

Lisiane Cysne de Medeiros
Vasconcelos e Rego^{1,2}

Alcides Ferreira Rego Neto^{1,2}

Hesley Lucena Landim Miranda²

Matias Carvalho Aguiar Melo²

Eliezer Luna Alencar Feitosa²

João Arnaud Diniz Neto²

Alicia Blazquez Montenegro³

Enric Álvarez Martínez^{1,4}

¹ Universidade Autònoma de Barcelona (UAB)
Campus de Bellaterra, 08193 Cerdanyola del
Vallès, Spain.

² Hospital de Saúde Mental Professor Frota Pinto,
Rua Vicente Nobre de Macedo, S/N 60841-110
Messejana Fortaleza, Ceará, Brazil

³ Universitat de Barcelona (UB), Passeig de la Vall
d'Hebron, 171, Palau de las Heures, Barcelona-
Spain

⁴ Hospital de la Santa Creu i Sant Pau, Carrer Sant
Quintí, 89, 08026 Barcelona, Spain

Correspondência: Lisiane Cysne de Medeiros
Vasconcelos e Rego

Hospital de Saúde Mental Professor Frota Pinto,
Rua Vicente Nobre de Macedo, S/N 60841-110
Messejana Fortaleza-Ce.

E-mail: lisiemv@gmail.com

Fone: (+5585) 31014309 (+5585) 99191932

Recebido : 08/07/2013

Aprovado : 27/09/2013

Relato de Pesquisa

Translation and transcultural adaptation into Portuguese language of the Cocaine Selective Severity Assessment

Tradução e adaptação transcultural para a língua Portuguesa da *Cocaine Selective Severity Assessment*

This work was conducted in the Unidade de Dependência química in the Hospital de Saúde Mental Professor Frota Pinto. Sources of funding: no sources.

Acknowledgements:

The authors would like to acknowledge Dr. Kyle Kampman for the permission to present the CSSA – “*Versão Brasileira*” in this article. Dra. Claudia Lopes McClure and Dr. Erick Messias for the translation and back-translation of the instrument.

Abstract

The objective of this study was to translate, to adapt culturally and to verify the semantic equivalence from english to portuguese of the Cocaine Selective Severity Assessment (CSSA), which evaluates the withdrawal for cocaine. The CSSA was translated from English to Portuguese, administered to 10 persons, and then submitted to brainstorming in a group of 3 psychiatrics for individual and verbal reproduction, item by item. *Backtranslation* was executed based on first translation and from brainstorming to the origin language. Then, it was translated again into Portuguese. The entire process was analyzed by a committee of psychiatrists with expertise in addiction, which emitted opinions and the pertinent comments. The scale in its general scope was well understood by both patients and professionals. Few changes were done from the first translation to final version in items 3, 4, 5, 10, 11 e 12. To the others items, the original translation was kept. Statements were added to the end of all items. Considering the opinions of the experts and a final pilot study, was constructed the final Brazilian version of the CSSA. Results indicated a satisfactory semantic equivalence between the two versions and so the CSSA may be helpful instrument in treating withdrawal of cocaine / crack.

Keywords: Validation studies; CSSA; withdrawal; cocaine; crack.

Resumo

O objetivo deste estudo foi traduzir, adaptar culturalmente e verificar a equivalência semântica do inglês para o português da escala *Cocaine Selective Severity Assessment* (CSSA), a qual avalia a abstinência de co-

caína. A CSSA foi traduzida do inglês para o português, aplicada em 10 pacientes e submetida ao *brainstorming* em um grupo de 3 psiquiatras para reprodução individual e verbal, item a item. Foi realizada a retrotradução (*backtranslation*) da primeira tradução e do *brainstorming*, sendo realizada nova tradução para o português. Todo o processo foi analisado por um comitê de psiquiatras com experiência em toxicomania, os quais emitiram pareceres com as observações pertinentes. A escala, em seu âmbito geral, foi bem compreendida pelos pacientes e profissionais. Poucas mudanças foram feitas da primeira tradução até a versão final nos itens 3, 4, 5, 10, 11 e 12. Para os demais itens, a tradução original foi mantida. Sentenças foram adicionadas ao final de todos os itens. Considerando os pareceres dos especialistas e um último estudo piloto, construiu-se a versão final brasileira da CSSA. Os resultados indicaram uma equivalência semântica satisfatória entre as versões, podendo a CSSA ser um instrumento útil no tratamento de abstinência de cocaína/*crack*.

Palavras-chave: Estudos de validação; CSSA; abstinência; cocaína; *crack*.

Introduction

The cocaine withdrawal is a important marker of severity of cocaine dependence^{1,2}, and some studies suggest its severity as a predictor of success or failure of treatment^{3,4}. There is a heterogeneous group of mental and physical symptoms that consists in a clinical manifestations of cocaine withdrawal^{5,6,7}.

One of the first studies that attempted to describe the biological and psychological response related with cocaine withdrawal was performed in a group of 30 patients and three phases were identified, according to the craving intensity in each one. The first phase is very rapidly and the patient exhibits anxious and depressive symptoms predominantly. The craving, during this phase, can be almost suppressed. The second phase is the withdrawal properly. During this phase, that lasts one to ten weeks, the patient presents fluctuating symptoms. The mood may be euthymic and craving progressively appears, even without external stimuli. Finally, the extinction phase, that can lasts indefinitely⁵.

After this study, others studies on cocaine withdrawal have highlighted the craving, the eating disorders, the depressions, the sleep disturbances and the anxiety as principal symptoms^{8,9}.

The Cocaine Selective Severity Assessment (CSSA) is the only instrument for detecting and evaluating the initial signs and symptoms of cocaine withdrawal¹⁰. Consists of 18 items, with each item distributed in a range of 0-7, according to a Likert scale scores, where 0 = absence of symptom and 7 = symptoms with maximum severity. The scale scores are obtained by summing the scores for each item, with a maximum score of 112. The CSSA English version showed concurrent validity with recent cocaine use, good reliability between interviewers and good internal consistency (Cronbach's alpha = 0.80)¹¹. Moreover, the CSSA has predictive validity for early drop treatment for cocaine dependence. Patients who have high scores on the CSSA discontinue treatment more often or have more difficulty in reducing cocaine use during treatment than those with low scores^{3,4}. Likewise, the CSSA proved to be a useful tool to evaluate the efficacy of various drugs currently used to treat cocaine dependency and abstinence^{12,13,14}.

Thus, an instrument that predicts the treatment dropout and provides the necessary data for the greater engagement of staff in the care of this patient, avoiding an early discharge and a new relapse and hospitalization, is very important both to public health and to the management of resources. Therefore,

it would be useful to examine the functioning of an instrument like the CSSA in Brazilian social reality. Translation, cultural adaptation and verification of semantic equivalence are the first step in the validation process of this scale.

Method

After authorization of the author of the English version of the scale CSSA, the process of translation to Portuguese, cultural adaptation and verification of semantic equivalence was initiated. The process consisted of seven steps and was guided by previous studies^{15,16}. Twenty patients participated in this study: ten in first application and ten in final version.

Step 1: The CSSA scale was translated from English into Portuguese by a Brazilian naturalized American, PhD in sociology, U.S. resident, proficient in the English language and knowledgeable of the translation's objectives.

Step 2: The translated instrument was applied to subjects diagnosed as addicted to cocaine snorted / smoked in order to consider whether the questions are easy to understand and observe any doubts.

Sample size: 10 patients

Inclusion criteria: Patients with diagnosis of cocaine dependence according to DSM-IV-TR¹⁷, abstinent from cocaine for less than 15 days, hospitalized for detoxification in a male unit, specialized in drugs dependency.

Exclusion criteria: Illiteracy or any degree of mental retardation.

Step 3: Brainstorming - were reunited a group of psychiatrists with experience in treating addictions. Each question that compose the instrument was reproduced verbally by them and finally, was investigated their comprehension.

Sample size: 3 psychiatrists

Inclusion criteria: psychiatrists with experience in treating addictions.

Step 4: Backtranslation - after gathering the observations made by the brainstorming committee and by the patients whom was applied the first translation, changes took place in the first version in order to resolve the indicated difficulties of understanding. The new version was submitted to reverse translation, which is the translation of the version (in Portuguese) for the source language (English), that was conducted by a psychiatrist born in Brazil, naturalized American, U.S. resident, fluent in English and that did not know the purpose of the scale.

Step 5: Second translation of the instrument - from the backtranslation was performed a new translation into Portuguese by a Brazilian psychiatrist, fluent in English and who knew the purpose of the scale.

Step 6: A committee of 3 judges / psychiatrists was reunited, all with theoretical and practical training in addictions that compared the versions of the instruments, making sure that the items of the questionnaires were referring to the topic of "abstinence" and opined about which items of both versions translated into

Portuguese were better suited to the purpose of the instrument. The results obtained by the committee members were consolidated and produced the final version of the scale in Portuguese.

Step 7: Pilot study - the final version of the scale in Portuguese was applied to a sample of patients diagnosed as addicted to cocaine snorted / smoked. The goal of this application was to determine the point of view of these patients, if the instrument is suitable and whether it is easy to understand.

Sample size: 10 patients

Inclusion criteria: Patients with diagnosis of cocaine dependence according to DSM-IV-TR¹⁷, abstinent from cocaine for less than 15 days, hospitalized for detoxification in a male unit, specialized in drugs dependency.

Exclusion criteria: Illiteracy or any degree of mental retardation.

Ethical Aspects:

The authors of the original scale in English have granted their consent to the process of translation, cultural adaptation and validation of the CSSA to Portuguese via email. Only after the research project has been approved by the ethics committee of the Department of Health of the State of Ceará (C.A.A.E. number 04293012.9.0000.5051) the cultural adaptation of CSSA was initiated, which included the application of the instrument to patients. Each patient was informed of the aims of the study and signed a consent form accepting part of the research, before the application of the instrument. There is no conflict of interest by researchers. The validation process did not result in any change in treatment or use of experimental therapies. This study met the requirements of Resolution 196/96 and its complementary. The results will be public whether confirm or not the study hypothesis.

Results

The original and the final version translation of the CSSA are in Figure 1 and 2.

Figure 1. COCAINE SELECTIVE SEVERITY ASSESSMENT (Original)

CSSA	
<p>1. HYPERPHAGIA: 0= normal appetite 3-4 = eats a lot more than usual 7= eats more than twice usual amount of food</p>	
<p>2. HYPOPHAGIA: 0= normal appetite 3-4= eats less than normal amount 7= no appetite at all</p>	
<p>3. CARBOHYDRATE CRAVING: 0= no craving 3-4=strong craving for sweets half the time 7= strong craving for sweets all the time</p>	

<p>4. COCAINE CRAVING: (Please have subject rate intensity at the end of page) 0-7</p>	
<p>5. CRAVING FREQUENCY: (Please have subject rate intensity at the end of page) 0-7</p>	
<p>6. BRADYCARDIA Apical Pulse 0 = >64 1=64-63 2=62-61 3=60-59 4=58-57 5=56-55 6=54-53 7= <53</p>	
<p>7. SLEEP I: 0= normal amount of sleep 3-4= half of normal amount 7= no sleep at all</p>	
<p>8. SLEEP II: 0= normal amount of sleep 3-4= could sleep or do sleep half the day 7= sleep or could sleep all the time</p>	
<p>9. ANXIETY: 0=usually does not feel anxious 3-4= feels anxious half the time 7= feels anxious all the time</p>	
<p>10 ENERGY LEVEL: 0=feels alert and has usual amount of energy 3-4= feels tired half the time 7=feels tired all the time</p>	
<p>11. ACTIVITY LEVEL: 0= no change in usual activities 3-4= participates in half of usual activities 7= no participation in usual activities</p>	
<p>12. TENSION: 0= rarely feel tense 3-4= feels tense half the time 7=feels tense most of the time</p>	
<p>13. ATTENTION: 0=able to concentrate on reading, conversation, tasks, and make plans without difficulty 3-4= has difficulty with the above half the time 7= has difficulty with the above all the time</p>	
<p>14. PARANOID IDEATION 0= no evidence of paranoid thoughts 3-4= unable to trust anyone 5=feels people are out to get him/her 7=feels a specific person/group is plotting against him/her</p>	
<p>15. ANHEDONIA 0= ability to enjoy themselves remains unchanged 3-4= able to enjoy themselves half the time 7=unable to enjoy themselves at all</p>	
<p>16. DEPRESSION 0= no feelings related to sadness or depression 3-4= feels sad or depressed half the time 7= feels depressed all of the time</p>	

<p>17. SUICIDALITY 0= does not think about being dead 3-4=feels like life is not worth living 7= feels like actually ending life</p>	
<p>18. IRRITABILITY 0= feels that most things are not irritating 3-4= feels that many things are irritating 7= feels that mostly everything is irritating and upsetting</p>	
Total: _____	
<p>Please rate the highest intensity of the desire for cocaine you have felt in the last 24 hours::</p> <p>/----0----/----1----/----2----/----3----/----4----/----5----/----6----/----7---/ No desire at all Unable to resist</p> <p>Please identify on the line below, how often you have felt the urge to use cocaine in the last 24 hours:</p> <p>/----0----/----1----/----2----/----3----/----4----/----5----/----6----/----7---/ Never All the time</p>	

Figure 2. ESCALA DE AVALIAÇÃO DA GRAVIDADE SELETIVA PARA COCAÍNA

CSSA	
<p>1.HIPERFAGIA: Como tem sido o seu apetite durante as últimas 24 horas? 0= apetite normal 3-4 =come mais do que o usual 7=come duas vezes mais do que o usual</p>	
<p>2.HIPOFAGIA 0= apetite normal 3-4 =come menos do que o usual 7= sem apetite</p>	
<p>3.FISSURA POR CARBOIDRATO: Você tem ou teve fissura por biscoitos, chocolates ou doces durante as últimas 24 horas?. 0= não tem fissura 3-4=grande fissura por doces 7= grande fissura por doces o tempo todo</p>	
4. FISSURA POR COCAÍNA: (marque a intensidade na escala no final da página) 0-7	
5.FREQUÊNCIA DA FISSURA: (marque a intensidade na escala no final da página) 0-7	
<p>6.BRADICARDIA. Pulso radial 0 = >64 1=64-63 2=62-61 3=60-59 4=58-57 5=56-55 6=54-53 7= <53</p>	
<p>7.SONO I(Insônia/hiposonia): Como tem sido seu sono durante as últimas 24 horas? 0= sono normal 3-4= metade de quantidade do sono normal 7= sem sono</p>	
<p>8.SONO II(hipersonia): 0= sono normal 3-4= consegue dormir ou dorme a metade do dia 7= consegue dormir ou dorme o dia todo</p>	

<p>9.ANSIEDADE: Você se sentiu ansioso durante as últimas 24 horas? 0=normalmente não se sente ansioso 3-4= sente ansioso a metade do dia 7= sente ansioso o tempo todo</p>	
<p>10 NÍVEL DE ENERGIA: Como tem sido seu nível de energia (vigor, disposição) durante as últimas 24h? 0= sente alerta e tem nível de energia normal 3-4= sente cansado durante a metade do dia 7= sente cansado o tempo todo</p>	
<p>11. GRAU DE ATIVIDADE: Como tem sido seu nível de atividade durante as últimas 24 horas? 0= nada mudou nas atividades usuais 3-4= participa de metade das atividades usuais 7= não participa de nenhuma das atividades usuais</p>	
<p>12.TENSÃO: Você se sentiu tenso (pouco relaxado), durante as últimas 24 horas? 0= raramente se sente tenso 3-4= sente-se tenso durante a metade do dia 7=sente-se tenso a maior parte do tempo</p>	
<p>13. ATENÇÃO: Como tem sido sua capacidade de manter-se atento durante as últimas 24 horas 0=concentra-se na leitura, na conversa, nas atividades e faz planos sem dificuldade. 3-4= tem dificuldade nas atividades acima a metade do tempo 7= tem dificuldade nas atividades acima todo o tempo</p>	
<p>14. IDEIAÇÃO PARANÓICA: Foi difícil confiar nas pessoas durante as últimas 24 horas? 0= não tem evidência de pensamentos paranóides 3-4= não confia em ninguém 5=sente que as pessoas o perseguem 7=sente que pessoas ou grupos específicos estão conspirando contra você</p>	
<p>15.ANEDONIA: Você foi capaz de se divertir nas últimas 24 horas? 0= a habilidade de se divertir não mudou 3-4= consegue se divertir na metade do dia 7=não consegue se divertir</p>	
<p>16.DEPRESSÃO: Você se sentiu triste ou deprimido durante as últimas 24 horas? 0= não tem sentimento de tristeza ou depressão 3-4=sente-se triste e deprimido a metade do dia 7= sente-se deprimido o tempo todo</p>	
<p>17.PENSAMENTOS SUICIDAS.: Você teve algum pensamento sobre morte nas últimas 24 horas? 0= não pensa a respeito da morte 3-4=sente que a vida não vale a pena ser vivida 7= sente vontade de acabar com a vida</p>	
<p>18.IRRITABILIDADE: Você se sentiu irritado durante as últimas 24 horas? 0= não se sente irritado com a maioria das coisas 3-4= sente que muitas coisas são irritantes 7= sente que a maioria das coisas são irritantes ou perturbadoras</p>	
<p>Total: _____</p>	

<p>Por favor, classifique a maior intensidade da fissura por cocaína que você se sentiu nas últimas 24 horas:</p> <p>/----0----/----1----/----2----/----3----/----4----/----5----/----6----/----7---/ nenhuma fissura sem poder resistir a fissura</p> <p>Por favor, identifique na linha abaixo, quantas vezes você sentiu fissura por cocaína nas últimas 24 horas:</p> <p>/----0----/----1----/----2----/----3----/----4----/----5----/----6----/----7---/ nenhuma vez o tempo todo</p>	
--	--

In step 2, patients presented doubts about a few questions and the professionals reported difficulty to explain a few items to patients. Nevertheless the scale in its general scope was well understood by both patients and professionals, during the brainstorm, it was decided to make statements for each item, due those difficulties encountered by professionals to explain some terms to patients. The average time for administration of the scale was 5 minutes, which was regarded as positive. After all steps, the following changes were done from the first translation to final version: the item 3, which was translated initially as “*COMPULSÃO POR CARBOIDRATO*” was replaced by “*FISSURA POR CARBOIDRATO: Você tem ou teve fissura por biscoitos, chocolates ou doces durante as últimas 24 horas?*”. The term “*compulsão*”, translated from the original “*craving*” in the first translation, was related to acts ego dystonic and replaced in a first moment by “*desejo*”. In turn, the term “*desejo*” was finally replaced by “*fissura*” because “*desejo*” was considered too broad and did not characterize the intensity that the item wanted to address. The same was applied to items 4 and 5, which were translated in the final version to “*FISSURA POR COCAÍNA*” and “*FREQUÊNCIA DA FISSURA*”, respectively. The item 10, translated as “*GRAU DE ENERGIA*” in the first translated version, was replaced for “*NÍVEL DE ENERGIA*”, which is most frequently used in everyday language and easier to understand for patients. The same, due to the similar reason, was done to item 11, translated as “*NÍVEL DE ATIVIDADE*” in the final version. Furthermore, as items 10 and 12 were the most difficult to understand for patients and most difficult for the professionals to explain to patients, synonymous were added to the statement. So, to item 10, “*NÍVEL DE ENERGIA*” the final statement was: “*Como tem sido seu nível de energia (vigor, disposição) durante as últimas 24h?*” to avoid localism; and to item 12 “*TENSÃO*” the final statement was: “*Você se sentiu tenso (pouco relaxado), durante as últimas 24 horas?*”. To the others items: 1,2,6,7,8,9,13,14,15,16,17,and 18, the original translation was kept and it was make statements beside each question. After considering the comments of the judges, it was decided keeping the original name of the scale - adding its initials - CSSA - and the expression “*Versão Brasileira*” at the end, as a facilitator in search of international databases.

Conclusions

The careful methodology in the process of semantic adaptation of an instrument is of primary importance^{18,19,20}. It is very important a careful and reliable assessment of cocaine withdrawal for the cocaine dependence treatment. The cocaine withdrawal is a marker of severity^{1,2} and the treatment predictor abandon^{3,4}, so it is necessary that the instrument determine the different variables. As the clinical manifestations of cocaine abstinence include a heterogeneous group of symptoms, both physical and mental^{5,6,7}, the CSSA can be especially useful because it has a good multidimensional evaluation of this event, has good

psychometric properties¹⁰, and the presence of predictive validity^{3,4}. The CSSA is currently the only scale that measures cocaine abstinence.

Since the prevalence of cocaine/crack addicts has increased in Brazil, instruments useful in treating these patients are necessary. The CSSA- “*Versão Brasileira*” achieved an excellent level of semantic equivalence with the original scale in English, without presenting major difficulties in understanding the utterance. Regionalisms were not used.

The translation and cultural adaptation, described in this paper, is the first phase of the whole process of validating clinical scales²⁰. The second phase was initiated by the authors, seeking a psychometric validation of the final Brazilian version of the CSSA. The statistical analysis of the variation of the judges’ decisions wasn’t done because just three judges were used, which is a limitation of the study. However, considering the eighteen items, fourteen were decided unanimously and only four by a simple majority. Another important limitation was the absence of intrarater reliability in this phase of the study. The intrarater reliability was performed further in the phase of validation of the scale.

REFERENCES

1. Schuckit MA, Daepfen JB, Danko GP, Tripp ML, Smith TL, Li TK, *et al.* Clinical implications for four drugs of the DSM-IV distinction between substance dependence with and without a physiological component. *Am J Psychiatry*. 1999;156:41-49.
2. Sofuoglu M, Dudish-Poulsen S, Brown SB, Hatsukami DK. Association of cocaine withdrawal symptoms with more severe dependence and enhanced subjective response to cocaine. *Drug Alcohol Depend*. 2003;69:273-282.
3. Mulvaney FD, Alterman AI, Boardman CR, Kampman K. Cocaine abstinence symptomatology and treatment attrition. *J Subst Abuse Treat*. 1999;16:129-135.
4. Kampman KM, Alterman AI, Volpicelli JR, Maany I, Muller ES, Luce DL, *et al.* Cocaine withdrawal symptoms and initial urine toxicology results predict treatment attrition in outpatient cocaine dependence treatment. *Psychol Addict Behav*. 2001a; 15: 52-9.
5. Gawin FH, Kleber HD. Abstinence symptomatology and psychiatric diagnosis in cocaine abusers. *Arch Gen Psychiatry*. 1986;43:107-13.
6. Brower KJ, Maddahian E, Blow FC, Beresford TP. A comparison of self-reported symptoms and DSM-III criteria for cocaine withdrawal. *Am J Drug Alcohol Abuse*. 1998; 14:347-56.
7. Cottler LB, Shillington AM, Compton WM, Mager D, Spitznagel EL. Subjective reports of withdrawal among cocaine users: recommendations for DSM-IV. *Drug and Alcohol Depend*. 1993; 33:97-104.
8. Dackis CA, Gold MS, Sweeney DR. The physiology of cocaine craving and crashing. *Arch Gen Psychiatry*. 1987; 44: 298-99.

9. Gawin FH, Ellinwood EH. Cocaine and other stimulants: actions, abuse and treatment. *N Engl J Med.* 1988; 318: 1173-82.
10. Kampman KM, Volpicelli JR, McGinnis DE, Alterman AI, Weinrieb R, D'Angelo L, *et al.* Reliability and validity of the Cocaine Selective Severity Assessment. *Addict Behav.* 1998; 23: 449-61.
11. Cronbach LJ. Coefficient alpha and the internal structure of tests. *Psychometrika.* 1951;16:297-334.
12. Kampman KM, Volpicelli JR, Alterman AI, Cornish J, Gariti P, O'Brien CP. Amantadine in the treatment of cocaine dependent patients with severe cocaine withdrawal symptoms. *Am J Psychiatry.* 2000; 157: 2052-4.
13. Kampman KM, Volpicelli JR, Mulvaney F, Alterman AI, Cornish J, Gariti P, *et al.* Effectiveness of propranolol for cocaine dependence may depend on cocaine withdrawal symptom severity. *Drug and Alcohol Dependence.* 2001b; 63: 69-78.
14. Ahmadi J, Kampman K, Dackis C. Outcome predictors in cocaine dependence treatment trials. *Am J Addict.* 2006;15:434-439.
15. Duarte PS, Miyazaki MCOS, Ciconelli RM, Sesso R. Tradução e adaptação cultural do instrumento de avaliação de qualidade de vida para pacientes renais crônicos (KDQOL-SF™). *Revista da Associação Médica Brasileira.* 2003; 49, 375-381.
16. Guillemin F, Bombardier C, Beaton D. Cross-cultural adaptation of health-related quality of life measures: literature review and proposed guidelines. *Journal Clinical Epidemiology.* 1993; 46, 14-32.
17. American Psychiatric Association. *Manual de Diagnóstico e Estatística das Perturbações Mentais.* 4th Ed. texto revisto: Climepsi Editores. 2000.
18. Pedroso RS, Oliveira MS, Moraes JFD. Tradução, adaptação e validação da versão brasileira da escala Marijuana expectancy Questionnaire. *Cad Saude Publica.* 2007;23(1):63-73.
19. Pasquali, L. Princípios de elaboração de escalas psicológicas. *Revista de Psiquiatria Clínica.* 1998; 25, 206-213.
20. Araujo RB, Oliveira MS, Mansur MA. A validação brasileira do Questionnaire of Smoking Urges. *Cad Saude Publica.* 2006; 22(10):109-18.