

Evaluation of oral health in patients with mental disorders attended at the clinic of oral diagnosis of a public university

Avaliação da saúde bucal em portadores de transtornos mentais atendidos na clínica de diagnóstico bucal de uma universidade pública

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Resumo

Introdução: Muitas pessoas acometidas por transtornos mentais não conseguem realizar o auto cuidado adequadamente, principalmente em relação à higiene pessoal e em particular à higiene oral. Para esses indivíduos, a prevenção e o acompanhamento clínico contínuo são fundamentais. **Objetivo:** Investigar as afecções bucais que mais afetam os pacientes portadores de transtornos mentais, atendidos na faculdade de odontologia da Universidade Federal do Piauí (UFPI). **Metodologia:** Pacientes atendidos durante o 2º semestre de 2011 e 1º semestre de 2012 foram examinados. O índice CPOD foi utilizado para avaliação da cárie dentária e o índice CPI para avaliação periodontal. As análises estatísticas foram feitas no Programa SPSS (Statistical Package for the Social Sciences), versão 18.0, utilizando-se da estatística descritiva na determinação de médias, desvio-padrão e frequências. **Resultado:** 67,50% dos 40 pacientes tiveram contato com o cirurgião-dentista há mais de um ano, 95% realizavam a própria higiene oral e 70% não usavam fio dental. A média do CPOD foi de 14,18. 49,13% dos pacientes necessitavam de restaurações de uma superfície e 60% necessitavam de prótese dentária. Além disso, 33,75% dos sextantes avaliados apresentavam bolsa periodontal. **Conclusão:** Pode-se perceber que os portadores de doença mental apresentam um elevado risco de desenvolver desordens orais, entretanto, poucos portadores visitam um profissional da odontologia com regularidade. Além disso, a procura tardia por tratamento e a falta de preparo dos profissionais, levam a soluções muitas vezes mutiladoras.

Descritores: Transtornos mentais; autocuidado; higiene bucal; saúde bucal; capacitação profissional; educação em saúde.

Abstract

Introduction: Many people suffering from mental disorders fail to adequately perform self-care, especially in relation to personal hygiene and in particular to oral hygiene. For these individuals, the prevention and ongoing clinical monitoring are essential. **Objective:** To investigate the oral diseases that most affect patients with mental disorders attended in the Dental College of the Federal University of Piauí (UFPI). **Methodology:** Patients treated during the 2nd half of 2011 and 1st half of 2012 were examined. The DMFT index was used for evaluation of dental caries and the CPI index for periodontal evaluation. The statistical analyzes were performed with SPSS (Statistical Package for the Social Sciences), version 18.0, using a descriptive statistics to determine averages, standard deviations and frequencies. **Result:** 67.50% of the 40 patients had contact with the surgeon dentist for over one year, 95% performed their own oral hygiene and 70% did not use dental floss. The average of DMFT was 14.18. Of the patients, 49.13% needed of restorations of one surface and 60% needed dental prosthesis. Moreover, 33.75% of sextants evaluated had periodontal pockets. **Conclusion:** It can be noticed that patients with mental illness have a high risk of developing oral disorders, however, few carriers visite a dental professional regularly. In addition, the delay to seek treatment and lack of staff training, lead to solutions often crippling.

Descriptors: Mental disorders; self care; oral hygiene; oral health; professional training; health education.

INTRODUCTION

Mental disorders encompass a wide range of psychiatric disorders. Patients with mental disorders have a number of special features that may cause tissue damage hard and/or soft tissues of the oral cavity. Among these, the highlights the difficulty to conduct and concentration, preventing them from observing the real need for oral care both in terms of hygiene, as with regard to the perception of changes in normal¹.

Many people affected by these disorders cannot perform oral hygiene satisfactorily. This fact is aggravated by prolonged use of medications that cause dry mouth as well as the excessive use of tobacco products and alcohol that contribute to poor oral health².

The severity of the changes present due to a combination of factors. Added to this, the already mentioned, the damage these individuals and psychomotor problems in accessing dental treatment³. Diseases of the oral cavity affecting these patients are the same as in the general population (caries, periodontal disease, malocclusion), but generally occur more frequently⁴.

Oral health impairment has been associated with an increased risk of other diseases⁵. Members of the multidisciplinary team should be encouraged to help psychiatric patients to maintain their oral health, taking into account their special needs⁶. These individuals should receive early attention and ongoing care to prevent future problems⁷.

From the first semester of the year 2011, the School of Dentistry, UFPI began to receive, for the dental screening of Oral Diagnosis Clinic, patients with mental disorders referred by the Center for Psychosocial Attendance East (East-CAPS) in the city of Teresina - Piauí. It was felt during these visits that the mentally ill have real need for dental treatment. Moreover, a good oral condition prevents complications in the functions of mastication, speech and swallowing, thus preventing dental foci of infection and inflammation that cause pain and can affect the overall health of the individual.

Thus, research on major oral diseases that affect this population is of fundamental importance for the conditions to the dentist to get subsidies in the planning of more effective treatment. In order to acquire these qualities of care, this study aims to assess the oral health status of patients with mental disorders referred to the Clinic of Oral Diagnosis UFPI.

METHODOLOGY

After approval of the research by the Ethics Committee in Research of UFPI (CAAE: 0333.0.045.000-11), held an observational, cross-sectional study, with a quantitative approach, to identify the oral health status and need for dental treatment for patients with mental disorders treated at the Clinic of Oral Diagnosis, School of Dentistry of the Federal University of Piauí, Teresina - PI. The sample consisted of patients referred to dental care at this University in the second half of 2011 and first half of 2012, a total of 40 dental examinations.

These patients underwent (after signing the Consent Form) to an anamnesis contained in proper form, with the caretaker

of these individuals as an aid to obtain more reliable data, and detailed clinical examination performed by an examiner and a recorder. The examiner underwent a training of 12 hours and was later performed calibration ($\kappa=0.81$). The evaluation was performed under artificial lighting in the dental chair, with the use of dental mirror, periodontal probe blunt and sucking disposable.

To assess the prevalence and severity of dental caries, the DMFT index was used - where the component "C" indicates decayed teeth, the "P", the lost or indicated extraction, the component "O", and the restored "D", the number of teeth - described by Klein and Plamer⁴.

In periodontal assessing the mouth was divided into sextants defined by the teeth 18-14, 13-23, 24-28, 38-34, 33-43 and 44-48, where teeth 17, 16, 11, 26, 27, 37, 36, 31, 46 and 47 were examined in each sextant (teeth index). At least six points were examined in each of the ten teeth-indexes (disto-buccal, mid-buccal, mesio-buccal, disto-lingual, mid-lingual, mesio-lingual).

In periodontal evaluation, some prerequisites have been considered.

- The examinations were made of all remaining teeth the sextant when no tooth-index sextant was present;
- The distal surface of the third molars was not considered;
- Each sextant had to present two or more teeth without indication for extraction; otherwise the analysis of sextant was canceled, registering an "X";
- Only six notes were made, one by sextant on the worst situation encountered.

With respect to the use and need of prosthetics, the data from maxilla and mandible were analyzed, based on the presence of prosthetic spaces. An individual may be using, and at the same time, require prosthesis.

To collect data on the conditions of the oral soft tissues, were observed on the entire buccal mucosa, the presence of nodules, papules, vesicles, ulcers, plaques, pustules, macules and tumors.

After the exam, guidance on dental care was provided to patients and families, as well as information on the oral health status. Patients with diseases identified at the time of the study were referred for individualized care in dental clinics UFPI.

The statistical analyzes were performed with SPSS (*Statistical Package for the Social Sciences*), version 18.0, using descriptive statistics to determine averages, standard deviations and frequencies.

RESULT

In the analysis of the tests performed, it was described the socio-economic profile of this population of a mean age of 35.08 years old (SD \pm 10.83), the same number for both sexes (20), a majority of brown color (67.50%), with a household income of one to two minimum wages (47.50%) who received no help from the Government (55%). With regard to education, it was observed that 15% were illiterate and 37% had less than 4 years of study. As for housing, the majority of the subjects lived in brick houses finished (62.50%) and benefited from public water supply (90%).

Regarding oral hygiene and dental history, only 03 patients had not received any dental care throughout their lives, a percentage of 18.92% could not remember the place where they met, 27.03% and 24.32% were treated in private clinics and institutions of higher education, respectively. However, for most, the contact with the dentist had happened more than one year (67.50%). Furthermore, 95% of patients with mental disorders were responsible for conducting their own oral hygiene, all brushed their teeth using toothpaste, and 37.50% reported brushing their teeth three times a day. Not flossing was mentioned by 70% of the participants.

The data relating to lifestyle and the medications used are described in Table 1 and were collected from medical records of patients in their own CAPS-East. When there was no data in the medical record, the answers were searched with the nursing staff or caregivers of patients.

The psychiatric diagnosis of patients with mental disorders treated at the Clinic of Oral Diagnosis of UFPI is described in Table 2.

Table 1. Lifestyle habits and medications used by patients with mental disorders assisted in the clinic of oral diagnostic of UFPI

		N°	%
Do you smoke?	Yes	11	27.50
	No	29	72.50
	Total	40	100.00
How often?	Everyday	08	72.73
	1-3 per week	01	9.09
	4-5 per week	02	18.18
	Total	11	100.00
You consume any alcoholic beverage?	Yes	03	7.50
	No	37	92.50
	Total	40	100.00
How often?	1-3 per week	03	100.00
	Clonazepam	16	40.00
	Haldol	15	37.50
	Risperidone	15	37.50
	Carbamazepine	13	32.50
	Neozine	11	27.50
	Fluoxetine	11	27.50
	Diazepam	10	25.00
	Biperidona	9	22.50
	Amytril	5	12.50
	Phenergan	5	12.50
	Other	15	37.50

Source: Direct research.

The mean DMFT and the average of the components of the index of patients with mental disorders can be observed in Figure 1. With regard to the oral health condition, the 40 patients examined, two had DMFT zero (5%).

Figure 2 presents the results of treatment need in absolute values and percentages.

In Table 3 we can see the percentage changes of the oral mucosa and the use and need for prosthetic patients with mental disorders.

The periodontal status was assessed by the CPI (Table 4).

DISCUSSION

Currently, the concern with special needs is a global issue. Under the coordination of the Ministry of Health Mental Health, 3% of the population suffer from severe and persistent mental disorder, 6% had severe psychiatric disorders arising from the use of alcohol and other drugs, and 12% require some mental health care either continuous or eventual⁸. In this study the most common psychiatric disorders in patients evaluated were Schizophrenia, Recurrent Depressive Disorder, Schizotypal and Acute Psychotic Disorder Polymorph.

Table 2. Diagnosis of psychiatric patients with mental disorders assisted in the clinic of oral diagnostic, UFPI

	N°	%
Schizophrenia	19	47.50
Recurrent Depressive Disorder	06	15.00
Schizotypal Disorder	03	7.50
Acute Polymorphic Psychotic Disorder	03	7.50
Bipolar Affective Disorder	02	5.00
Mild Cognitive Impairment	02	5.00
Panic disorder	02	5.00
Moderate Mental Retardation	02	5.00
Mild Mental Retardation	01	2.50
Dependency syndrome	01	2.50
Paranoid Personality	01	2.50
Severe depressive episode with psychotic symptoms	01	2.50
Mixed disorder Anxious and Depressive	01	2.50
Generalised Anxiety Disorder	01	2.50
Dissociative Disorders of Movement	01	2.50
Schizoaffective disorder of manic type	01	2.50

Source: Direct research.

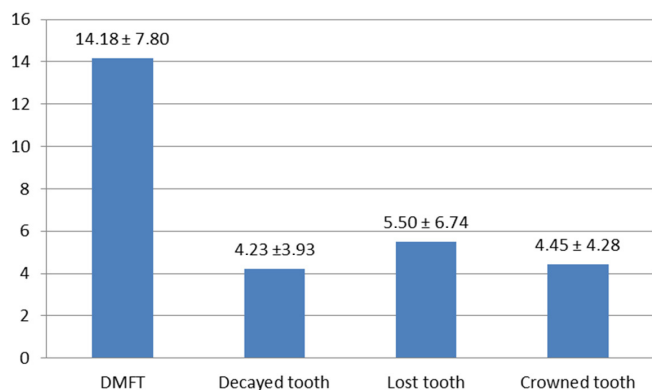


Figure 1. DMFT medium and average of the components of patients' index with mental disorders assisted in the clinic of oral diagnostic, UFPI. Teresina - PI, 2012. Source: Direct search.

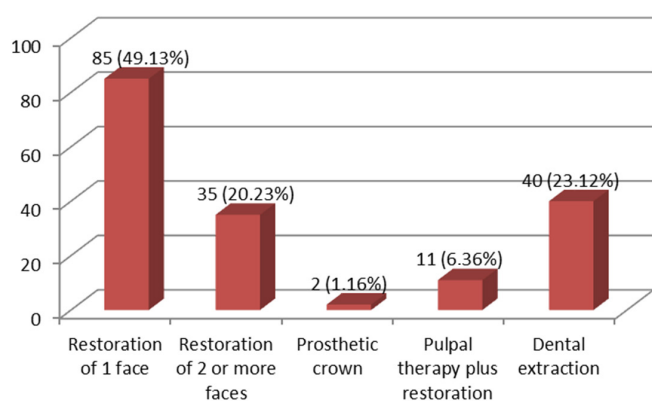


Figure 2. Needs of treatment in relation to the number of teeth of patients with mental disorders assisted in the clinic of oral diagnostic, UFPI.

Table 3. Changes in the oral mucosa, use and need for prosthetic patients with mental disorders assisted in the clinic of oral diagnostic, UFPI

		N°	%
Changes of the oral mucosa	Without changes	33	82.50
	Melanic pigmentation	04	10.00
	Pigmentation due to smoking	02	5.00
	White spot not specified	01	2.50
	Total	40	100.00
Uses Prosthesis?	Yes	06	15.00
	No	34	85.00
Total	40	100.00	
Need to use some type of prosthesis	Yes	24	60.00
	No	16	40.00
Total	40	100.00	

Source: Direct research.

Dental treatment of these patients involves understanding their motor difficulties, behavioral and communication and engagement and commitment on the part of families and caregivers. The dentist should be aware of the knowledge of the psychological state of the patient and family, for preoperative care and the experiences suffered lifelong patient⁹.

Despite the great need for dental monitoring and constant assistance of caregivers during performance of oral hygiene, studies show that regular visits to the dentist is not routine for psychiatric patients¹⁰. This has been proven in this study, since 67.50% of the interviewees had had contact with the dentist for over 1 year. Furthermore, 95% of patients with mental disorders were responsible for conducting their own oral hygiene, which can affect the oral health of patients, in view of the possible motor difficulties presented by them.

Another problem is the frequent use of specific drugs that have the potential to induce changes in the oral cavity and sequelae. Drugs such as Diazepam, Clonazepam, and Carbamazepine Fluoxetine may be associated with xerostomia, the inhibition of the function or change in salivary composition and development of ageusia, dysgeusia or hypogeusia. Already Risperidone is associated with increased salivary flow and drooling. is essential in the dental practice, knowledge of changes and side effects of oral medications used by many patients¹¹. In this study it was found that on average, were prescribed for these individuals about 3 drugs, the most common being: Clonazepam, Haldol, Risperidone and Carbamazepine.

A study of two hundred users of the Psychosocial Care Center II (CAPS II) Blumenau - SC, in order to assess the prevalence of oral mucosal stomatological lesions these patients, 28.5% of the examined patients had lesions in the oral mucosa. In addition, 1% of oral lesions were diagnosed leukoplakia and 2% were nicotinic stomatitis. This can be explained by the fact that 42.5% of the population being smokers, since the consumption of tobacco products is a predisposing factor to the onset of some premalignant oral lesions⁸. These data were not confirmed in this study, since only 17.5% of patients had abnormal oral mucosa and 27.5% reported being smokers.

Some research indicates an average experience of decay similar in patients with mental disorders and the general population, however, the extraction is the treatment used most often. The historical contempt with this part of the population and with their oral health, allied to poor training of health professionals or refusal to meet such demand can explain this situation³.

With regard to the oral health condition, in this research, of the 40 patients examined only two had DMFT zero. The component "lost" was the largest contributor to the index, which confirms the suspicion of mutilating dental treatment or lack of access to dental care. This situation is aggravated due to the patients' difficulty in perceiving a problem already installed and running difficult treatment, because these individuals have low motivation, poor and limited cooperation comunicação¹⁰.

For comparison of the results it was obtained in this study data from the National Epidemiologic Survey¹², we used the indexes to the city of Teresina, aged 35-44, by virtue of the mean

Table 4. Periodontal Condition measured by the CPI of patients with mental disorders assisted in the clinic of oral diagnosis, UFPI. Teresina-PI, 2012

Condition of the sextant	Healthy	Bleeding	Calculation	Shallow pouch	Deep pouch	Excluded
Region	N° (%)	N° (%)	N° (%)	N° (%)	N° (%)	N° (%)
Upper Right	07 (17.50)	05 (12.50)	07 (17.50)	11 (27.50)	05 (12.50)	05 (12.50)
Upper Central	19 (47.50)	07 (17.50)	03 (7.50)	05 (12.50)	0 (0.00)	06 (15.00)
Upper Left	02 (5.00)	08 (20.00)	06 (15.00)	13 (32.50)	06 (15.00)	05 (12.50)
Lower Left	02 (5.00)	09 (22.50)	06 (15.00)	13 (32.50)	01 (2.50)	09 (22.50)
Lower Central	12 (30.00)	07 (17.50)	12 (30.00)	07 (17.50)	02 (5.00)	0 (0.00)
Lower Right	03 (7.50)	09 (22.50)	04 (10.00)	16 (40.00)	02 (5.00)	06 (15.00)
Total (N°)	45 (18.75)	45 (18.75)	38 (15.83)	65 (27.08)	16 (6.67)	31 (12.92)

Source: Direct research.

age of participants this research to be 35.08 ± 10.83 years old. According to SBBrazil¹² 2010 in Teresina, the average DMFT decayed component for this age group was 2.20, below the average number of decayed teeth in this study (4.45) which can reaffirm the idea of dental care neglected.

Several studies reveal the strong need of restorative treatment and dental prostheses among psychiatric patients^{3,8,10,13}. In the present study, it can also be observed. The need was most frequent one-surface restorations (49.13%) followed by the need for extractions (23.12%). Most patients examined did not use prosthesis (85%), but had the need to have their oral health rehabilitated (60%).

According to data from 2010 SBBrazil¹² conducted in Teresina, aged between 35 and 44 years old, the presence of calculus was present in 24.1% of the examined and 24.6% of the individuals had shallow and/or deep pouch. In the present study, 15.83% of the examined presented calculation and 33.75% of the subjects were diagnosed with bags shallow and/or deep, showing that the disease appears to be more severe in patients with mental disorders.

Patients under hospitalization underwent studies, a dynamic of service different from the dynamics established in CAPS^{10,13}. However, the highest proportion of periodontal disease corroborates with the findings of this research. Changes in

the quality and quantity of saliva, changes in oral microbiota, endocrine dysfunction and reduced resistance to infections among these patients could lead to a higher incidence of periodontal diseases¹³.

People with serious mental illness are at increased risk of developing oral disorders and have higher treatment needs compared to the general population. In addition, oral health seems is not seen as a priority in people with mental disorders. Performing groups to work motivation and oral health education can encourage self-care, self-perception, and also the care performed by family members¹⁴.

The main limitations of this study are the small number of patients examined and the absence of a control group. It is suggested further researches using a sample that reflects more accurately the large universe of patients with psychiatric disorders.

CONCLUSION

The oral health evaluation showed a high prevalence of periodontal disease, caries and extracted teeth, showing that when this population was assisted, the treatment of choice was crippling. Realized that even with all the scientific advancement in the field of dentistry, this population has had poor oral health.

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CONFLICTS OF INTERESTS

The authors declare no conflicts of interest.

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