

UNIVERSIDADE FEDERAL DO PARANÁ

MICHELLE ANTONETTE BROWN

CONDIÇÃO DE SAÚDE BUCAL EM USUÁRIOS DE SUBSTÂNCIAS
PSICOATIVAS E SEU IMPACTO NA QUALIDADE DE VIDA

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MICHELLE ANTONETTE BROWN

CONDIÇÃO DE SAÚDE BUCAL EM USUÁRIOS DE SUBSTÂNCIAS
PSICOATIVAS E SEU IMPACTO NA QUALIDADE DE VIDA.

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Orientadora: Profa. Dra. Maria Ângela Naval
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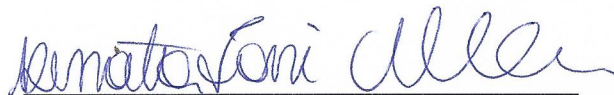
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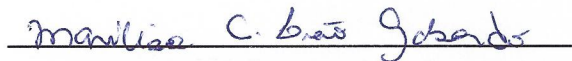
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“At the right time, I, the LORD, will make it happen.”

Isaiah 60:22

RESUMO

O objetivo deste estudo foi investigar o perfil de saúde bucal e o impacto da saúde bucal na qualidade de vida dos usuários de drogas em duas cidades do sul do Brasil. Trezentos e noventa e oito indivíduos internados em dois centros de reabilitação entre 2013-2016 responderam a um questionário estruturado, incluindo dados de hábitos de saúde bucal, sociodemográficos e comportamentais da drogadição. Os entrevistados foram examinados para dentes cariados, perdidos e restaurados (CPOD). A autopercepção em saúde bucal foi medida utilizando a versão abreviada do Oral Health Impact Profile (OHIP-14). Após a análise estatística descritiva, foram realizados os testes de Mann Whitney, regressão de Poisson univariada e múltipla com variância robusta. A média de idade dos participantes foi de 35 anos (DP=9,6). A maioria era da cor branca (63,6%), solteiro (75,9%), com emprego (61,3%), com baixo nível de escolaridade (68,6%) e recebeu mais de um salário mínimo mensal (57,7%). O número médio de lesões cáries não tratadas foi de 4,6 (DP=4), dentes perdidos 4,3 (DP=5,5) e dentes restaurados 2,5 (DP=3,1). O escore médio do CPOD foi de 11,4 (DP =6,8). As drogas mais frequentemente consumidas foram tabaco (83,2%), crack (81,2%) e álcool (72,9%). O escore médio do OHIP-14 foi 22,8 (DP=13,2) e a prevalência de impacto na saúde bucal relacionada com qualidade de vida na amostra foi de 84,9%. Dentes perdidos foi significativamente associado com a presença do impacto ($p=0,027$). Menos de 8 anos de estudo ($p=0,021$) e gosto metálico ($p < 0,001$) foram independentemente associados com os maiores escores de OHIP-14. Concluiu-se que os dependentes químicos têm saúde bucal precária e precisam de tratamento odontológico e políticas públicas. A falta de dentes, baixo nível de escolaridade e gosto metálico foram associados com pior autopercepção em saúde bucal em dependentes químicos.

Palavras-chave: saúde bucal, drogas ilícitas, consumo de bebidas alcoólicas, hábito de fumar, qualidade de vida

ABSTRACT

The aim of this study was to investigate the oral health profile and the impact of oral health on the quality of life of drug addicts in two southern cities in Brazil. Three hundred and ninety eight individuals admitted to two drug rehabilitation centers between 2013-2016 responded to a structured questionnaire including sociodemographic, oral health habits and drug usage habits. Respondents were also examined for decayed, missing and filled teeth (DMFT). Self-perception of oral health was measured using the shortened form of the Oral Health Impact Profile (OHIP-14). After descriptive statistical analysis, Mann Whitney test, univariate and multiple Poisson regression with robust variance were performed. The mean age of the participants was 35 (SD=9.6). The majority were white (63.6%), single (75.9%), employed (61.3%), had low level of schooling (68.6%) and received more than one monthly minimum salary (57.7%). The mean number of untreated carious lesions was 4.6 (SD=4), 4.3 (SD= 5.5) missing teeth and 2.5 (SD= 3.1) filled teeth. The average DMFT score was 11.4 ± 6.8 . The most frequently consumed drugs were tobacco (83.2%), crack (81.2%) and alcohol (72.9%). The mean OHIP-14 score was 22.8 (SD= 13.2) and the prevalence of impact in oral health related quality of life in the sample was 84.9%. Missing teeth was significantly associated with presence of impact ($p=0.027$). Less than 8 years of schooling ($p=0.021$) and metallic taste ($p<0.001$) were independently associated with higher OHIP-14 scores. It was concluded that drug addicts have precarious oral health and therefore are in need of dental treatment and public health policies. Missing teeth, low educational level and metallic taste were independently associated with worse self- perception of oral health in drug addicts.

Keywords: oral health, drugs of abuse, alcohol drinking, smoking, quality of life

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INTRODUÇÃO

A dependência química é classificada pela presença de três ou mais indicadores, por no mínimo um mês, em um determinado ano (WHO, 1993). Estes indicadores incluem um intenso desejo de consumir a substância, um controle ineficiente do seu uso, sintomas de abstinência ao cessar ou reduzir o uso, tolerância aos efeitos, necessidade de doses mais elevadas para alcançar o efeito psicológico desejado, desproporção entre o tempo gasto pelo usuário na obtenção, utilização e recuperação dos seus efeitos e a persistência no uso independente dos problemas que ocorrem (APA, 2000).

No mundo, estima-se que entre 162 e 324 milhões de pessoas, com idade variando de 15 a 64 anos já usaram alguma droga ilícita pelo menos uma vez no ano de 2011. Isso corresponde a 3,5 e 7,0 % da população mundial. Estas substâncias pertencem principalmente aos grupos de *cannabis*, opiáceos, cocaína ou estimulantes como anfetaminas (UNODC, 2014).

Substâncias Psicoativas

As drogas de abuso são definidas como qualquer substância que possa alterar o humor, o nível de percepção ou o funcionamento do sistema nervoso central (CARLINI et al., 2001). Estas substâncias também são conhecidas como substâncias psicoativas ou psicotrópicas e podem ser tanto lícitas quanto ilícitas, incluindo álcool, cocaína e seus derivados (merla, oxi e crack), maconha, opiáceos, sedativos, alucinógenos e outras substâncias estimulantes como cafeína, tabaco e solventes voláteis (WHO, 1994).

O álcool, por atuar no sistema nervoso central, também é considerado uma droga psicotrópica. Por ser uma droga lícita é amplamente aceita socialmente. Não obstante, o álcool tem sérias repercussões quando ingerido em excesso, como violência associada a

episódios de embriaguez, acidentes de trânsito e a dependência química (alcoolismo) a longo prazo. Além disso, os dependentes do álcool podem apresentar doenças do fígado (esteatose hepática, hepatite alcoólica e cirrose), complicações no sistema digestivo (gastrite, síndrome de má absorção e pancreatite) e doenças do sistema cardiovascular (hipertensão e problemas cardíacos) (CEBRID, 2010a).

Estima-se que 76.6% da população mundial são usuários de álcool (WHO, 2014), cujo abuso causa 3,2% do total das mortes (WHO, 2002). De acordo com dados do Segundo Levantamento de Álcool e Drogas (II LENAD), 50% da população brasileira consome álcool, do qual 39% consome uma quantidade habitual de 5 doses ou mais em um dia. Os homens consomem álcool com maior frequência do que as mulheres (LARANJEIRA et al., 2014). O uso de álcool por estudantes do ensino fundamental e médio da rede pública das 27 capitais brasileiras, em 2010, foi de 59.3%. A maior prevalência de consumo foi encontrada em mulheres (86,3%) na faixa etária de 19 anos ou mais (61,4%) (CEBRID, 2010b).

O tabaco é outra droga lícita, que segundo a Organização Mundial de Saúde (OMS) atua como um dos principais fatores relacionados à carga global de doenças. Estima-se que haja 1,3 bilhões de fumantes de tabaco no mundo (WHO, 2002). Anualmente aproximadamente 400,000 mortes prematuras são causadas por câncer, doenças cardiovasculares, respiratórias e perinatais devido ao fumo de tabaco. No Brasil, 16,9% da população brasileira é fumante de tabaco, sendo prevalente em homens de 40 a 49 anos de idade (LARANJEIRA et al., 2014).

O abuso do tabaco e do álcool inicia-se ainda na adolescência e perdura pela idade adulta, sendo ambos considerados problemas de saúde pública (SANCHEZ et al., 2002) tendo em vista que o seu uso prolongado causa doenças e acarreta altos custos para a economia, a estrutura familiar e a sociedade (CEBRID, 2010a;).

A cocaína é derivada da planta *erythroxylon coca* e é principalmente administrada por via nasal, mas, também, pode ser injetada. A droga é misturada com outras substâncias a fim de aumentar a quantidade do produto, diminuir a pureza e o preço, viabilizando o acesso a mesma (HAASEN et al., 2004; MALONEY, 2011). As formas fumáveis, chamadas de crack, merla e oxy são um grande desafio para a saúde pública devido à sua alta dependência e consumo (CEBRID, 2010a; DA SILVA et al., 2012; NARVAEZ et al., 2014). Reações adversas a cocaína e seus derivados incluem problemas neurológicos e psiquiátricos como convulsões e psicose (CEBRID, 2010a) e também prejudica a função dos pulmões e do coração (SMART, 1991).

No mundo, 0,3 a 0,5% dos indivíduos entre os 15 a 64 anos de idade são usuários de cocaína (UNODC, 2014). No Brasil, essa prevalência é de 0,6% sendo mais prevalentes em homens que mulheres (ABDALLA 2014). O consumo de cocaína em adolescentes do segundo grau apresentou aumento significativo de 1,7% a 1,9% entre 2004 a 2010 (CEBRID, 2010b) e a prevalência do consumo de crack foi de 1,5% (ABDALLA et al., 2014); assim sendo, aproximadamente 2 milhões de brasileiros fumaram crack pelo menos uma vez na vida (LARANJEIRA et al., 2014). A idade média dos usuários de crack é de 30 anos, predomina o sexo masculino e não brancos (BASTOS, BERTONI et al., 2014).

A *cannabis* sativa é uma planta herbácea que se apresenta de três formas: maconha, haxixe e óleo de haxixe (CHO, JOHNSTONE, 2005). Existe a percepção de que a *cannabis* é a droga ilícita menos prejudicial à saúde; porém, a procura por tratamento de transtornos relacionados ao seu uso aumentou significativamente na última década (UNODC, 2014). O uso prolongado provoca alterações do sistema respiratório como bronquite e enfisema, e também compromete a saúde mental causando psicose e esquizofrenia (CHO, JOHNSTONE, 2005). O uso de maconha em adolescentes brasileiros tem prevalência de 5,7% (CEBRID,

2010b) e na população adulta de 6,8% atingindo 8 milhões de pessoas (LARANJEIRA et al., 2014).

As anfetaminas são outra classe de drogas, conhecidas por estimular o sistema nervoso central. Metilendioximetanfetamina (MDMA) é a mais popular, vulgarmente conhecida como “êxtase/ ecstasy” (CEBRID, 2010a). Há uma grande aceitação do MDMA pela juventude, é frequente seu consumo em festas. Há evidências que seu uso prolongado pode causar esquizofrenia, comprometimento cognitivo, hepatotoxicidade, necrose tecidual do fígado e do coração e infarto cerebral (GREEN, 2003). Além disso, experimentos em animais indicam que o uso crônico das anfetaminas causa a degeneração de determinadas células no cérebro (CEBRID, 2010). No mundo há 34,4 milhões de usuários de anfetaminas (UNODC, 2014) e os adolescentes brasileiros em 2010 apresentaram 2,1% de consumo na vida de anfetaminas (CEBRID, 2010b).

Opiáceos são outras substâncias ilícitas que tem uma menor prevalência de uso na população brasileira do que as outras drogas anteriormente mencionadas. Em contraste, globalmente é estimado que há 16,4 milhões de usuários de opiáceos (UNODC, 2014). A morfina e a heroína têm uma prevalência de consumo por adolescentes brasileiros de 0,1 e 0,2% respectivamente (CEBRID, 2010b). Esta classe de drogas causa alta dependência e seu uso em níveis tóxicos podem ocasionar depressão respiratória e cardíaca e óbito (CEBRID, 2010a).

Efeito das Substâncias Psicoativas na Saúde Bucal.

Usuários de drogas ilícitas costumam utilizar mais do que uma das substâncias previamente discutidas. Assim, em poliusuários, torna-se um desafio determinar os efeitos agudos e crônicos associados ao uso de uma determinada substância específica (DEGENHARDT, HALL, 2012).

As piores condições de saúde bucal também são relatadas em usuários de drogas quando comparados com a população em geral (MOLENDIJK et al., 1996). As manifestações bucais comumente associadas com a dependência química são cáries, erosão de esmalte, doença periodontal, xerostomia e perda dentária (COLODEL et al., 2008; D'AMORE et al., 2011; MATEOS - MORENO, 2013; ALBINI et al., 2015; MARQUES et al., 2015).

A literatura demonstra amplamente que o abuso persistente de álcool e tabaco aumenta o risco de doença periodontal e câncer bucal (KHOCHT et al., 2009; GATKE et al., 2012). O uso crônico da maconha foi relacionado com um aumento nos escores do índice de cariados, perdidos e restaurados (CPOD) e com a xerostomia, que por si só pode aumentar o risco de cárie dentária (CHO, JOHNSTONE, 2005). Opiáceos como a heroína e a metanfetamina levam ao aumento de cáries e de erosão dentária (MALONEY, 2011; LOPRESTI, NGO, TOCCHIO, 2013). O uso da cocaína pode causar perfuração do septo nasal e do palato, bruxismo, abrasão cervical (BRAND, BLANKSMA, 2008), corrosão de restaurações de ouro, desgaste oclusal, hemorragia abundante após a exodontia, aumento da cárie dentária, halitose e periodontite (MALONEY, 2010). O uso crônico da cocaína e do *crack* também podem induzir alterações inflamatórias e proliferativas na células epiteliais da mucosa oral (THIELE et. al, 2013).

Dependentes químicos também apresentam comportamentos que prejudicam a saúde bucal como: dieta cariogênica, higiene bucal inadequada, negligência com a saúde bucal e com a aparência física e menor acesso e procura por serviços odontológicos, pois a preocupação principal do usuário é a alimentação do vício (MOLENDIJK et al., 1996; SHERIDAN, AGGLETON, CARSON, 2001; ROBINSON, ACQUAH, GIBSON, 2005; SCHEKARCHIZADEH et al., 2013).

Qualidade de vida relacionada à saúde bucal

O uso de drogas é associado com fatores socioeconômicos, crime e violência, estrutura familiar instável, baixa escolaridade e comportamento sexual arriscado (SHERIDAN, AGGLETON, CARSON, 2001; GUINDALINI et al., 2006; BUNGAY et al., 2010; HORTA et al., 2011; MOURA et al., 2014; KOPETZ et al., 2014; YUR'YEV, AKERELE, 2015) fatores que podem influenciar a qualidade de vida dos dependentes químicos (MARTINS, BALDANI, WAMBIER, 2014; MARQUES et al., 2015).

A qualidade de vida é definida como a percepção do indivíduo de sua posição na vida, no contexto cultural, dos valores nos quais vive e em relação aos seus objetivos, expectativas, padrões e preocupações (ALLEYNE, 2001). A qualidade de vida relacionada à saúde bucal (QVRSB) descreve as medidas de função e impacto psicossocial das doenças bucais (LOCKER, QUINONEZ, 2011).

O modelo conceitual de Locker (1988), no qual o impacto da saúde bucal foi baseado, explica as consequências biológicas, comportamentais e psicossociais das doenças bucais. É constituído por diferentes dimensões que descrevem o impacto negativo resultante da saúde bucal de um indivíduo. Este modelo foi fundamentado na primeira classificação de deficiência, incapacidade e desvantagem descrito pela Organização Mundial da Saúde (OMS) (NUTTALL et al., 2006).

Uma série de outras medidas de saúde bucal validadas foram desenvolvidas para suprir o aumento da demanda por indicadores que avaliam o aspecto psicossocial da Odontologia, tanto para estudos clínicos, quanto para epidemiológicos. As principais medidas de saúde bucal também conhecidas como auto - relatadas ou escalas de QVRSB incluem: Oral Health Impact Profile (OHIP) (SLADE, SPENCER, 1994), Oral Impact on Daily Activity (OIDP) (ADULYANON, SHEIHAM, 1997) e Geriatric Oral Health Assessment Index (GOHAI) (ATCHISON, DOLAN, 1990).

O primeiro modelo do OHIP foi desenvolvido por Locker e Miller (1994) e originalmente consistiu em 49 perguntas (OHIP - 49). Embora o OHIP vise fornecer dados importantes sobre as percepções dos indivíduos, o total de 49 perguntas foi considerado demorado, desgastante e impróprio em alguns contextos de pesquisa. O OHIP - 14 é organizado em sete dimensões que incluem: limitação funcional, dor física, desconforto psicológico, deficiência física, deficiência psicológica, incapacidade social e desvantagem social. A ferramenta é composta por um total de 14 perguntas, possuindo cada dimensão avaliada por duas perguntas. O OHIP-14 é respondido com uma escala de cinco pontos, com as seguintes categorias de respostas: “nunca” (0), “raramente” (1), “às vezes” (2), “quase sempre” (3) e “sempre” (4) (SLADE, 2005). O escore final da escala pode ser obtido tanto pelo método ponderado quanto pelo aditivo, pois ambos possuem relação entre si e apresentam desempenho semelhante (SLADE et al., 1996; GABARDO et al., 2013). Os escores mais altos representam um maior impacto na QVRSB (SLADE, 1997). Ele pode ser aplicado na forma de entrevista ou autoaplicado, sem alteração das suas propriedades psicométricas (ROBINSON et al., 2001)

Apesar do princípio psicométrico geral demonstrar que a confiabilidade de um determinado instrumento é reduzida quando o número de perguntas é reduzido, o OHIP - 14 comprovou ter adequada validade, confiabilidade e precisão (SLADE, 1997).

Destaca-se o OHIP-14 por ser amplamente usado (LOCKER, QUINONEZ, 2011). O OHIP-14 foi validado e adaptado para a língua portuguesa brasileira (ALMEIDA et al., 2004; OLIVEIRA, NADADOVSKY, 2005) e tem sido aplicado em diferentes grupos populacionais (MASON 2006; SANDERS et al., 2009; CASCAES et al., 2009; CUNHA-CRUZ et al., 2009; COHEN-CARNEIRO et al., 2010; ARAÚJO et al., 2010; BÉRNABE, MARCENES, 2010; HABASHNEH et al., 2012; GABARDO et al., 2013; DURHAM et al., 2013; SIMONA et al., 2014; OLIVEIRA et al., 2015).

Diversos estudos epidemiológicos confirmaram a relevância dos fatores sociais e psicológicos nas doenças bucais e na saúde geral (SLADE, 1997; MCGRATH, BEDI, 2002; ALLEN, 2003; LOCKER, GIBSON, 2006; LOCKER, 2008; SISCHO, BRODER, 2011). Deste modo, a saúde bucal exerce um impacto importante na saúde geral e na qualidade de vida (ZINI et al., 2015). Fatores como idade, sexo, condição clínica, situação socioeconômica, fatores sociais e culturais, tabagismo, ansiedade dental, eventos do curso da vida, retenção de dentes naturais, edentulismo, uso e o tipo de prótese, perda de inserção periodontal, acesso a serviços odontológicos influenciam na QVRSB (MCGRATH, BEDI, 2003; MCGRATH, BEDI, 2004; JOHN et al., 2004; STEELE et al. 2004; MASON et al., 2006); doravante, na mesma linha de pensamento, o uso de drogas também deve ser um fator que impacta na QVRSB.

Estudos que usaram o OHIP – 14 para avaliar a associação entre QVRSB e CPOD mostraram associações significativas para as variáveis dentes perdidos (SANDERS et al, 2009; DALY et al., 2010), presença e número de dentes cariados e não tratados (MULLIGAN et al., 2008; MARTINS, BALDANI, WAMBIER, 2014; OLIVEIRA et al., 2015). Dessa forma, os escores de CPOD foram considerados preditores significantes da QVRSB (ACHARYA, BHAT, 2009).

A qualidade de vida é indissociável da saúde bucal e tem repercussão direta na saúde geral dos indivíduos (SHINKAI, CURY, 2001). Os fatores que influenciam na qualidade de vida são capazes de modificar o tratamento de qualquer doença, incluindo a dependência química (MOREIRA et al., 2013). Assim sendo, a dependência química parece interferir na percepção do indivíduo em relação a sua saúde bucal e na sua qualidade de vida (MARQUES et al., 2015).

Justifica-se assim, a investigação do impacto da saúde bucal na qualidade de vida dos dependentes químicos, uma vez que a dependência química pode agravar as condições bucais e impactar na sua autopercepção.

OBJETIVOS

OBJETIVO GERAL

- Avaliar o impacto da saúde bucal na qualidade de vida relacionada à saúde bucal em dependentes químicos.

OBJETIVOS ESPECÍFICOS

1. Descrever as características sociodemográficas, condições de saúde bucal e hábitos comportamentais da drogadição de dependentes químicos.
2. Investigar a associação entre as variáveis sociodemográficas, o uso de drogas e as condições de saúde bucal com a qualidade de vida relacionada à saúde bucal em dependentes químicos.

CAPÍTULO I

Oral health profile and characteristics of drug addicts in a southern Brazilian population.

Brazilian Journal of Oral Science

ORAL HEALTH PROFILE AND CHARACTERISTICS OF DRUG ADDICTS IN A
SOUTHERN BRAZILIAN POPULATION.

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ABSTRACT

Objective: Alcohol, tobacco and illicit drugs are all risk factors that contribute to the global disease burden. Additionally, multiple factors have been associated with substance abuse. Therefore, the aim of this study was to investigate the oral health profile and characteristics of drug addicts in southern Brazilian cities.

Methods: Data regarding sociodemographic characteristics, drug habits and oral conditions were collected from 398 males admitted to two drug rehabilitation facilities, using a structured questionnaire and oral examination.

Results: The mean age of the participants was 35 (SD = 9.6). The majority were white (63.6%), single (75.9%), employed (61.3%), had low level of schooling (68.6%) and received more than one monthly minimum wage (57.7%). The mean number of untreated decayed teeth was 4.6 (SD = 4.0), 4.3 (SD = 5.5) missing teeth and 2.5 (SD = 3.1) filled teeth. The mean DMFT score was 11.4 ± 6.8 . The most prevalent drugs consumed were tobacco (83.2%), crack (81.2%) and alcohol (72.9%).

Conclusion: It was concluded that drug addicts possess low levels of schooling, cariogenic diets, large doses and long lengths of time of use of psychoactive substances. Drug addicts initiate use of licit substances early and present a high average of untreated caries.

Keywords: Oral Health. Smoking. Alcohol Drinking. Street Drugs.

INTRODUCTION

Alcohol, tobacco and illicit drugs are all risk factors that contribute to the global disease burden ⁽¹⁾. In Brazil, the consumption of alcohol is considered to be prevalent as 47.0% of Brazilian men and 27.0% of the women, consume five or more doses of alcoholic beverages on a regular day of drinking. Also, 16.9% of Brazilian adults are regular smokers, and 31% have experimented an illicit drug in their lifetime ⁽²⁾. Globally 0.3-0.5% of the world's population aged between 15 - 64 years are cocaine users. A substantial proportion of which, however imprecisely estimated, are crack-cocaine users ⁽³⁾. Brazil houses the largest crack cocaine market in the world approximately 1 million Brazilians have consumed this drug ⁽⁴⁾.

Multiple factors have been associated with substance abuse. These factors include: socioeconomic disadvantages ⁽⁵⁾, age, sex, low levels of education, geographic location ^(6,7), familial risk factors, early drug initiation age and unstable family structures ^(8,9).

Drug addicts have far worst oral health when compared to the general population ^(10,11). The most common dental diseases associated with substance dependence are: caries, enamel erosion and periodontal disease ^(12,13). They also present certain habits that compromise their oral health such as: cariogenic diets, inadequate oral hygiene and general neglect of their physical appearance, including their oral health ^(12,14,15).

The Brazilian National Mental Health Policy number 10.216 declared on April 6, 2001, guarantees the rights and protection of individuals with mental disorders without any form of discrimination and ensures access to the best treatment provided by the health system in accordance with their needs ⁽¹⁶⁾.

Therefore, knowing the current oral health profile and characteristics of drug addicts would be influential in instrumenting and tailoring existing public health policies to adequately represent drug addicts. As is such, the objective of this study was to investigate the oral health profile and characteristics of drug addicts in two southern cities in Brazil.

MATERIALS AND METHODS

Ethical considerations

This study was approved by the ethics committee of the Universidade Federal do Paraná, number 1.464.721 and was conducted according to the Declaration of Helsinki. Written, informed consent was obtained from all the participants in this study.

Study design

A descriptive transversal study was carried out at the Instituto de Pesquisa e Teatamento de Alcoolismo of Research (IPTA) and Associação de San Julian respectively located in the cities Campo Largo and Piraquara in the state of Paraná, Brazil, during the

period of December 2013 to July 2016. These facilities only permit the admittance of male drug addicts. Census sampling was carried out which resulted in the participation of a total of 421 males. To be included in the study, the individuals had to be users of psychoactive substances, aged 18 and over and able to provide responses to the questions included in the questionnaires. Therefore, 23 patients were eliminated from the study for either being less than 18 years old or having incomplete questionnaires, resulting in a final sample size of 398 individuals.

Calibration

Calibration was done in two steps in accordance with the World Health Organization⁽²⁰⁾. Firstly, diagnostic criteria for caries according to the decayed, missing and filled teeth (DMFT) index were discussed. Secondly, examiner calibration was carried out by a “Gold Standard” examiner. Twenty individuals were examined using the DMFT index and these same patients were reexamined after a 7 day interval. Kappa values for interexaminer and intraexaminer agreement were between 0.80 - 0.85.

Data collection and questionnaires

A calibrated examiner with reference to the DMFT index examined all teeth excluding the third molars, under natural light with ball-point probes and mirrors⁽²⁰⁾.

A structured questionnaire was administered to all the participants by a trained examiner in a face-to-face interview. The questionnaire included sociodemographic data such as: age, race, marital status, level of education, employment status, monthly household income and self reported health problems. Oral health condition and habits data were also collected and included: brushing of teeth and frequency, use of toothpaste and dental floss, self perceived tooth mobility and metallic taste, dental visits, procedure done at last dental consultation and high sugar intake frequency. Data regarding of type (s), frequency, daily quantity, and length of time of drug consumption were based on questions adopted from the Addiction Severity Index questionnaire (ASI-6)⁽¹⁸⁾. The participants had already undergone 48 hours of detoxification before participating in the study.

Data analysis

Descriptive analysis of the data was done using Stata/SE 14.1, Stata Corp LP, USA. The variables were analyzed according to their frequency and percentage distribution. The sociodemographic variables were dichotomized as follows: race: white or nonwhite (afrodescendants, indigenous, asians or mixed race); marital status: married/civil union or single (unmarried, divorced, widowed); gainful employment: yes or no; years of schooling (<8 or ≥8); monthly household income (minimum Brazilian salary was considered to be US\$ 275.00, <1 or ≥1 minimum wage) and self reported health problems: yes (mental, cardiovascular, respiratory, gastrointestinal diseases, diabetes, HIV/AIDS, cancer, Hepatitis B and C) or no. The mean age of the participants was determined, and they were placed into

the age group closest to their mean, 35-44 years old to allow for comparison with results from the National Survey of Oral Health ⁽¹⁹⁾. Participants were asked how many times per day they brushed their teeth and consumed high in sugar foods, the frequencies were then dichotomized by the median scores.

Oral health habits and conditions were classified as follows: brushing of teeth: yes or no; use of toothpaste: yes or no; use of dental floss: yes or no; self perceived tooth mobility or "loose teeth": yes or no; self perceived metallic taste: yes or no; dental visit at least once in their lifetime: yes or no; motive for last dental consultation: resolution of pain, aesthetic purposes and other reasons. Means and SD were determined for the DMFT index and its components.

Drug habits were dichotomized as follows: use of crack, alcohol, tobacco, marijuana, cocaine, LSD, ecstasy and oxy: yes or no and history of drug related crimes: yes or no. Initiation age of tobacco, alcohol and crack, years of duration and daily quantity of crack, alcohol, tobacco and marijuana consumption were dichotomized according to their means and their standard deviations (SD) were determined. Frequency of use of alcohol, tobacco and marijuana was dichotomized as: 1 or 2 or ≥ 3 times/day; while frequency of cocaine, LSD and ecstasy use was classified as: weekly or daily consumption. Heavy drinking was classified as five or more drinks per day on each of 5 or more days ⁽²⁰⁾. Preferred types of alcoholic beverages were classified as: beer, vodka, wine, cachaça (Brazilian sugarcane hard liquor) or more than one type of liquor (no real preference).

RESULTS

The study was comprised of 398 males undergoing drug rehabilitation with a mean age of 35 (SD = 9.6) years old. The majority were white, single and employed. Table I shows the sociodemographic characteristics of the sample. Self reported health problems were related only by 29.9% of the individuals. The main health problems reported were cardiovascular problems (26.9%) and gastrointestinal problems (19.3%).

Table II shows the oral health habits and the distribution of the DMFT scores in the sample. Most participants brushed their teeth more than 3 (SD = 1.0) times per day. Although the use of toothpaste was common amongst the participants (95.0%), the use of dental floss was not. The majority of the participants had visited the dentist at least once in their lives. Their motives for their last dental visit were for pain (40.1%), aesthetic purposes (39.8%) and other reasons such as orthodontic treatment and checkups (20.1%). Daily consumption of foods with high sugar content was considered to be high, 3 (SD = 1.30). Regarding the DMFT index, the mean number of untreated carious lesions was 4.6 (SD = 4) and the average DMFT score was (11.4 [SD= 6.8]). The teeth that had the highest frequency of untreated caries were the upper left second molar (tooth 27, 30.9 %) and the right and left

lower second molars (teeth 47 and 37, 29.6%). Participants had an average of 23.6 (SD= 5.6) teeth of the 28 teeth examined.

Table III shows the distribution of drug habits in the sample, regarding type, length of time, quantity and frequency of drug use. The most commonly used drug related in the study was tobacco smoking initiated in early adolescence (14 ± 4.3 years old), closely followed by crack use with average initiation during early adulthood years (22.3 ± 8.4 years old). It was observed that most crack users smoked more than 16.7 rocks per day (16.7 ± 23.7). One rock weighs approximately 0.25 grams ⁽²¹⁾ hence, they smoked an average of 4.18 grams/day of crack cocaine. Participants had a high average of years of heavy drinking (Table III) and alcohol consumption had an early initiation age (14.6 ± 4.0). It was observed that alcohol drinkers preferred to drink more than one type of liquor (53.1%) and “cachaça” (Brazilian sugarcane hard liquor, 27.1%) as opposed to beer, vodka or wine. A little over half of the participants used marijuana and cocaine. On the other hand LSD, oxy and ecstasy were the least frequent substances used and their consumption was reserved mostly for weekly and not daily use.

DISCUSSION

This study was intended to describe the characteristics and oral health profile of drug addicts in a southern Brazilian population. The most common drug used amongst the participants in this study was tobacco. The mean age of initiation of tobacco use was 14 years old, which was interestingly the same for alcohol use. In Brazil 65.0% of all male adult drinkers began the habit of alcohol consumption at 18 years or older, while the smoking habit started at 17 years old ⁽²⁾. Drug addicts in this study, therefore developed the habit of use of licit substances earlier than the general population. The use of alcohol and tobacco during adolescence acts as a precursor for illegal substance dependence ⁽²²⁾. This could explain the use of illegal substances such as crack, cocaine and marijuana observed in this study. Additionally, early initiation use of alcohol is associated with later alcohol misuse ⁽²³⁾. Hence, the early initiation of alcohol use in the sample could account for the heavy alcohol drinking seen in this study. Also, the persistent smoking of tobacco is associated with long periods of drug abuse ⁽²⁴⁾ and tobacco smokers and drinkers use more illicit substances ⁽²⁵⁾. Interestingly, the average lengths of time of tobacco and alcohol use were both 19 years in this study, which is a considerable period of time.

The majority of the participants were crack users. The use of crack cocaine is associated with unemployment, low levels of education, low income, history of legal and criminal problems ^(26,27). This study however contrasts with some of these findings, as most of the participants were employed and received more than one monthly minimum salary. It is however questionable if the participants considered their illegal activities as gainful

employment, especially as most reported to have been detained by the police due to criminal activities. Also, most of them had less than 8 years of schooling therefore, hypothetically they would be unable to secure more than a month's minimum salary. One could argue that in order to sustain their drug habits, they would need to work. Crack use is associated with multiple drug use ⁽²⁶⁾, this could account for the consumption of alcohol, tobacco, cocaine, marijuana and also the minimal use of oxy, LSD and ecstasy seen in this study. It is more likely for afrodescendants and unmarried individuals to report crack use ⁽²⁶⁾. The findings of this study however contrasts with this, as 63.6% of the individuals were white and also corroborates with this as 75.9% were single. The participants were mainly from Paraná, a southern state mainly populated by European descendants; as a result it was expected that the majority of the participants would be white regardless of their drug preferences. This is a regional difference in a country with a population that is mostly mixed.

The average daily quantity of crack rocks observed in this study was substantially greater than those obtained in Rio de Janeiro (12 rocks/day) and Salvador (8 rocks/day), cities located in southeastern and northeastern regions of Brazil ⁽²⁶⁾.

Though the majority related frequent brushing of teeth, most did not use dental floss. This could account for the few who reported metallic taste and tooth mobility, which are indicative of periodontal problems. Dental floss along with the use of a toothbrush has been proven to more efficiently reduce plaque and gingival inflammation ⁽²⁸⁾. Gingival bleeding (gingivitis), presence of calculus and biofilm and bleeding on probing were found to be prevalent in crack addicts in this same population. However, periodontitis was observed in approximately 20% of 242 patients evaluated ⁽²⁹⁾.

Generally drug addicts visit the dentist for palliative care and are less likely to adhere to follow up sessions ⁽¹³⁾. The findings of this study corroborate with this as most participants reported that their last dental visit was for the resolution of pain.

Individuals from the southern region of Brazil in the age group 35-44 presented a higher average DMFT score (17.56) ⁽¹⁹⁾, than the present study. However it should be taken into account that edentulous persons were included in this national survey and missing teeth was the component that weighted the most, additionally a total of 32 teeth were examined ⁽¹⁹⁾. In this present study, all the participants were dentate and only 28 teeth were examined, as third molars were excluded. Other studies have reported higher mean DMFT scores in samples of drug addicts ^(10,13). These studies however, consisted primarily of heroine users, drugs that have been proven to be very detrimental to oral health ^(11,12). Additionally the majority of the participants of this study brushed their teeth frequently while admitted as inpatients and had a scheduled routine. This could have accounted for lower mean DMFT scores in comparison to other studies of oral health in drug addicts. It is important to consider that on average the participants were young and the tendency is for oral health to

worsen with age. Successive relapses of drug addicts often lead to frequent hospitalizations in rehabilitation centers, but this on its own is not enough to prevent the deterioration of oral health.

Decayed teeth accounted for the major part of the DMFT index, followed by missing teeth. This shows that drug addicts are in need of dental treatment ⁽³⁰⁾. There is an association between drug use, hyposalivation, increased consumption of sugars and oral diseases ⁽¹⁴⁾. This study showed that drug addicts had a high daily rate of consumption of high in sugar foods; this may be one of the factors that attributed to the presence of decayed teeth in the study. This result is comparable to Shekarchizadeh et al. 2013 ⁽¹⁵⁾, where the majority of the drug addicts in treatment consumed sugary snacks more than 3 times per day. Cariogenic diets and lack of use of dental floss could explain the high average of untreated caries in this study, which was considerably greater than the age group 35-44 for southern Brazilians in the National Oral Health Survey (1.15) ⁽¹⁹⁾.

The average duration of marijuana use was 14 years, smoked multiple times per day. The chronic use of marijuana may cause xerostomia, which leads to an increase in caries; which could account for the presence of untreated caries in this study. Furthermore, low salivary flow and acidic pH were found to be significantly associated with drug use ⁽³⁰⁾.

Brazilians smoke an average of 14.5 cigarettes per day ⁽²⁾, the participants of this study however smoked 18 tobacco cigarettes per day for an average of 19 years and also consumed an average of 2 liters per day of alcohol. Duration and dose of tobacco and alcohol were found to be related to severe dental diseases⁽¹¹⁾ and could therefore be related to the high average of untreated caries and missing teeth seen in this study.

While this study presents important information, some limitations should be taken into account. It is a difficult task to recruit active drug addicts outside of facilities, thus this study was done in two drug rehabilitation centers. The results therefore cannot be extrapolated to the general population of drug addicts who are not institutionalized. The majority of the participants were poly-drug users, as a result the effects of any particular drug on oral health could not be observed. Instead it is possible to infer that the cumulative effect of different drugs are detrimental to oral health, this is valuable information as most drug addicts use multiple substances. Additionally as this study was based on self-reported responses that were not confirmed by information present in the participants' medical files, it is likely to be liable to social desirability and memory biases.

This study was a cross-sectional census study, studies of this type are essential for political surveillance policies, as they expose the current situation of a given population. It was shown that drug addicts have precarious oral health when compared to the same age group and geographic region of the general population. This may be due to low levels of education, age of initiation, quantity and duration of drug use and cariogenic diets. This study

composed of 398 individuals, has a considerable sample size that brings attention to an often overlooked and marginalized population, and may serve as a reference for future studies in this area. The study also highlighted the need for dental treatment in drug addicts, henceforth dental treatment should be administered at drug rehabilitation facilities to supply this demand. Drug addicts are a population with specific characteristics and public health policies aimed at reducing damage should be adapted to include them. Henceforth, it can be concluded that drug addicts possess low levels of schooling, cariogenic diets, large doses and long duration of use of psychoactive substances. Drug addicts initiate use of licit substances earlier and present a high average of untreated caries.

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Table I: Sociodemographic characteristics of drug addicts in rehabilitation (n =398), Campo Largo and Piraquara, Paraná, 2016.

Sociodemographic status	n (%)
Race	
White	253 (63.6)
Nonwhite	145 (36.4)
Marital Status	
Single	302 (75.9)
Married/ civil union	96 (24.1)
Gainful employment	
Yes	244 (61.3)
No	154 (38.7)
Years of schooling	
<8	273 (68.6)
≥8	125 (31.4)
Monthly household income (minimum salary)	
≤1	168 (42.3)
>1	229 (57.7)
Self reported health problems	
Yes	119 (29.9)
No	279 (70.1)

monthly household income (minimum Brazilian salary) = US\$ 275.00

Table II: Oral health habits and conditions of drug addicts in rehabilitation (n =398), Campo Largo and Piraquara, Paraná, 2016.

Oral health habits and condition	n (%)
Brushing of teeth	
Yes	378 (95.0)
No	20 (5.0)
Tooth brushing frequency	
≤ 3	121 (32.0)
> 3	257 (68.0)
Use of toothpaste	
Yes	376 (94.5)
No	22 (5.5)
Use of dental floss	
Yes	62 (15.6)
No	336 (84.4)
Metallic taste	
Yes	114 (28.6)
No	284 (71.4)
Tooth mobility	
Yes	134 (33.7)
No	264 (66.3)
Dental visit	
Yes	369 (92.7)
No	29 (7.3)
Daily high sugar foods intake	
≤ 3	263 (66.1)
> 3	135 (33.9)
Decayed teeth	4.60 ± 4.00
Missing teeth	4.30 ± 5.50
Filled teeth	2.50 ± 3.10
DMFT index	11.40 ± 6.80

mean± standard deviation

Table III. Drug habits of drug addicts in rehabilitation (n =398), Campo Largo and Piraquara, Paraná, 2016.

Drug habits	n (%)
Crack	
Yes	323 (81.2)
No	75 (18.8)
Years of crack use	
< 11.3	178 (55.1)
≥ 11.3	145 (44.9)
	11.3 ± 7.1
Number of rocks/day	
< 16.7	211 (65.5)
≥ 16.7	111 (34.5)
	16.7 ± 23.7
Alcohol	
Yes	290 (72.9)
No	108 (27.1)
Years of alcohol consumption	
< 18.9	145 (49.7)
≥ 18.9	147 (50.3)
	18.9 ± 9.6
Daily alcohol consumption (Litres)	
< 1.9	158 (54.1)
≥ 1.9	134 (45.9)
	1.9 ± 1.5
Daily alcohol consumption	
1 or 2 times/day	
≥ 3 times/day	101 (34.6%)
	191 (65.4%)
Years of heavy drinking	11.83 ± 10
Drug- related crimes	
Yes	226 (56.8)
No	172 (43.2)
Tobacco smoking	
Yes	331 (83.2)
No	67 (16.8)
Years of tobacco smoking	
< 19	165 (49.8)
≥ 19	166 (50.2)
	19 ± 9.6
Frequency of tobacco use	
1 or 2 times/day	28 (8.4)
≥ 3 times/ day	304 (91.6)
Number of cigarettes/day	
< 18.3	130 (39.3)
≥ 18.3	201 (60.7)
	18.3 ± 11.3
Marijuana	
Yes	212 (53.4)
No	185 (46.6)

Continuation of table III

Drug habits	n (%)
Years of marijuana use	
< 14.2	120 (56.6)
≥ 14.2	92 (43.4)
	14.2 ± 8.7
Frequency of marijuana use	
1 or 2 times/day	58 (27.4)
≥ 3 times/ day	154 (72.6)
Number of marijuana cigarettes/day	
1 or 2	46 (21.7)
≥ 3	166 (78.3)
Cocaine	
Yes	204 (51.3)
No	194 (48.7)
Frequency of cocaine use	
Weekly	123 (60.9)
Daily	79 (39.1)
LSD	
Yes	40 (10.1)
No	358 (89.9)
Frequency of LSD use	
Weekly	31 (86.1)
Daily	5 (13.9)
Ecstasy	
Yes	23 (5.8)
No	375 (94.2)
Frequency of Ecstasy use	
Weekly	19 (86.4)
Daily	3 (13.6)
Oxy	
Yes	24 (6)
No	374 (94)

mean± standard deviation

CAPÍTULO II

Impact of oral health on the quality of life of users of psychoactive substances: a cross-sectional study done in a southern Brazilian population.

Substance Abuse

Impact of oral health on the quality of life of users of psychoactive substances: a cross-sectional study done in two southern Brazilian cities.

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Author Contributions.

Brown MA collected data, analyzed and interpreted the results of the study as well as wrote and revised this manuscript. Machado MAN was involved in the conception and design of the study and was responsible for the final revision of the manuscript.

Impact of Oral Health on the Quality of Life of users of psychoactive substances: A cross-sectional study done in a southern Brazilian population.

ABSTRACT

Objective: To investigate the impact of oral health on the quality of life of drug addicts in rehabilitation.

Methodology: 398 individuals admitted to two drug rehabilitation centers between 2013-2016 responded to a structured questionnaire including sociodemographic, oral health habits and drug usage variables. Respondents were also examined for dental caries. Oral health related quality of life was measured using the Oral Health Impact Profile (OHIP-14). Descriptive statistical analysis, Mann Whitney test, univariate and multiple Poisson regression with robust variance were performed.

Results: The mean OHIP-14 score was 22.8 (SD=13.2). The prevalence of impact in oral health related quality of life in the sample was 84.9%. Missing teeth was significantly associated with presence of impact ($p=0.027$). Less than 8 years of schooling ($p=0.021$) and metallic taste ($p<0.001$) were independently associated with higher OHIP-14 scores.

Conclusion: Missing teeth, low educational level and metallic taste were associated with worse oral health related quality of life in drug addicts.

Keywords: drugs of abuse, oral health, quality of life, drug users

INTRODUCTION

Every one in twenty adults between the ages of 15 - 64 years old (over a quarter billion) have used at least one illicit drug in 2014 ¹. In the same vein, it is estimated that globally there are 2 billion alcohol users and 1.3 billion tobacco smokers ². Consequentially, there is a significant burden on public health systems where health care and prevention for drug addiction is concerned ¹.

Drug addicts have far worse oral health when compared to the general population ³. Addicts tend to give lower priority to their oral hygiene and their primary concern is to aliment their drug dependence ⁴. The most common dental diseases associated with substance dependence are: caries, enamel erosion, periodontal disease and xerostomia ^{5,6}.

It is important to account for patient outcome measures, due to the importance of knowing an individual's outlook of their health and oral health status. This plays a role in public health, enabling direct health strategies to provide for treatment and rehabilitation. Such data are obtained using oral health related quality of life (OHRQoL) measures ⁷. The short version of the Oral Health Impact Profile (OHIP-14) estimates the negative consequences of oral disorders and relates them to quality of life through the evaluation of discomfort, dysfunction and disability that stem from these disorders ⁸.

Age, socioeconomic conditions, social and cultural norms, smoking, dental anxiety, use of freebase cocaine and stages of lifecourse have been shown to influence OHRQoL ⁹⁻¹². Numerous studies have shown that oral health conditions such as periodontitis, edentulism, use and type of dentures, tooth retention and low access to dental treatment have an impact on OHRQoL ¹³⁻¹⁷. Additionally, studies employing the use of the OHIP-14 in different populations have shown that tooth loss, number of untreated decayed teeth and higher

decayed, missing, filled teeth (DMFT) index scores are significantly associated with OHRQoL^{9,12,15, 18}.

Despite the number of studies investigating OHRQoL, there is a paucity of information regarding the oral health of drug addicts and also the impact this has on their quality of life. Understanding the oral health impact on the quality of life of these often marginalized individuals, could be useful for the planning and implementation of public health policies for these populations. Therefore, the aim of this study was to investigate the impact of oral health on the quality of life of drug addicts in rehabilitation at the Instituto de Pesquisa e Tratamento do Alcoolismo (IPTA) and the Associação de San Julian in the state of Paraná, Brazil.

METHODS

Ethical considerations

This study was approved by the ethics committee of the Universidade Federal do Paraná under number 1.464.721 and was conducted according to the Declaration of Helsinki. Written, informed consent was obtained from all the participants in this study.

Study design

A cross-sectional study was carried out at the Instituto de Pesquisa e Tratamento do Alcoolismo (IPTA) in the city of Campo Largo and the Associação de San Julian located in the city of Piraquara, during the period of December 2013 to July 2016. These facilities only permit the admittance of male drug addicts; convenient sampling was carried out which resulted in the participation of a total of 421 males. To be included in the study, the individuals had to be users of psychoactive substances, aged 18 and over and able to provide responses to the questions included in the questionnaires. Therefore, 23 patients were eliminated from the study for either being less than 18 years old or having incomplete questionnaires, resulting in a final sample size of 398 individuals.

Calibration

Calibration was done in two steps in accordance with the World Health Organization¹⁹. Firstly, diagnostic criteria for caries according to the decayed, missing and filled teeth (DMFT) index were discussed. Secondly, examiner calibration was carried out by a “Gold Standard” examiner. Twenty individuals were examined using the DMFT index and these same patients were reexamined after a seven day interval. Kappa values for interexaminer and intraexaminer agreement were between 0.80 - 0.85.

Data collection and questionnaires

A calibrated examiner with reference to the DMFT index examined all teeth with the exception of the third molars under natural light with ball-point probes and mirrors¹⁹.

A structured questionnaire was administered to all the participants by a trained examiner in a face-to-face interview. The questionnaire included sociodemographic data such as: age, race, marital status, level of education, employment status, monthly household income and self reported health problems and drug- related crimes. Oral health habits and conditions data were also collected and included: brushing of teeth and frequency, use of toothpaste and dental floss, self perceived tooth mobility and metallic taste, dental visits and high sugar intake frequency. Data regarding of type (s), frequency, daily quantity, and length of time of drug consumption were based on questions adopted from the Addiction Severity Index questionnaire (ASI-6)²⁰. The participants had already undergone 48 hours of detoxification before they participated in the study.

Data analysis

Descriptive analysis of the data was done using Stata/SE 14.1, Stata Corp LP, USA. The sociodemographic variables were dichotomized as follows: age: $<$ or \geq average age; race: white or nonwhite (afrodescendants, natives, asians or mixed); marital status: married/civil

union or single (unmarried, divorced, widowed); years of schooling (<8 or ≥ 8); gainful employment: yes or no; resides alone: yes or no; monthly household income (minimum Brazilian salary was considered to be US\$ 275.00, <1 or ≥ 1 minimum salary); self reported health problems: yes or no and history of drug related crimes: yes or no. Participants were asked how many times per day they brushed their teeth and consumed high in sugar foods, the frequencies were then dichotomized by the median scores. Oral health habits and conditions were classified as follows: brushing of teeth: yes or no; use of toothpaste: yes or no; use of dental floss: yes or no; self perceived tooth mobility or “loose teeth”: yes or no; self perceived metallic taste: yes or no and dental visit at least once in their lifetime: yes or no. Means and standard deviations (SD) were determined for the DMFT index and its components. Drug habits were dichotomized as follows: use of crack, alcohol, tobacco, marijuana, cocaine, LSD, ecstasy and oxy: yes or no.

A trained examiner administered the Oral Health Impact Profile 14 (OHIP-14)²¹ validated for Brazilian Portuguese ²². The OHIP-14 consists of seven dimensions with two questions each that evaluate: functional limitation, physical pain, psychological discomfort, physical disability, psychological disability, social disability, and handicap. Participants responded in reference to 12 months before rehabilitation, on a scale of 0 - 4 (0 = never, 1= hardly ever, 2= occasionally, 3 = fairly often, 4 = very often). The OHIP-14 is able to estimate severity and prevalence of impact in OHRQoL. Severity is the sum of all the ordinal responses ranging from 0 – 56 and prevalence is the percentage of ‘fairly often’ or ‘very often’ responses ¹⁵.

Statistical analysis

Analysis of the data was done using Stata/SE 14.1, Stata Corp LP, USA. Descriptive and Poisson univariate analysis were used to analyze the association between the

sociodemographic, oral health conditions, drug consumption variables and the dependent variables of the self reported oral health impact on quality of life. To analyze the associations between the independent variables and oral health impact on quality of life, the OHIP-14 scores were classified as presence of impact if there was at least one report of “fairly often” or “often” or absence of impact if there were all reports of “never,” “hardly ever” and “occasionally”²¹. Those variables with $p < 0.10$ were included in the Poisson multivariate regression model with robust variance. A receiver operating characteristic curve (ROC) was constructed to determine the DMFT score that best discriminated between cases with and without impact. To evaluate the association between the presence/absence of impact and number of decayed teeth, missing teeth, filled teeth and the DMFT index score, the Mann-Whitney test was used. The associations with significance of $p < 0.05$ were considered statistically significant.

RESULTS

This study was comprised of 398 males undergoing drug rehabilitation with a mean age of 35 ± 9.6 , predominantly white (63.6%), single (75.9%), employed (61.3%) and received more than one monthly minimum salary (57.7%). The most common drug use related in the study was tobacco (83.2%), closely followed by crack cocaine use (81.2%).

Table 1 shows the prevalence and mean severity scores for each item of the OHIP-14. The mean severity score of the sample was 22.8 (SD=13.2). The prevalence of impact in OHRQol in the sample was 84.9% (n=338). The items that had the greatest prevalence of impact were psychological discomfort and disability (69.1% and 61.1% respectively). Within these categories the questions that had the most impact were “Have you been self-conscious because of your teeth or mouth?” (63.3%) and “Have you been a bit embarrassed because of problems with your teeth or mouth?” (58%). On the other hand, the items social disability (73.4%) and functional limitation (68.5%) were those that had the most reports with absence

of impact in OHRQoL.

[Table 1 Here]

Table 2 shows the DMFT scores and components associated with impact in OHRQoL. The average score for missing teeth with presence of impact was ($n = 338$, 4.5 [$SD = 5.5$]) and was statistically significant ($p = 0.027$). The average DMFT score was 11.7 ($SD = 6.8$) and was also statistically significant ($p = 0.013$).

[Table 2 Here]

When sociodemographic variables were associated with impact in the univariate analysis, less than 8 years of schooling was significantly associated ($p=0,028$) shown in table 3.

[Table 3 Here]

For oral health habits and condition (table 4), DMFT was incorporated into the univariate analysis and was proven to be significant ($p = 0.016$), as well as brushing of teeth ($p = 0.034$), metallic taste ($p < 0.001$) and tooth mobility ($p = 0.020$).

[Table 4 Here]

Table 5 shows drug habits associated with impact, only use of LSD ($p = 0.059$) and oxy ($p = 0.007$) were significantly associated.

[Table 5 Here]

The variables that were significant in the univariate analyses were included in the multivariate regression analysis. Less than 8 years of schooling ($p = 0.021$) and metallic taste ($p < 0.001$) were the only variables that were independently associated with impact in OHRQoL.

[Table 6 Here]

DISCUSSION

This study investigated the impact of oral health on the quality of life of institutionalized drug addicts in southern Brazil. Missing teeth was significantly associated with impact in OHRQoL, while metallic taste in mouth and less than 8 years of schooling were independently associated with impact on OHRQoL.

Different studies carried out in the general population have shown that tooth loss is significantly associated with impact in OHRQoL ^{7,15,23}. Based on the findings of this study, tooth loss also impacts on the OHRQoL of drug addicts.

Individuals that experienced a metallic taste in the mouth (dysgeusia) were more likely to have worse OHRQoL. This is comprehensive as taste is an essential part of an individual's general sense of well-being and quality of life ²⁴. Common causes of dysgeusia are: dental appliances such as dental fillings and prostheses, dental procedures such as root canals and extractions, aging, medication and oral infections such as periodontitis ²⁵. These are plausible motives to explain the association of metallic taste with presence of impact on OHRQoL in drug addicts, especially causes such as medication and periodontitis. Some of the medication that have been affiliated with dysgeusia are antidepressants and antimanic drugs ^{24,25} that are commonly used in rehabilitation treatment. It is also possible that periodontitis causes the metallic taste and thereby impacts OHRQoL. Even though periodontal evaluation was not carried out in this study, it is possible that the source of the metallic taste could stem from an infected periodontal pocket. It has been proven that periodontitis exerts an influence in OHRQoL ¹⁶.

Studies that employed the OHIP-14 in different adult populations ^{7,16, 26} and also a study that evaluated OHRQoL of Brazilian drug addicts with a similar mean age (37 years old) ²⁷ did not find significant associations between low schooling and presence of impact in

OHRQoL, contrary to the findings of this study. In an Iranian study of drug addicts, low educational level was significantly associated with poor oral hygiene²⁸. In the present study, although brushing of teeth was not significant when adjusted for, there was a strong correlation with presence of impact. It is possible to deduce that low schooling affects OHRQoL because it is related to poor oral health habits, such as inadequate oral hygiene.

Higher OHIP-14 scores indicate worse OHRQoL¹³. The mean score obtained in this study was considered to be substantially high and was more severe than national representative samples in Australia (7.4 [SD= 0.13]), the United Kingdom (5.1 [SD= 0.11])¹³ and in the United States (2.81 [SD= 0.12])¹⁵. The prevalence of impact in this study was also considerably greater than those obtained in the United States (15.3%)¹⁵ and the United Kingdom (15.9%)²⁹. When compared to other Brazilian studies, the severity and prevalence in this study were also higher than those obtained in rural Amazon (14.03 and 70.3%)³⁰, Sao Paulo (10.21 and 48.1%)⁷ and southern Brazil (9.1, 47.7%)³¹.

Of the seven items included in the OHIP-14, those that had the greatest impact in this study were psychological discomfort and disability, followed by physical pain. Similarly, a study carried out in drug addicts in Amsterdam, also had the highest prevalence of impact in these subcategories. This sample population however, presented a higher mean OHIP-14 score (40.6 [SD= 12.9])³² than the present study. Therefore, drug addicts primarily report adverse psychological impacts of oral health in their quality of life. This illustrates how perceptions of oral health are subjective and related to certain habits such as substance abuse.

Based on the severity of the study done in Amsterdam³² and the present study, one could infer that drug addicts are more likely to report worse OHRQoL than the general population, when compared to the aforementioned studies^{7,13,15,30,31}. Drug usage has a negative impact on quality of life³³. Although no specific drug use was associated with worse OHRQoL, this study was able to show that drug addicts in general have worse

OHRQoL. This could be attributed to the significant association of missing teeth and metallic taste in mouth with the presence of impact shown in this study.

While the results of this study present significant findings regarding the OHRQoL of drug addicts, some limitations should be taken into account. Due to the transversal study design, the associations obtained cannot be considered as causative factors. Additionally as the OHIP-14 is based on self -reported responses, the results may be susceptible to social desirability and memory biases. However, the design of this study allowed for insight into the OHRQoL of drug addicts. This is an area that has not been explored to great extent in the current literature, despite the growing problem that substance abuse poses for public health, as it affects millions of individuals both directly and indirectly causing health, societal and economic consequences.

CONCLUSION

The findings of this study showed that missing teeth, low educational level and metallic taste were associated with worse oral health related quality of life in drug addicts. Therefore, public health strategies for the rehabilitation of these individuals should account for the biopsychosocial aspect of drug addicts, aim to reduce inequity and also include dental treatment as a part of the healthcare offered to drug addicts in rehabilitation.

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Table 1. Mean severity scores and prevalence of impact for OHIP-14 items, Paraná, 2016.

OHIP-14 items	N	Mean (SD) a	Prevalence N (%) b
Functional limitation	398	2.5 (2.4)	128 (32.5)
Physical pain	398	3.9 (2.5)	193 (48.5)
Psychological discomfort	398	5.0 (2.6)	275 (69.1)
Physical disability	398	2.8 (2.7)	143 (35.9)
Psychological disability	398	3.7 (2.5)	243 (61.1)
Social disability	398	2.2 (2.5)	106 (26.6)
Handicap	398	2.8 (2.5)	165 (41.5)
Total OHIP	398	22.8 (13.2)	338 (84.9)

^a Sum of scored responses (potential range 0–28 for 7 items and for 0–56 for 14 items).

^b Proportion of respondents reporting one or more items ‘fairly often’ or ‘very often’.

SD =standard deviation

Table 2. Prevalence of decayed, missing and filled teeth and impact in oral health related quality of life, Paraná, 2016.

Variable	Impact	n	Mean	Median	Minimum	Maximum	SD	<i>p</i>
Decayed teeth	Absence	60	3,7	3	0	11	3,2	0,102
	Presence	338	4,7	4	0	21	4,1	
Missing teeth	Absence	60	3,5	1	0	23	5,7	0,027*
	Presence	338	4,5	2	0	25	5,5	
Filled teeth	Absence	60	2,3	1	0	11	3,0	0,445
	Presence	338	2,5	1	0	15	3,1	
DMFT	Absence	60	9,5	8	0	28	6,4	0,013*
	Presence	338	11,7	10,5	0	28	6,8	

Mann Whitney test; SD= standard deviation; * significant when $p < 0.05$

Table 3. Univariate analysis of sociodemographic characteristics and impact in oral health related quality of life, Paraná, 2016.

Sociodemographic characteristics	Classification	Absence of impact	Presence of impact	Total n (%)	<i>p</i>	PR (CI 95%)
Years of age	18-70					
	< 35 (ref)	35 (15.9)	185 (84.1)	220 (55.3)		
	≥ 35	25 (14)	153 (86)	178 (44.7)	0.603	1.02 (0.94 ; 1.11)
Race	White (ref)	37 (14.6)	216 (85.4)	253 (63.6)		
	Non white	23 (15.9)	122 (84.1)	145 (36.4)	0.743	0.99 (0.9 ; 1.08)
Marital status	Married	13 (13.5)	83 (86.5)	96 (24.1)		
	Single (ref)	47 (15.6)	255 (84.4)	302 (75.9)	0.617	0.98 (0.89 ; 1.07)
Years of schooling	≥ 8 (ref)	27 (21.6)	98 (78.4)	125 (31.4)		
	< 8	33 (12.1)	240 (87.9)	273 (68.6)	0.028 *	1.12 (1.01 ; 1.24)
Employment	Yes (ref)	40 (16.4)	204 (83.6)	244 (61.3)		
	No	20 (13)	134 (87)	154 (38.7)	0.343	1.04 (0.96 ; 1.13)
Resides alone	Yes	18 (8.6)	79 (81.4)	97 (24.4)		
	No (ref)	42 (14)	259 (86)	301 (75.6)	0.306	0.95 (0.85 ; 1.05)
Minimum salary	> 1 (ref)	33 (14.4)	196 (85.6)	229 (57.7)		
	≤ 1	27 (16.1)	141 (83.9)	168 (42.3)	0.651	0.98 (0.9 ; 1.07)
Health problem	Yes	14 (11.8)	105 (88.2)	119 (29.9)		
	No (ref)	46 (16.5)	233 (83.5)	279 (70.1)	0.198	1.06 (0.97 ; 1.15)
Drug related crimes	Yes	28 (12.4)	198 (87.6)	226 (56.8)		
	No (ref)	32 (18.6)	140 (81.4)	172 (43.2)	0.096	1.08 (0.99 ; 1.17)

Poisson univariate regression; *significant; PR= prevalence ratio; CI= confidence interval; ref= reference monthly household income (minimum Brazilian salary) = US\$ 275.00

Table 4. Univariate analysis of oral health habits, condition and impact in oral health related quality of life, Paraná, 2016.

Oral health	Classification	Absence of impact	Presence of impact	Total n (%)	<i>p</i>	PR (CI 95%)
Brushing of teeth	Yes (ref)	59 (15.6)	319 (84.4)	378 (95)		
	No	1 (5)	19 (95)	20 (5)	0.034*	1,13 (1,01 ; 1,26)
Tooth brushing frequency	≤ 3	24 (19.8)	97 (80.2)	121 (32)		
	> 3 (ref)	35 (13.6)	222 (86.4)	257 (68)	0.147	1,08 (0,97 ; 1,19)
Use of toothpaste	Yes (ref)	58 (15.4)	318 (84.6)	376 (94.5)		
	No	2 (9.1)	20 (90.9)	22 (5.5)	0.309	1,07 (0,94 ; 1,24)
Use of dental floss	Yes (ref)	8 (12.9)	54 (87.1)	62 (15.6)		
	No	52 (15.5)	284 (84.5)	336 (84.4)	0.580	0,97 (0,87 ; 1,08)
Metallic taste	Yes	6 (5.3)	108 (94.7)	114 (28.6)		
	No (ref)	54 (19)	230 (81)	284 (71.4)	<0.001*	1,17 (1,09 ; 1,26)
Loose teeth	Yes	13 (9.7)	217 (82.2)	264 (66.3)		
	No (ref)	47 (17.8)	314 (85.1)	369 (92.7)	0.020*	1,10 (1,02 ; 1,19)
Dental visit	Yes	55 (14.9)	121 (90.3)	134 (33.7)		
	No	5 (17.2)	24 (82.8)	29 (7.3)	0.750	0,97 (0,82 ; 1,15)
Daily high sugar food intake	≤ 3	41 (15.6)	222 (84.4)	263 (66.1)		
	> 3 (ref)	19 (14.1)	116 (85.9)	135 (33.9)	0.684	1.02 (0,93 ; 1,11)
DMFT	≤ 10 (ref)	40 (19.1)	169 (80.9)	209 (52.5)		
	> 10	20 (10.6)	169 (89.4)	189 (47.5)	0.016 *	1.11 (1.02 ; 1.2)

Poisson univariate regression; *significant; PR= prevalence ratio; CI= confidence interval; ref= reference

Table 5. Univariate analysis of drug use and impact in oral health related quality of life, Paraná, 2016.

Drug	Classification	Absence of impact	Presence of impact	Total n (%)	<i>p</i>	PR (CI 95%)
Crack	No (ref)	13 (17.3)	62 (82.7)	75 (18.8)	0.566	1.03 (0.92 ; 1.16)
	Yes	47 (14.6)	276 (85.4)	323 (81.2)		
Alcohol	No (ref)	18 (16.7)	90 (83.3)	108 (27.1)	0.600	1.03 (0.93 ; 1.13)
	Yes	42 (14.5)	248 (85.5)	290 (72.9)		
Tobacco	No (ref)	15 (22.4)	52 (77.6)	67 (16.8)	0.121	1.11 (0.97 ; 1.27)
	Yes	45 (13.6)	286 (86.4)	331 (83.2)		
Marijuana	No (ref)	33 (17.8)	152 (82.2)	185 (46.6)	0.163	1.06 (0.98 ; 1.16)
	Yes	27 (12.7)	185 (87.3)	212 (53.4)		
Cocaine	No (ref)	31 (16)	163 (84)	194 (48.7)	0.624	1.02 (0.94 ; 1.11)
	Yes	29 (14.2)	175 (85.8)	204 (51.3)		
LSD	No (ref)	57 (15.9)	301 (84.1)	358 (89.9)	0.059*	1.10 (1.00 ; 1.21)
	Yes	3 (7.5)	37 (92.5)	40 (10.1)		
Ecstasy	No (ref)	56 (14.9)	319 (85.1)	375 (94.2)	0.765	0.97 (0.80 ; 1.18)
	Yes	4 (17.4)	19 (82.6)	23 (5.8)		
Oxy	No (ref)	59 (15.8)	315 (84.2)	374 (94)	0.007*	1.14 (1.04 ; 1.25)
	Yes	1 (4.2)	23 (95.8)	24 (6)		

Poisson univariate regression; *significant; PR= prevalence ratio; CI= confidence interval; ref=reference

Table 6. Multivariate analysis of sociodemographic characteristics, oral health, drug use and impact in oral health related quality of life, Paraná, 2016.

Variable	Classification of risk	<i>p</i>	PR (CI 95%)
Years of schooling	< 8	0.021*	1.13 (1.02 ; 1.25)
Brushing of teeth	No	0.051	1.11 (1.00 ; 1.24)
Metallic taste	Yes	<0.001*	1.16 (1.08 ; 1.24)
Soft teeth	Yes	0.058	1.08 (1.00 ; 1.16)
LSD	Yes	0.050	1.12 (1.00 ; 1.25)
Oxy	Yes	0.105	1.10 (0.98 ; 1.23)
Drug related crimes	Yes	0.185	1.06 (0.97 ; 1.15)
DMFT	> 10	0.058	1.08 (1.00 ; 1.17)

Poisson multivariate regression; *significant when $p < 0.05$; PR= prevalence ratio; CI= confidence; interval; ref= reference

CONCLUSÕES

Este estudo avaliou o perfil e as características da condição bucal e o impacto dessas variáveis na qualidade de vida relacionada à saúde bucal em dependentes químicos. Os resultados mostraram que dependentes químicos apresentaram condições precárias de saúde bucal. É possível que este dado seja relacionado com os baixos níveis de escolaridade, dieta cariogênica, idade de início da drogadição, quantidade e tempo de consumo das drogas. A presença de dentes perdidos, baixos níveis de escolaridade e o gosto metálico foram significativamente associados com os piores relatos de qualidade de vida relacionado à saúde bucal.

Dependentes químicos representam uma população com características específicas, portanto políticas públicas deveriam ser adaptadas e desenvolvidas com o intuito de reduzir a iniquidade e os danos a esses indivíduos. Os resultados deste estudo revelaram a importância do cirurgião dentista na reabilitação dos dependentes químicos, uma vez que esta população apresenta necessidade de tratamento e as condições bucais impactam na sua qualidade de vida.

Para efetuar mudanças em estilos de vida, seja relacionado ao consumo de drogas, a hábitos de higiene bucal ou a políticas públicas de prevenção, a inclusão e desestigmatização dos dependentes químicos são requisitos pré-condicionantes para a mudança destes comportamentos.

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APÊNDICE

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2. Termo de Consentimento Livre e Esclarecido
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5. Instruções para os autores- Substance Abuse

UNIVERSIDADE FEDERAL DO
PARANÁ - SETOR DE
CIÊNCIAS DA SAÚDE/ SCS -



PARECER CONSUBSTANCIADO DO CEP

DADOS DA EMENDA

Título da Pesquisa: Avaliação da saúde bucal e da condição periodontal e seu impacto na qualidade de vida de dependentes químicos

Pesquisador: Maria Ângela Naval Machado

Área Temática:

Versão: 4

CAAE: 23289213.5.0000.0102

Instituição Proponente: Departamento de Estomatologia

Patrocinador Principal: Financiamento Próprio

DADOS DO PARECER

Número do Parecer: 1.464.721

Apresentação do Projeto:

O presente estudo, proposta do departamento de Estomatologia, possui caráter transversal e pretende avaliar a qualidade de vida de usuários de álcool e crack, em tratamento no IPTA em Campo Largo - PR e na Associação San Julian.

Para tanto, será aplicado questionário validado da área, bem como realização de exame clínico não invasivo.

A análise dos dados será quantitativa a partir de análises estatísticas dos resultados observados.

Objetivo da Pesquisa:

Avaliar a experiência de cárie, a condição periodontal e o impacto dessas doenças na qualidade de vida de dependentes químicos.

Avaliação dos Riscos e Benefícios:

Apresentados no corpo do projeto e no TCLE, de acordo com o solicitado pelo CEP e estão bem descritos.

Comentários e Considerações sobre a Pesquisa:

A pesquisa está bem estruturada e segue os preceitos éticos necessários para a sua aprovação.

Considerações sobre os Termos de apresentação obrigatória:

Todos apresentados de acordo com o solicitado pelo CEP.

Endereço: Rua Padre Camargo, 285 - Térreo

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CIÊNCIAS DA SAÚDE/ SCS -



Continuação do Parecer: 1.464.721

Recomendações:

A solicitação para inclusão da instituição Associação San Julian e a consequente inclusão de participantes na pesquisa deve seguir os mesmos métodos e cuidados éticos previamente aprovados.

Conclusões ou Pendências e Lista de Inadequações:

Solicitamos que sejam apresentados a este CEP, relatórios semestrais e final, sobre o andamento da pesquisa, bem como informações relativas às modificações do protocolo, cancelamento, encerramento e destino dos conhecimentos obtidos, através da Plataforma Brasil - no modo: NOTIFICAÇÃO. Demais alterações e prorrogação de prazo devem ser enviadas no modo EMENDA. Lembrando que o cronograma de execução da pesquisa deve ser atualizado no sistema Plataforma Brasil antes de enviar solicitação de prorrogação de prazo.

Considerações Finais a critério do CEP:

Este parecer foi elaborado baseado nos documentos abaixo relacionados:

Tipo Documento	Arquivo	Postagem	Autor	Situação
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_479429_E1.pdf	16/03/2016 16:34:05		Aceito
Outros	declaração de coparticipante modelo CONEP.pdf	07/05/2015 13:47:13		Aceito
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_479429_E1.pdf	27/03/2015 16:55:03		Aceito
Outros	Carta para insercao de co participante CEP.pdf	27/03/2015 16:46:38		Aceito
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_479429_E1.pdf	09/03/2015 17:16:56		Aceito
Declaração de Instituição e Infraestrutura	Concordancia Associacao San Julian.pdf	09/03/2015 16:04:18		Aceito
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_DO_PROJETO_232892.pdf	11/11/2013 14:48:31		Aceito
Outros	Concordancia IPTA com Parecer CEP.pdf	11/11/2013 14:46:44		Aceito
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_DO_PROJETO_232892.pdf	15/10/2013 20:15:07		Aceito
Outros	Roteiro para Conferencia 1.pdf	15/10/2013 20:09:48		Aceito
Outros	Roteiro para Conferencia 2.pdf	15/10/2013 19:58:49		Aceito

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**UNIVERSIDADE FEDERAL DO
PARANÁ - SETOR DE
CIÊNCIAS DA SAÚDE/ SCS -**



Continuação do Parecer: 1.464.721

Projeto Detalhado / Brochura Investigador	Projeto IDPQV Maria Angela.pdf	15/10/2013 19:34:42		Aceito
Outros	Concordancia IPTA.pdf	15/10/2013 18:42:39		Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO.pdf	15/10/2013 17:42:09		Aceito
Outros	Termo Compromisso de Uso dos Dados.pdf	15/10/2013 17:41:44		Aceito
Outros	Declaracao de Uso Especifico de Dados.pdf	15/10/2013 17:40:39		Aceito
Outros	Declaracao de tornar publ resultados.pdf	15/10/2013 17:39:59		Aceito
Outros	Termo de Confidencialidade.pdf	15/10/2013 17:38:45		Aceito
Outros	Concordancia UFPR.pdf	15/10/2013 17:38:01		Aceito
Outros	Analise de Merito.pdf	15/10/2013 17:36:59		Aceito
Outros	Declaracao Orientador.pdf	15/10/2013 17:36:04		Aceito
Outros	ATA DA APREOVACAO 04 10 2013.pdf	15/10/2013 17:34:05		Aceito
Outros	Oficio Ata de Aprovacao.pdf	15/10/2013 17:33:33		Aceito
Outros	Oficio Pesquisador.pdf	15/10/2013 17:32:34		Aceito
Folha de Rosto	Folha de rosto.pdf	15/10/2013 17:30:33		Aceito

Situação do Parecer:

Aprovado

Necessita Apreciação da CONEP:

Não

CURITIBA, 24 de Março de 2016

**Assinado por:
IDA CRISTINA GUBERT
(Coordenador)**

Endereço: Rua Padre Camargo, 285 - Térreo

Bairro: Alto da Glória

UF: PR

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CEP: 80.060-240

E-mail: cometica.saude@ufpr.br

- a) Nós, Maria Ângela Naval Machado e Michelle Antonette Brown, pesquisadores da Universidade Federal do Paraná, estamos convidando você, paciente do Instituto de Pesquisa e Tratamento de Alcoolismo (IPTA) a participar de um estudo intitulado "Avaliação da saúde bucal e da condição periodontal e seu impacto na qualidade de vida de dependentes químicos". Através desse tipo de pesquisa é que ocorrem os avanços importantes na área da odontologia, e sua participação é fundamental. O objetivo da pesquisa é verificar se existe alguma alteração na gengiva e se esta doença pode interferir nas atividades cotidianas dos dependentes químicos.
- b) Caso você participe da pesquisa, será necessário realizar um exame na sua boca medindo alguns pontos entre a gengiva e seus dentes. Com essas medidas poderemos saber se você possui algum tipo de doença na sua gengiva (doença periodontal) que pode levar com o tempo a possibilidade de perda do seu dente.
- c) Como em qualquer tratamento, você poderá experimentar algum desconforto na gengiva na hora da inserção do instrumento odontológico (sonda periodontal milimetrada) entre a gengiva e o dente para obter registros da presença da doença.
- d) O exame empregado neste estudo não é capaz de produzir qualquer dano ou risco aos pacientes examinados.
- e) Contudo os benefícios esperados são:
- 1 Esclarecimentos que receberei sobre o que é a doença periodontal, como tratá-la.
 - 2 Orientações sobre higiene oral, aprendendo as técnicas de escovação e uso do fio dental.
 - 3 Encaminhamento para realização de tratamento odontológico nas Clínica da UFPR, conform
- e a
- disponib
- ilidade.

Participante da Pesquisa

Pesquisador Responsável ou quem aplicou o TCLE

Orientador

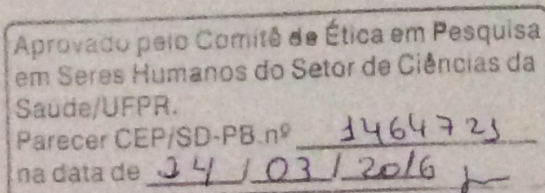
Aprovado pelo Comitê de Ética em Pesquisa
em Seres Humanos do Setor de Ciências da
Saúde/UFPR.


Parecer CEP/SD-PB nº 3464721
na data de 24/03/2016

- f) Os pesquisadores Maria Ângela Naval Machado e Michelle Antonette Brown, responsáveis por este estudo poderão ser contatados Na Universidade Federal do Paraná, Rua Prefeito Lothário Meissner nº 632, pela manhã ou a tarde de 2ª ou 5ª feira, ou pelo email man.machado@ufpr.br ou michellebrown_876@hotmail.com para esclarecer eventuais dúvidas que você possa ter e fornecer – lhe as informações que queira, antes, durante ou depois de encerrado o estudo.
- g) Estão garantidas todas as informações que você queira, antes durante e depois do estudo.
- h) As informações relacionadas ao estudo poderão ser conhecidas por pessoas autorizadas (Maria Ângela Naval Machado e Michelle Antonette Brown). No entanto, se qualquer informação for divulgada em relatório ou publicação, isto será feito sob forma codificada, para que a sua identidade seja preservada e mantida sua confidencialidade).
- i) As despesas necessárias para a realização da pesquisa (exame, etc) não são de sua responsabilidade e pela sua participação no estudo você não receberá qualquer valor em dinheiro. Você terá a garantia de que qualquer problema decorrente do estudo será tratado pelo pesquisador responsável, na Clínica de Odontologia da Universidade Federal do Paraná.
- j) Quando os resultados forem publicados, não aparecerá seu nome, e sim um código.
- k) Eu, _____ li esse Termo de Consentimento Livre e Esclarecido e compreendi a natureza e objetivo do estudo do qual concordei em participar. A explicação que recebi menciona os riscos e benefícios. Eu entendi que sou livre para interromper minha participação a qualquer momento sem justificar minha decisão e sem qualquer prejuízo para mim.
- l) Eu concordo voluntariamente em participar deste estudo.

(Assinatura do participante de pesquisa ou responsável legal)

Local e data: _____, ____ de _____ de 20____.





Prof. Dra. Maria Ângela Naval Machado
Pesquisadora responsável

Apêndice 3

Avaliação da saúde bucal e o impacto na qualidade de vida de dependentes

Químicos

Entrevistador: _____ N° de Identificação: _____

Nome: _____ Idade: ____ Sexo: F ☐ M ☐

Data de nascimento: ____/____/____ Local de Nascimento: _____

Cidade/Município: _____ Bairro: _____

CARACTERIZAÇÃO SOCIOECONÔMICA:

1.Etnia

☐ 1-branco
☐ 2-pardo
☐ 3-negro
☐ 4-indígena
☐ 5-amarelo

2.Estado Civil

☐ 1-solteiro
☐ 2-casado
☐ 3-divorciado
☐ 4-viúvo

3.Escolaridade Nível

☐ 0- Fundamental Comp
☐ 1-1ºGrau completo
☐ 2-2ºGrau completo
☐ 3-3ºGrau completo
☐ 4-Curso Técnico

3'.Escolaridade

☐ 0-Fundamental Incompleto
☐ 1-1ºIncompleto
☐ 2-2ºIncompleto
☐ 3-3ºIncompleto

4.Estudante

☐ 0-SIM
☐ 1- NÃO

5.Trabalha

☐ 0-SIM
☐ 1-NÃO (desempregado)

6. Reside Com:

☐ 1-Sozinho 3- Pais
☐ 2-Irmãos 4- Cônjuge
☐ 5-Avós 6-Outros

7.Renda (em salário min.)

1 ☐ 2 ☐ 3 ou + ☐

SAÚDE GERAL - Sofre alguma dessas doenças?

DOENÇAS	SIM	NÃO	QUAL (is)
Problemas Cardíacos			
Problemas Renais			
Problemas Gástricos			
Problemas Respiratórios			
Problemas Alérgicos			
Problemas Articulares/Reumatismo			
Diabetes			
Problemas com Cicatrização			
Faz uso de alguma medicação?			

SAÚDE BUCAL

HÁBITOS DE HIGIENE	SIM	NÃO	
Escova os dentes?			Quantas vezes escova o dente ao dia?
Faz uso de pasta de dente?			Quando foi a última vez que fez tratamento?
Faz uso de fio dental			Porque procurou tratamento?
Sente gosto metálico na boca?			
Sente seus dentes moles?			Quantas vezes ao dia consome carboidratos (pão, doces, café com açúcar etc..)?
Foi feita raspagem em seus dentes nos últimos 2 meses?			

Qual a substância que levou você a buscar o tratamento atual?

Álcool

☐

Cocaína

☐

Crack

☐

VÍCIOS - CRACK

Quantas vezes você já foi internado para o tratamento de crack?

Quantos desses tratamentos foram apenas para desintoxicação?

Que idade você tinha quando foi internado pela primeira vez?

Que idade você tinha quando usou crack pela primeira vez?

CRACK

Há quanto tempo vc usa o crack ? anos

Frequência: diária

☐

semanal

☐

mensal

☐

Quantidade (número de pedras):

Uma pedra crack = 0,25 g

VÍCIOS - ÁLCOOL

Quantas vezes você já foi internado para o tratamento do álcool?

Quantos desses tratamentos foram apenas para desintoxicação?

Quantos anos da sua vida você bebeu álcool regularmente, 3 ou mais dias na semana?

Quantos anos da sua vida você bebeu 5 drinks por dia regularmente, 3 ou mais vezes na semana?

Obs.: 1 drink= 1 dose de destilado ou 1 cálice de vinho ou 1 lata de cerveja

Que idade você tinha quando bebeu pela primeira vez e sentiu os efeitos do álcool?

Qual o tipo de bebida que vc usa? cachaça

☐

cerveja

☐

vodka

☐

vinho

☐

ÁLCOOL

SIM () NÃO ()

Há quanto tempo?

Frequência: diária 1, 2 x ao dia

☐

3 ou +

☐

Quantidade: cerveja /cachaça:

1 drink= 1 dose de destilado ou 1 cálice de vinho ou 1 lata de cerveja

Neste momento o quanto é importante para você este tratamento?

0- Nada 1- Pouco 2- Mais ou menos 3- Consideravelmente 4- Extremamente

Desde que começou a usar você já esteve limpo das drogas e do álcool por pelo menos um ano? 1-sim 0- não

Você, por conta das drogas, já foi detido por policiais? Se sim qual motivo? 1-sim 0-não

Que idade você tinha quando fumou o primeiro cigarro de papel?

CIGARRO DE PAPEL

SIM () NÃO ()

Há quanto tempo (anos)?

Frequência: diária 1, 2 x ao dia

☐

3 ou +

☐

Quantidade:

CIGARRO DE MACONHA

SIM () NÃO ()

Há quanto tempo? anos

Frequência: diária 1, 2 x ao dia

☐

3 ou +

☐

Quantidade: 1- 2 baseados/dia

☐

3 ou +

☐

Obs.: Uma porção de maconha = 1g

OUTRAS DROGAS	SIM	NÃO	FREQUÊNCIA	QUANTIDADE em g
COCAÍNA	<input type="checkbox"/>	<input type="checkbox"/>	Diária (D) /Semanal (S) Quantas vezes por dia?	Um papelote de cocaína = 1g
LSD / ÁCIDO	<input type="checkbox"/>	<input type="checkbox"/>	Diária (D) /Semanal (S) Quantas vezes por dia?	
ECSTASY	<input type="checkbox"/>	<input type="checkbox"/>	Diária (D) /Semanal (S) Quantas vezes por dia?	
OXY	<input type="checkbox"/>	<input type="checkbox"/>	Diária (D) /Semanal (S) Quantas vezes por dia	

Obs.: Nenhuma resposta usar NR

CONDIÇÃO DENTAL

	18	17	16	15	14	13	12	11		21	22	23	24	25	26	27	28
CPO-D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	48	47	46	45	44	43	42	41		31	32	33	34	35	36	37	38
CPO-D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CPO-D do indivíduo:

Códigos Diagnóstico CPO-D:

- 0- Hígido
- 1- Cárie
- 2- Restaurado, com cárie
- 3- Restaurado, sem cárie
- 4- Ausente devido a cárie
- 5- Ausente por outras razões
- 6- Selante de Fissura
- 7- Suporte de prótese coroa ou faceta / implante
- 8- Dente (Coroa) não irrompido
- 9- Dente excluído (Não registrado)
- T- Trauma (fratura)

Questionário OHIP-14, versão original em português.

Entrevista de autopercepção em saúde bucal *

Perguntas	Respostas					OHIP-14 (Não preencher)
	Nunca (0)	Raramente (1)	Às vezes (2)	Quase sempre (3)	Sempre (4)	
1.Você teve problemas para falar alguma palavra por causa de problemas com sua boca ou dentes?						Item1 (0) (1) (2) (3) (4)
2.Você sentiu que o sabor dos alimentos ficou pior por causa de problemas com sua boca ou dentes?						Item2 (0) (1) (2) (3) (4)
3.Você sentiu dores em sua boca ou nos seus dentes?						Item3 (0) (1) (2) (3) (4)
4.Você se sentiu incomodado ao comer algum alimento por causa de problemas com sua boca ou dentes?						Item4 (0) (1) (2) (3) (4)
5.Você ficou preocupado por causa de problemas com sua boca ou dentes?						Item5 (0) (1) (2) (3) (4)
6.Você se sentiu estressado por causa de problemas com sua boca ou dentes?						Item6 (0) (1) (2) (3) (4)
7.Sua alimentação ficou prejudicada por causa de problemas com sua boca ou dentes?						Item7 (0) (1) (2) (3) (4)
8.Você teve que parar suas refeições por causa de problemas com sua boca ou dentes?						Item8 (0) (1) (2) (3) (4)
9.Você encontrou dificuldade para relaxar por causa de problemas com sua boca ou dentes?						Item9 (0) (1) (2) (3) (4)
10.Você sentiu-se envergonhado por causa de problemas com sua boca ou dentes?						Item10 (0) (1) (2) (3) (4)
11.Você ficou irritado com outras pessoas por causa de problemas com sua boca ou dentes?						Item11 (0) (1) (2) (3) (4)
12.Você teve dificuldades em realizar suas atividades diárias por causa de problemas com sua boca ou dentes?						Item12 (0) (1) (2) (3) (4)

13.Você sentiu que a vida, em geral, ficou pior por causa de problemas com sua boca ou dentes?						Item13 (0) (1) (2) (3) (4)
14.Você ficou totalmente incapaz de fazer suas atividades diárias por causa de problemas com sua boca ou dentes?						Item14 (0) (1) (2) (3) (4)

TAXA GLOBAL DE CONFIABILIDADE DO ENTREVISTADO

Leva em conta a aparente capacidade e disposição do entrevistado em responder o questionário assim como a validação de suas respostas

No geral a informação recebida foi:

Ruim	<input type="text"/>
Satisfatória	<input type="text"/>
Boa	<input type="text"/>

Ruim: muitos itens provavelmente imprecisos

Satisfatória: numerosos itens imprecisos, mas o perfil das respostas parece razoável

Boa: Algumas/poucas imprecisões aparentes, mas o perfil das respostas parece avaliar bem o entrevistado



Instructions for Authors

Correspondence, when applicable, should be addressed to:

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- Title of the manuscript in English.
- Names of the authors in direct order (not exceed six authors) with their respective degrees, affiliations institution.
- Full address of the corresponding author, to whom all correspondence should be addressed, including fax and phone number as well as e-mail address.

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1. Title of the manuscript and subtitle, if necessary
2. Structured abstract and keywords
3. Introduction, Material and methods, Results, and Discussion
4. References
5. Tables
6. Figures, Images

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Do not review existing literature extensively. State clearly the working hypothesis.

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Summarize the findings without repeating with details the data given in the Results section. Present your conclusions within the discussion.

Relate your observations to other relevant studies and point out the implications and limitations of the findings.

Acknowledgements

Financial support by government agencies should be acknowledged as well as technical assistance or assistance from colleagues.

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Standard journal article

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International Association for Dental Research. Code of ethics for dental researchers. J Am Coll Dent. 2014 Summer;81(3):19-22.

No author given

Tobacco and dental caries: a systematic review. Br Dent J. 2013 Nov 8;215(9):463.

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