

## THE USE OF CRACK DURING PREGNANCY AND THEIR BIOPSYCHOSOCIAL AND SPIRITUAL REPERCUSSIONS

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The purpose of this study was to identify the biopsychosocial and spiritual effects of crack use during pregnancy. This is a descriptive study with qualitative approach, it is a case report of a 33 year-old patient, multiparous, postpartum and used crack until the sixth month of pregnancy. After data collection and analysis, disorders were classified and placed in three thematic categories, which are: biological effects, psychological repercussions, and social and spiritual repercussions. The results of this study reinforce the need for holistic strategies of intervention for this specific segment of the population.

Descriptors: Crack Cocaine; Street Drugs; Substance-Related Disorders; Pregnancy; Drug Users.

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## **O USO DO *CRACK* DURANTE A GESTAÇÃO E SUAS REPERCUSSÕES BIOPSISSOCIAIS E ESPIRITUAIS**

O objetivo deste estudo foi identificar as repercussões biopsicossociais e espirituais do uso do *crack* durante a gestação. Trata-se de um estudo descritivo com abordagem qualitativa onde foi feito um relato de caso de uma paciente de 33 anos, puérpera e múltipara que fez uso do *crack* até o sexto mês de gestação. Após coleta e análise dos dados, as desordens encontradas foram classificadas e inseridas em três categorias temáticas, que são: repercussões biológicas; repercussões psicológicas e repercussões sociais e espirituais. Os resultados deste estudo reforçam a necessidade de estratégias holísticas tanto de abordagem quanto de intervenção para esse segmento específico da população.

Descritores: Cocaína Crack; Drogas Ilícitas; Transtornos Relacionados ao Uso de Substâncias; Gravidez; Usuários de Drogas.

## **EL USO DEL *CRACK* DURANTE LA GESTACIÓN E SUS REPERCUSIONES BIOPSISSOCIALES Y ESPIRITUALES**

El objetivo de este estudio fue el de identificar las repercusiones biopsicosociales y espirituales del uso del *crack* durante la gestación. Se trata de un estudio con enfoque cualitativo, se realizó un relato de caso de una paciente de 33 años, que ha dado a luz recientemente, múltipara, que hizo uso de *crack* hasta el sexto mes de gestación. Después de la recolección y análisis de los datos, los desordenes encontrados fueron clasificados, e insertadas en tres categorías temáticas que son: repercusiones biológicas, repercusiones psicológicas y repercusiones sociales y espirituales. Los resultados de este estudio refuerzan las necesidades de estrategias holísticas, tanto para el abordaje, cuanto para la intervención para este segmento específico de la población.

Descriptorios: Cocaína Crack; Drogas Ilícitas; Trastornos Relacionados con Sustancias; Embarazo; Consumidores de Drogas.

### **Introduction**

The use of drugs remains a major public health problem, reflecting an alarming rate in our society, because in most cases the abuse and dependence rebound aggressively in one's life by changing their mental state, behavior and attitudes. This problem becomes even more aggravating in pregnant women because it is known that the abusive or harmful use of alcohol and other drugs can lead to irreversible impairment of the integrity of the mother-fetus<sup>(1)</sup>.

It is therefore important that tracking drug use during pregnancy is done when obtaining the history of the patient during a prenatal visit. But most often it is difficult to identify this problem, because many patients deny the use of the substance. The recognition of such a problem occurs largely in investigation of infections, such as hepatitis B and human immunodeficiency virus (HIV) which are substantially related to the drug<sup>(2)</sup>.

Studies show that the use of crack is associated with biopsychosocial factors, in addition to

physical problems, there are also psychological, social and legal changes. The use of this substance can result in serious losses of family ties, in the areas of relationships, studies, and work. It is also noted the emergence of risky behaviors, such as exchanging sex for drugs and even performing minor offenses to acquire crack<sup>(3)</sup>.

There is controversy about the practice of such socially disapproved behaviors, because you cannot explain it as having to do with a broken state or if it is clearly from the toxicity of the substance. However, there is unanimity on the serious and complex social exclusion that is caused by the consumption of crack<sup>(3)</sup>.

However, given the complexity of the theme 'pregnancy and drug use', it is noted that the available literature lacks epidemiological studies that establish a relationship of cause and consequence. Therefore, crack use by pregnant women becomes worrisome because it is amazing how quickly crack ruins the mental life, organic and social aspects of the person<sup>(1,4)</sup>.

In this context, this study aims to identify the biopsychosocial and spiritual effects of crack use during pregnancy.

## Materials and methods

This is a case study of a 33 year-old patient, multiparous, postpartum and used crack until the sixth month of pregnancy. The case study seeks to address the actions of an individual as a human agent and as a member of society, thus allowing the researcher to uncover the subjective aspects of culture and social organization<sup>(5)</sup> that which the individual belongs. Thus, it was possible to identify and justify the biopsychosocial effects of crack use during pregnancy. It is noteworthy that we already had previous contact with the patient, because she was a client of treatment services for drug addicts to which the authors had access.

Data collection was held at the residence of the patient, in the municipality of Aracruz, during August 2010. Prior to the interview, an explanation about the study was given and we requested authorization to interview using an MP3 player, on the grounds of ensuring the reliability of what was said. Upon signing the Informed Consent, the interview was conducted and subsequently

transcribed. We used content analysis<sup>(6)</sup> for the processing of data collected through interviews, which lasted six hours. In order to ensure the confidentiality of participant's identity, she has been identified with the code Pregnant G1 for this research.

This study was approved by the Research Ethics Committee of the Superior Science School of the Mercy Saint House of Victoria - EMESCAM under No. 115/2010.

## Results and discussion

### *Biological repercussions*

The crack or "rock" (a popular name) is a stimulant drug that acts on the cardiovascular system producing effects similar to sympathomimetic. This illicit drug works by blocking the receptors of dopamine, hence, the sensory and motor activities are super stimulated causing a significant increase in heart rate, blood pressure and systemic vascular resistance<sup>(7)</sup>.

*[...] when I used, I felt heart palpitations and also had a headache [...].*

The results of this study corroborate some of the complications of crack use exposed by other research. It notes that a headache is present during the absence of drugs, a known characteristic of substance withdrawal, the development of this specific syndrome resulting from cessation or reduction of heavy and prolonged drug use<sup>(8)</sup>.

*[...] there were days that I would wake up so tired, feeling bad [...] when it was not that I had a headache all day, it was only better when I used the rock or drank [...].*

There are possible respiratory complications of crack use because the lungs are the first organ exposed to the products of their combustion. Among the respiratory symptoms reported in the literature, it highlights cough, chest pain and dyspnea<sup>(9)</sup>.

*[...] oh my god, when I smoked I coughed a lot, I was only pulling a little when the cough started but then it didn't stop [...] at that time I had almost nothing, but after I used, I felt shortness of breath and chest pain [...].*

The process that induces cough is not clear from the available literature. It is believed that inhaled components in the consumption of crack have irritating power on the subepithelial receptors, thus resulting in episodes of coughing

during constant drug use<sup>(10)</sup>. Chest pain can occur one hour after crack use and deteriorates with deep inspiration. This symptom is usually a local sensory feedback as a consequence of irritation of the airways caused by combustion products. However, it is emphasized that other causes of chest pain should be investigated in these patients<sup>(9)</sup>.

In an informative guideline booklet, released by a research center for psychoactive substances in Brazil, one major concern that is pointed out with regards to the development of pregnancy is the diet of pregnant women because crack can be an anorectic drug; there is a major possibility of significant malnutrition. This same reference also highlights the aspect of physical deterioration of drug users, as with the passage of time, they may lose the basic notions of hygiene<sup>(11)</sup>.

*[...] I didn't care about food, I woke up and ate a little something, after that I used the rock and the rest of the day went without eating [...] I lost too much weight when I used the rock, but I did not care much, I did not feel hungry, so I ate little.*

*[...] I took a shower every 5 days and brushed my teeth from time to time, about every 2 days, I didn't care about anything, I only thought about crack [...].*

In addition to the physical changes described above, it is worth noting that during the consumption of high doses of the drug, there may be the appearance of various physical and neurological symptoms. Standing out among them are tremors, hyperactivity, hyperreflexia and even seizures<sup>(12)</sup>.

*[...] after a while of using the rock, my hands began to tremble out of nowhere. They shook when I used and when I wanted to use as well [...] there was only trembling [...].*

It is essential to stress the importance of proper detection of this manifest framework, whether by intoxication, consumption or withdrawal of the drug. This will allow the professional to choose the appropriate therapy in view of the occurrence of any of the symptoms mentioned above, since they can manifest themselves in different situations<sup>(13-14)</sup>.

#### *Psychological repercussions*

The use and abuse of crack justifies the various changes that occur in the living conditions of the users of this type of substance, since

using this drug can lead to a situation of total dependence<sup>(15)</sup>.

*[...] before I did not care about the doctor, not anything that I felt, for me it was the crack that had to heal [...].*

Such perceptions that are referred to as pleasurable strengthen the predilection to this substance, as it is realized that the sensations produced by the drug are somehow responsible for the substance's enhancement. This is because of the emergence of a feeling of exaltation and the disappearance of anxiety experienced during consumption and, associated with these, emerges an exaggerated sense of confidence and self-esteem<sup>(16)</sup>.

*[...] I used to runaway [...] I was thinking of a lot of things and there is the reason I chased the rock [...] if the staff [health professionals] had not gone to my house, I would not have had prenatal care, before I only thought about crack [...].*

The consumption of high doses of the drug can be deliberate or even accidental. As a result of such an event, one can manifest acute psychosis or manic behavior, including paranoia, panic and agitation, as well as tactile, visual and auditory hallucinations. Thus, the user adopts a series of atypical behaviors in order to alleviate the fear and anxiety experienced<sup>(12,17)</sup>.

*[...] sometimes I thought I was going crazy, you know, I thought someone was chasing me. When I was using I felt it, I was quietly in my room [...] every little noise scared me [...].*

According to the results, one can expose that withdrawal of the drug can also have a negative effect on sleep quality because, due to the development of certain symptoms, the incitement of feelings such as anger and sadness, can consequently, change the sleep of the patient<sup>(18)</sup>.

*[...] I bought in the morning and then was using, I used until I finished the rock. When I was finished, I went out to see if I could buy more, if I couldn't I got angry and came home crying. [...] then I cried and I cried [...] I started to curse the world [...] I could not even sleep when I was using or when I ran out [...].*

*[...] sometimes I was very anxious, wanting to use more, I could not sleep well then [...] I was angry when I was without the drug, now attacking others that did nothing. Sometimes I would ask for money from others and they did not give it to me [...] I was very nervous then and did not even want to think about sleep [...].*

It is worth noting that during the consumption of high doses, crack users may have impaired critical judgment and thus changes their disposition negatively<sup>(16)</sup>. They may also express suicidal thoughts during the development of crack withdrawal symptoms<sup>(8)</sup>.

*[...] when I smoked, I suspected everyone, one time I arranged an ugly fight with my sister for no reason, simply because I thought she was seeing my husband [...] there was a time when I was so crazy that I thought about killing myself when the rock was gone [...] because I wanted more rock and had none [...].*

A person who experiences symptoms of abstinence experiences an intense desire to consume crack. However, in the absence of the substance, many users turn to other drugs in order to minimize the existing discomfort and/or take certain actions related to the addiction of crack<sup>(16,19)</sup>.

*[...] there were times that I drank to have the courage to go out and arrange money to smoke more [...] if I had to face someone, at times I would not, I would go inside the house and speak to no one [...] when I saw that there was no way to arrange more, I drank a lot [...].*

It is important to note that alcohol can be a trigger, not a causal factor in the use of crack, because their consumption only enhances latent behaviors, thus causing its manifestation. Alcohols acts on the consciousness to inhibit censorship allowing the practice of actions that in normal state would be suppressed<sup>(20)</sup>.

*[...] there were days that it hit me a great desire to use the rock after I drank, I was only drinking when I was in the mood to smoke [...].*

*[...] there were time when I wanted to stay sober, but it was only drinking that made me want to use crack, if I don't consume alcohol, I don't feel like using the rock [...].*

#### *Social and spiritual repercussions*

The phenomenon of drug use is a serious social problem with direct impacts on the health of the individual, family and society. In this study, it was observed that the consumption of crack led the interviewee to situations of social exclusion<sup>(21)</sup>.

*[...] I stayed with people that loved to use the rock, I did not use, I was too nervous, it was terrible [...].*

Note that family members and friends exerted a strong influence for drug use<sup>(22)</sup>, for Pregnant G1, she was unemployed and consumed crack through her companion who was a user and also sold this substance. After a temporary separation, she went on to acquire crack with the money that was provided by their families.

*[...] it was him [companion] that taught me to use [...] I wanted that, it was more for curiosity [...] I did not work and my*

*husband gave it to me, after we broke up, I had to ask my family for money to buy [...] then I drank to get the courage, right? [...] then they didn't give me and I was very angry [...].*

Besides the need to constantly seek the drug, addiction results in marked changes in the individual's relationship with his family, shaking their social and even professional relationships<sup>(23)</sup>.

*[...] I shut myself off because of the desire to smoke crack, then after my family moved away from me [...] my mom would not take me to use the drug, but I could not stop smoking [...].*

Article 19 of the Statute of Children and Adolescents (SCA) states that all children and adolescents are entitled to a healthy family and community life, which assumes that his/her creation and upbringing within the family ensures an environment free of the presence of chemical dependents<sup>(24)</sup>. In this case, because of the consumption of crack, the other children of the patient were sent to a temporary shelter by court order.

*[...] I want my kids back, because of the crack I miss the things I loved most in this world [...].*

The drug ends up acting as an artificial paradise for the drug addict, in which it has the alleged function to eliminate the tensions in search of an inner balance at any cost. Consequently, the personal and social losses will be part of the crack users every day life because of the abdication of their habits and values<sup>(25)</sup>.

*[...] sometimes I want to leave, go to church, but if I saw the rock, I was dying to use it, then I forgot everything that I was going to [...].*

It is important to highlight the merits of religiosity in the theme, as it seeks to help the person's well-being through the suggestion of physical and mental care, associated with not using drugs<sup>(26)</sup>.

#### **Final considerations**

Chemical dependency is a rather complex issue that affects the biological, psychological, social and spiritual level of the user.

Although this study presents limitations, it is noteworthy that the findings of this study and the repercussions described in the literature are similar in all populations who consume this type of drug. It is noticed that the biopsychosocial and spiritual implications of crack use are strongly linked to each other, and result from the effects



caused by drug use, intoxication and substance withdrawal syndrome.

We conclude that the use of crack can result in various consequences that both directly and indirectly affect the health of the mother and child, by means of malnutrition and lack of self-care for pregnant women, the fetus is subject to numerous consequences. However, it is significant that such complications can also be associated with the use of other drugs, because, as per the findings of this study and previous research, crack users are characterized by their concurrent use of alcohol and other drugs.

It is observed that the use of crack causes major social exclusion, leads to weakening of moral values and lack of self-health care. After the reports were analyzed, it was observed that the use of alcohol, as well as alleviating withdrawal symptoms, encouraged the patient to cope with various situations by using crack, favoring, thus, the regular consumption of the drug.

In view of this, we believe in promoting a holistic approach when addressing the particularities of these patients, aiming to promote health and prevention, and diagnosis and treatment of possible complications. From all the foregoing, it is understood that some measures should be taken in order to care for the health of the mother and child.

Therefore we suggest: the development of more studies to uncover and show the biopsychosocial-spiritual repercussions of crack use during pregnancy, and the formulation of implementation strategies in prenatal care that focus on abstinence of alcohol and other drugs in chemically dependent pregnant women.

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