PATIENTS WITH MENTAL DISORDERS: ORAL HEALTH CONDITION

PACIENTES CON TRASTORNOS MENTALES: CONDICIÓN DE SALUD BUCODENTAL

PACIENTES COM TRANSTORNOS MENTAIS: CONDIÇÃO DE SAÚDE BUCAL

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ABSTRACT
Objective: The aim of this study was to evaluate the oral health condition of patients with mental and behavioral disorders treated in CAPS II in Parnaíba, Piauí state. **Materials and Methods:** Participated of the study 43 patients treated in CAPS II, and they agreed to participate by signing the Term of Assent and the Informed Consent Term. A health questionnaire was used with 22 questions appropriated to the research aims and also a clinical record where the data from the intraoral physical examination were recorded. The data were collected and the results were obtained through the "Statistical Package for the Social Sciences (SPSS)". **Results:** The sociodemographic profile of CAPS II is characterized by individuals over 40 years of age, mostly women, with low level education and unemployed. Changes such as burns, spotting, attrition wear, caries and periodontal diseases have been found. **Conclusion:** We consider that the psychopathologies, the medications used, the socioeconomic factors and the level of education of the patients are the main reasons that these patients with mental disorders of CAPS II, have this oral health condition. **Key Words:** Mental Disorders, Oral health, Dental care

RESUMEN
Objetivo: fue evaluar la condición de salud bucal de los pacientes con trastornos mentales y comportamentales atendidos en el CAPS II de Parnaíba-Piauí (PI). **Materiales y métodos:** participaron en la encuesta 43 pacientes atendidos por el CAPS II, que aceptaron participar mediante la firma del Término de Asentimiento y Término de Consentimiento Libre y Esclarecido. Se utilizó un cuestionario de salud con 22 preguntas adecuadas a los objetivos de la investigación y una ficha clínica donde se registraron los datos del examen físico intraoral. Los datos fueron recolectados y los resultados fueron obtenidos a través del paquete estadístico Statistical Package for the Social Sciences (SPSS). **Resultados:** se puede caracterizar el perfil sociodemográfico del CAPS II por individuos con edad mayor que 40 años, en su mayoría mujeres, con escolaridad de nivel bajo y desempleados. Se han encontrado alteraciones tales como quemaduras, manchas, desgaste por atrición, caries y enfermedades periodontales. **Conclusión:** consideramos que las psicopatologías, las medicaciones utilizadas, los factores socioeconómicos y el grado de instrucción de los pacientes constituyen los principales factores observados para que los pacientes con trastornos mentales del CAPS II tengan la condición de salud bucal presentada. **Descriptores:** Trastornos mentales, Salud bucal, Atención odontológica

RESUMO
Objetivo: foi avaliar a condição de saúde bucal dos pacientes com transtornos mentais e comportamentais atendidos no CAPS II de Parnaíba-Piauí(PI). **Materiais e métodos:** participaram da pesquisa 43 pacientes atendidos pelo CAPS II, que aceitaram participar mediante assinatura do Termo de Assentimento e Termo de Consentimento Livre e Esclarecido. Utilizou-se um questionário de saúde com 22 perguntas adequadas aos objetivos da pesquisa e uma ficha clínica onde os dados do exame físico intraoral foram registrados. Os dados foram coletados e os resultados foram obtidos através do pacote estatístico Statistical Package for the Social Sciences (SPSS). **Resultados:** pode-se caracterizar o perfil sociodemográfico doCAPS II por indivíduos com idade maior que 40 anos, em sua maioria mulheres, com escolaridade de nível baixo e desempregados. Encontrou-se alterações tais
como queimaduras, manchamentos, desgaste por atrição, cárie e doenças periodontais. **Conclusão:** consideramos que as psicopatologias, as medicações utilizadas, os fatores socioeconômicos e ao grau de instrução dos pacientes constituem os principais fatores observados para que os pacientes com transtornos mentais do CAPS II de Parnaíba- PI possuam a condição de saúde bucal apresentada. **Palavras-chaves:** Transtornos mentais, Saúde bucal, Assistência odontológica.

**Introduction**

Mental illness affects many social aspects of the individual and depending on what it is, can lead to decreased physical activity, inadequate nutrition and expose patients to the side effects of medications, resulting in a group of people with poor quality of life and condition precarious health by comparing the general population.\(^1\)

In some cases, in addition to mental illness, they present other health problems that may hinder the prognosis and may even worsen the clinical picture. The decrease or lack of oral hygiene, for example, changes and leads to the establishment of oral manifestations that may complicate the treatment. The presence of oral diseases in patients with mental disorders may be related to several factors, such as educational level, financial conditions, age, general health status, effects of medications used and access to dental care.\(^2\)

In Brazil, the service units that are in charge of providing care to these patients are the Psychosocial Care Centers (CAPS). CAPS can be type I, II or III, alcohol and drugs (CAPSad) and infanto-juvenile (CAPSi). The present study was carried out in CAPS II that treats patients with severe mental disorders.

The health professionals who make up the team of this institution are: psychiatrist, nurse with mental health training, psychologist, social worker, occupational therapist, nursing assistant and nutritionist.\(^3\) It is verified that the presence of the dental surgeon is not considered in the health network of these centers.

These patients treated by CAPS II are being treated with medications, in many cases with antidepressants, that may cause adverse reactions of dental interest. The most common clinical manifestations due to adverse drug reactions are xerostomia, alterations in the palate, white lesions, gingival volume increase, bullous disorders such as erythema multiforme, pigmentation, infections, ulcerations, mucositis and hyperplasia.\(^4\)

As a result, dentistry can contribute to the health and treatment of these patients, alleviating pain and decreasing risks to their oral health, as well as helping social interaction with other professions.

The amount of epidemiological investigations on oral manifestations in patients with mental health problems and the consequences of these changes in their quality of life is still low in Brazil. Knowing about oral health and the dental needs of these patients helps in the development of dental treatment protocols and compensatory strategies to promote, prevent and rehabilitate the oral health of this vulnerable population.\(^5\)

Many oral diseases can cause both systemic and psychological impacts. Because of this, it is necessary to study the oral conditions of these patients and thus develop measures that solve the existing problems and improve the quality of the service provided to the community. The objective of this study was to evaluate the oral health status of patients with mental and behavioral disorders treated at a
Psychosocial Care Center in the city of Parnaíba-PI. Specific objectives were to detect oral disorders and their relationship to the medications being used and to identify sociodemographic factors such as gender, age group, schooling, profession and state of origin.

Material and methods

The study was descriptive, transversal and quantitative. Approved by the Research Ethics Committee with opinion number 2,331,828.

Patients attended by CAPS II between October 2017 and March 2018 were included in the study. Of the 70 patients who visited the center frequently, 43 patients accepted to participate in the study by signing the Term of Assent and signing the Term of Consent Free and Clarified by parents or guardians.

A health questionnaire applied to the parents or guardians was used, which was composed of 22 questions subdivided into 04 parts, adequate to the objectives of the study and a clinical record to record the intraoral examination data. The intraoral physical examination was performed by a researcher previously calibrated in the center, under natural light, using a wooden spatula and monitored by professionals of the institution.

All patients along with their caregivers were given oral hygiene instructions and after the clinical examination, patients with necessities received a referral to the School of Dentistry Clinic of a superior institution to treat oral alterations found.

Statistical Package for the Social Sciences (SPSS), version 21, was used to tabulate the data and perform the analyzes, with descriptive statistics for characterization of the sample, percentage for the results found, as well as tables and illustrative graph and comparative.

Results

Out of the 43 participants in the study, it was observed that most of them were self-described women (64.26%) and over 40 years old (45.22%). 85, 68% are from the state of Piauí, 73.78% have incomplete elementary education and 88.06% are unemployed.

Patients treated with CAPS II from Parnaíba-PI are diagnosed with schizophrenia, delusional disorders and affective mood disorders, such as bipolar disorder and depression.

As for the health questionnaire, it can be verified that 83.72% of the interviewees do not have allergy and among those who have cited, they indicated drugs such as Dipirone, Diclofenac, Amato, Zitron and Novalgina. Regarding the history of systemic diseases, 4.65% reported having diabetes, 2.32% hypertension, 2.32% epilepsy and 4.65% gastritis nervosa.

With regard to tobacco, alcohol and drugs, 79.09% say they are not smokers, 95.34% do not consume alcoholic beverages, 97.67% say they have never used any type of drug and 2.32% have used some type of drug in the past.

The medications used by the patients treated in the CAPS II are of continuous use and are organized in Table 1.
Table 1 - Medications most cited by CAPS II patients from Parnaíba-PI

<table>
<thead>
<tr>
<th>Anticonvulsant</th>
<th>Antidepressant</th>
<th>Antiepileptic</th>
<th>Antipsychotic</th>
<th>Benzodiazepines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenobarbital</td>
<td>Fluoxetine</td>
<td>Carbamazepine</td>
<td>Chlorpromazine</td>
<td>Alprazolam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Citalopram</td>
<td>Haldol</td>
<td>Clonazepam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quetiapine</td>
<td>Olanzapine</td>
<td>Diazepam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Risperidone</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sulpiride</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows the percentage of oral complaints found through the health questionnaire.

Table 2- Percentage of mouth complaints cited

<table>
<thead>
<tr>
<th>Complaints</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salivation greater than normal</td>
<td>6,97</td>
</tr>
<tr>
<td>Dry mouth feeling</td>
<td>41,36</td>
</tr>
<tr>
<td>Softened teeth</td>
<td>88,37</td>
</tr>
<tr>
<td>Toothache</td>
<td>60,46</td>
</tr>
<tr>
<td>Bruxism</td>
<td>69,76</td>
</tr>
<tr>
<td>Gingival bleeding after brushing</td>
<td>67,44</td>
</tr>
<tr>
<td>Oral infection in recent years</td>
<td>25,58</td>
</tr>
<tr>
<td>Frequent mouth ulcers or ulcers</td>
<td>62,79</td>
</tr>
<tr>
<td>Herpes simplex</td>
<td>48,83</td>
</tr>
</tbody>
</table>

When questioned about dental appointments, 60.46% do not remember the last time they went to the dentist, 4.65% admit they never went to a dental office. Among those who declared that they had already gone, most (95.34%) said they were going difficult, but all affirmed that they never suffered any kind of prejudice for trying a treatment. Only 2.32% claim that they have already been denied service due to the lack of training of the professional and his team.

Changes such as burn, spotting, attrition, presence of many residual roots, canker sores and gingival hyperplasia were found. In the periodontal evaluation, it was verified that 72.09% of the patients presented dental calculus. Through the clinical examination, the number of decayed teeth (n = 94), lost (n = 484) and obturated (n = 35) were identified. The CPO-D index of 14.25 was thus obtained.

Discussion

According to the IBGE census of 2010, there are more than 45.6 million Brazilians who report having a disability, and of these, 2.6 million are part of the mental deficiencies. In the present study, the number of women (64.26%) with some disorder is higher in men (35.74%). This result is in agreement with those found in these studies.(6-8)

The literature seeks to explain this female predominance, relating these mood disorders with hormonal and psychological factors that some women face. Some authors also say that women are more likely to identify symptoms, admit them and seek treatment and this should be a factor to be considered. (9)

Researchers report that women have higher rates of prevalence of anxiety and mood disorders and men are more prevalent in relation to disorders associated with the use of psychoactive substances, including alcohol. (10)

The results presented in this study demonstrate a domain of patients older than 40 years. This finding is in disagreement with current studies that found that the prevailing mean age was 24 years. (11,12)
Of the 43 patients studied, 85.68% are from Piauí and 88.06% are unemployed. According to data from the IBGE 2017,\(^{(13)}\) unemployment rates in the 4th quarter fell in Brazil, however in the same period there was a 12% increase to 12.6% in the state of Piauí, which is in the list of the six states where the unemployment has increased.

In Brazil, there is a law called Quota Law,\(^{(14)}\) which orders that 2% to 5% of vacancies in companies for people with disabilities be reserved. However, the high cost to adapt the work environment and the need for professional qualification are pretexts used for non-compliance in some cities. These facts must be taken into account against the results found in this and other researches.

With reference to schooling, more than half of the patients have incomplete primary education, according to a study done at CAPS in Butantã where they found a domain of psychiatric patients with incomplete basic education, indicating that the severity of psychiatric symptoms, relating with the complexity of mental illness, also has a negative impact on the individual's educational development and that this must also be considered as one of the reasons for the domain of unemployment in this vulnerable population.\(^{(15)}\)

In the oral complaints reported by the patients, 41.86% said they had a dry mouth feeling more than normal. Only 6.97% have the feeling that saliva a lot. Of the drugs most used by CAPS II patients are anticonvulsants, antidepressants, antiepileptics, antipsychotics and benzodiazepines. Benzodiazepines (anxiolytic drugs) induce the release of an inhibitory neurotransmitter GABA (Y-aminobutyric acid) and have the ability to alter the function of the salivary glands. Tricyclic antidepressants act by blocking the transport of dopamine, noradrenaline and serotonin and, therefore, causing these undesirable effects, being associated with the sensation of burning and dryness of the mouth,\(^{(15,16)}\) justifying this symptomatology of xerostomia.

Fewer than half of the patients interviewed report having had a mouth infection in recent years. 62.79% have thrush or mouth ulceration frequently. Some medications can cause oral ulcerations accompanied by burning and these lesions may be single or multiple. Among the possible drugs that cause these lesions are antidepressants (Fluoxetine), angiotensin-converting enzyme inhibitors (Captopril), non-steroidal anti-inflammatory drugs and analgesics.\(^{(17)}\)

Among the alterations found in the intraoral physical examination is gingival hyperplasia, a considerably small number and in accordance with the results found in a study done at a higher education institution in Piauí.\(^{(11)}\) The drugs most commonly associated with this type of change are anticonvulsants, immunosuppressants and calcium channel blockers. Of the 6.97% of patients who presented with gingival hyperplasia, 4.65% used phenobarbital, 2.32% Carbamazepine and all of Diazepam.

Most patients present dental calculus and when asked about brushing, a large number of the participants admitted that they had gingival bleeding, a result similar to those found in another study.\(^{(18)}\)

In the analysis of the patients' dental condition, the mean DMF-D index found was 14.25, this result corroborates a study conducted in Teresina, where DMF-D index was 14.18,\(^{(19)}\) below the national average, SBBrasil 2010\(^{(20)}\) show the national average CPO-D of 16.75 and the Northeast region of 16.62. But in disagreement with the results found in studies that had an average DMFT of 27.2\(^{(7)}\) and 21.11\(^{(12)}\) which showed that dental treatment in special patients is often mutilating and not rehabilitating. These results can also be explained by the patient's fear of seeking dental services, lack of education and / or difficulty accessing care.
Patients report having bruxism, and a large number report tooth pain. This relationship between pain and parafunctional habits was also found in a study carried out at the Paulo Schneider Special Needs Support Center in the state of Rio Grande do Sul.\(^{(18)}\) The presence of parafunctional habits, such as bruxism, in patients with some type of mental disorder and chemical dependence is already described in the literature.\(^{(20)}\)

Of the survey participants, few admit they have never been to a dental office. Among those who said they had already gone, it is almost unanimous the amount of patients who say that they hardly seek this type of service. Which, in a way, confirms the results on the oral conditions obtained in this research.

Silva et al.\(^{(21)}\) reports that the difficulty in accessing the office is great and that there is a shortage of persons qualified to assist the dental surgeon before, during and after the consultations, as well as adequate equipment and practices.

Although only one of the interviewees reports that they were denied treatment because of the professional's recognition that they did not find themselves fit for care, results found on the vision of the dentist to the care of patients with special needs corroborate this difficulty, 66.7% of the professionals answered who do not feel prepared to care for these patients.\(^{(22)}\)

Many studies evaluating the dental profile of patients with psychic disorders indicated high rates of caries, periodontal disease and edentulism, evidencing poor oral hygiene and lack of patient instructions. Confirming the hypothesis that these patients are more susceptible to the establishment of diseases and oral problems than the general population.

**Conclusion**

The epidemiological profile is characterized by individuals over the age of 40, the prevalence of self-described women, women from the state of Piauí, who have low educational level and are unemployed.

The oral alterations found were burns, spotting, attrition, caries, gingival hyperplasia and periodontal diseases. The caries is the oral pathology most frequently found in the patients analyzed.

We consider that the psychopathologies, the medications used, the socioeconomic factors and the level of education of the patients are the main factors observed so that the patients with mental disorders of the CAPS II of the evaluated municipality, have the presented oral health condition.

The insertion of the dental surgeon in the CAPS multiprofessional team should be considered in order to establish oral health policies and continuous care for these patients, aiming at the promotion and recovery of health as a whole.

**References**