

It was found that the majority of users undergoing intensive or semi-intensive treatment in the CAPS had been using crack for more than three years. In the early 1990s, estimated life expectancy for crack users was a few years. Nowadays, it is common to find users who have been taking it for more than five years<sup>(16)</sup>.

As for psych-active substance use, in this study it was observed that those addicts who had been taking drugs for more than six years, or who had been using crack for more than three years had the highest scores for cravings. This study shows that cravings in abstinence are not linked to the quantity of crack consumed, but rather to the length of abstinence from the substance, that is, the more recent the crack use, the higher the craving was evaluated<sup>(17)</sup>.

Regarding abstinence from crack, it was identified that, the shorter the period, the greater the craving for the drug, thus, those CAPS users who report shorter lengths of abstinence have higher scores for craving. These findings are similar to those of other studies that indicate that, the more recent the crack use, the greater the craving<sup>(17)</sup>. The association between length of abstinence and craving can be used when treating crack users, in order to motivate them to deal with a more intense desire at the beginning of the detoxification process, as they will be aware that this is a transitory stage<sup>(17)</sup>.

In this study, it was observed that cravings diminished with length of abstinence. A similar result was found in another study, the authors of which observed a decrease in cocaine cravings not only with pergolide use (a dopamine agonist that can desensitize the CNS area involved in

cocaine addiction), but also in the study control group, which showed that greater length of abstinence can impact on craving<sup>(18)</sup>.

## Conclusion

The characteristics of the crack users in the west of Minas Gerais state are similar to those found in other Brazilian studies: male, young, single and with low levels of schooling. The reduced length of abstinence associated with increased cravings suggests greater attention to care in the first weeks of treatment. Associated with the score found for crack cravings in the period between 10 and 30 days, it is recommended that the first month of treatment be permeated with strategies to facilitate user adherence to the service and professional in question, as cravings elevate the risk of relapsing and using crack again during this period.

Craving is an important variable when treating drug addiction and it is essential that health care professionals reinforce the crack user's ability to go through this phenomenon without relapsing. The addict needs to learn to identify and deal with cravings and with the signs and stimuli associated with it, to become able to resist the desire.

## References

1. Marques AC, Seibel SD. O craving. In: Seibel SD, Toscano A Jr. Dependência de drogas. São Paulo (SP): Atheneu; 2001. p. 239-48.
2. Nappo AS, Galduróz JCF, Noto AR. Uso de crack em São Paulo: fenômeno emergente? Rev ABP-APAL. 1994;16:75-83.
3. Nappo SA, Galduróz JC, Raymundo M, Carlini EA. Changes in cocaine use as viewed by key informants: a qualitative study carried out in 1994 and 1999 in São Paulo, Brazil. J Psychoactive Drugs. 2001;33(3):241-53.
4. Marlatt A, Gordon J. Prevenção de recaída – estratégias de manutenção no tratamento de comportamentos adictivos. Porto Alegre (RS): Artmed; 2009. 358 p.
5. Knapp P, Luz E Jr, Baldisserotto GV. Terapia cognitiva no tratamento da dependência química. In: Rangé B, editor. Psicoterapias cognitivo-comportamentais – um diálogo com a psiquiatria. Porto Alegre (RS): Artes Médicas; 2001. p. 332-50.
6. Chaves TV, Sanches MZ, Ribeiro LA, Nappo SA. Fissura por crack: comportamentos e estratégias de controle de usuários e ex-usuários. Rev Saúde Pública. 2011;45(6):1168-75.
7. Araujo RB, Oliveira MS, Pedroso RS, Miguéli AC, Castro MGT. Craving e dependência química: conceito, avaliação e tratamento. J Bras Psiquiatr. 2008;57(1):57-63.
8. Araujo RB, Pedroso RS, Castro MGT. Adaptação transcultural para o idioma português do Cocaine Craving Questionnaire – Brief. Rev Psiquiatr. 2010;37(5):195-8.
9. Araujo RB, Pansard M, Boeira BU, Rocha NS. As estratégias de coping para o manejo da fissura de dependentes de crack. Rev HCPA. 2010;30(1):36-42.
10. Oliveira LG, Nappo SA. Caracterização da cultura de crack na cidade de São Paulo: padrão de uso controlado. Rev Saúde Pública. 2008;42(4):664-71.
11. Guimarães CF, Santos DV, Freitas RC, Araujo RB. Perfil do usuário de crack e fatores relacionados à criminalidade em unidade de internação para desintoxicação no Hospital Psiquiátrico São Pedro de Porto Alegre (RS). Rev Psiquiatr RS. 2008;30(2):101-8.
12. Zeni TC, Araújo R. Relação entre o craving por tabaco e o craving por crack em pacientes internados para desintoxicação. J Bras Psiquiatr. 2011;60(1):28-33.
13. Ferreira OF Filho, Turchi MD, Laranjeira R, Castelo A. Perfil sociodemográfico e de padrões de uso entre dependentes de cocaína hospitalizados. Rev Saúde Pública. 2003;37(6):751-9.
14. Sanchez Z van der M, Nappo SA. Sequência de drogas consumidas por usuários de crack e fatores interferentes. Rev Saúde Pública. 2002;36(4):420-30.
15. Ferri CP, Laranjeira RR, Silveira DX, Dunn J, Formigoni MLOS. Aumento da procura de tratamento por usuários de crack em dois ambulatórios na cidade de São Paulo, nos anos de 1990 a 1993. Rev Assoc Med Bras. 1997;43(1):25-8.
16. Bastos FIM, Lopes CS, Dias PRTP, Oliveira SB, Luz TP. Perfil de usuários de drogas. I - Estudo de características de pacientes do Nepad/UERJ 1986/87. Rev ABP-APAL. 1988;10:45-52.

17. Balbinot AD, Alves GSL, Amaral AF Jr, Araujo RB. Associação entre fissura e perfil antropométrico em dependentes de crack- J Bras Psiquiatr. 2011;60(3):205-9.
18. Focchi GRA, Leite MC, Scivoletto S. Utilização do agonista dopaminérgico pergolida no tratamento da fissura por cocaína. Rev Bras Psiquiatr. 2001;23(4):188-94.