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Oral and dental health issues in people with mental disorders

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Abstract

Patients with mental disorders are subject to a greater number of risk factors for oral and dental disease than the general population. This is mostly caused by the side effects of the medications that they receive, lack of self-care, difficulty to access health services, a negative attitude towards healthcare providers, and patients' lack of cooperation in dental treatments. The most common psychiatric disorders in our population are depression, anxiety disorders, schizophrenia, bipolar disorder, and dementia. In disorders such as anxiety and depression, the main issue is the loss of interest in self-care, which results in a poor hygiene. The most frequent oral and dental diseases in these patients are dental cavities and periodontal disease. The purpose of this brief review is to provide up-to-date information about the management of oral and dental diseases of patients with mental disorders.

Introduction

Mental illnesses are very prevalent in the population, approximately 17.6% [1] and, according to some predictions, they will be the second cause of morbidity in 2020 [2]. Among the general population, one in four people will suffer an episode of mental disorder during their lifetime. We also need to consider that many people go undiagnosed or don't completely adhere to their treatments, this takes them to situations where they are not able to reach a complete remission, and to a worsening of their disease [3],[4].

Access to healthcare is a basic human right. This is especially relevant when we refer to this vulnerable population, where stigmatization and discrimination make access to healthcare more difficult [5]. These patients are subject to a greater number of risk factors for oral and dental disease than the general population, due to secondary effects of medications they receive, lack of self-care, difficulty to access health services, their attitude to

the healthcare providers and lack of cooperation with dental treatments [6].

The goal of this brief review is to provide up-to-date information about the management of oral and dental diseases that should be provided to patients with mental illnesses. We will analyze the most prevalent oral and dental issues in patients with depression, anxiety, schizophrenia, bipolar dementia with special consideration in their management. We also provide a brief note on bruxism: although this is not a mental disorder, it may be present in people with mental illnesses and psychosocial problems [7],[8].

Methods

A non-systematic search of literature published until 2017 was performed using the MEDLINE/PubMed and LILACS databases, we also searched institutional databases from the World Health Organization, the National Institute of Mental Health of the United States of America and the ones

of scientific societies. This was complemented with search in up-to-date books and book chapters from the specialty. The terms searched were: "Oral Health", "Dental Health", "Mental Health" and "Mental Disorders". Letters to the editor, consensus, and articles with unavailable full texts were excluded from the search. Original articles, reviews in English and Spanish that authors considered useful for the investigation were included in the search.

Results

Depression

Depression is a frequent and debilitating disorder characterized by loss of energy, anhedonia, inability to concentrate, lowering of libido, and feelings of sadness and hopelessness which interfere with the daily activities of individuals [9]. This loss of interest has an impact on their oral and dental health because those who previously enjoyed good oral hygiene, lose interest in personal care, which is why dental cavities are the most frequent oral and dental health issue in this population [10]. This lack of hygiene can ultimately lead to teeth loss. It is important to mention that oral and dental health issues generated by the conduct of patients with depression can in turn decrease their self-esteem, negatively affecting prognosis of treatment of their mental illness [11].

Gingivitis, xerostomia, oral candidiasis, oral lesions and temporomandibular joint lesions are characteristic findings in patients with depression [12]. In general, these findings, especially xerostomia, are a result of the antidepressant medication. Thus, it is important for dentists to provide education to these patients about how to prevent these issues in order to avoid possible complications. Professionals should insist in the use of artificial saliva, mouthwash and topical fluoride, and in the treatment of oral candidiasis when present [13].

It is important that dentists are able to identify these patients, since this is a group with particular characteristics and common risk factors for developing oral and dental diseases. Furthermore, the dentist visit is fundamental to provide a holistic attention to this group of patients [14].

Anxiety

Anxiety is a syndrome that includes a group of subjective and objective manifestations, it is characterized by a state of heightened alert, associated to signs and symptoms of autonomic excitation: the same that would accompany the presence or expectation of an objective danger, even in the absence of said danger [15]. The main conditions manifested in these patients include dental cavities; periapical, gingival, periodontal and pulp lesions, and cellulitis or abscesses of the oral cavity [16].

Changes in habits and behavior are frequent disorders such as anxiety and depression, since both are characterized by a poor oral hygiene, attributed to the loss of interest [17]. Likewise, smoking is more prevalent in people with mental health illnesses such as anxiety, this practice in turn increases the risk of having dental cavities due to changes in the buffer capacity of the saliva [18],[19].

Fear of going to the dentist is a common condition with a prevalence oscillating between 6 and 20%, independent from culture and country, it is more frequent in females [20],[21]. The most frequent fears regarding dentist consults are fear of the noise of the equipment, the vibrations in the mouth, and the needles [22].

Patients with anxiety show signs such as agitation, tremor, and frequently ask many questions about the procedures [23]. The anxiety produced by the dentist consult can be managed with behavioral techniques or with hypnosis. A calm, safe, and reassuring environment created by the dental care providers helps alleviate the symptoms. If needed, providers can use sedation or even general anesthesia [24].

Schizophrenia

Schizophrenia is a chronic, severe and incapacitating disease. It is defined by the presence of abnormalities in one or more of the following domains: delusions, hallucinations, disorganized thought, disorganized behavior, and negative symptoms: poverty of thought, anhedonia and flat affect [25]. A study with patients with schizophrenia shows that 61% of these patients have poor oral hygiene, including conditions such as dry mouth, teeth loss and severe forms of dental cavities. The dryness of the mouth can be explained by the secondary effects of antipsychotic medication used in these patients [26],[27].

Patients with schizophrenia should be considered a high-risk group for developing dental disease. This is evidenced in studies showing that they present a worse dental health than the general population [28]. It is also important to note that periodontal disease that affect these patients is related with subclinical atherosclerosis, which may predispose them to develop cardiovascular disease [29]. Other factors affecting the dental health of the patients are a low frequency of teeth brushing, a lower number of visits to the dentist, smoking and poor nutrition [30],[31],[32].

Some studies have found an association between type of antipsychotic medication administered and oral hygiene. First generation antipsychotics are more likely to cause extrapyramidal symptoms (such as tremors) which affect the process of tooth brushing [33]. It has been proven that negative symptoms are more strongly related to poor oral hygiene [34].

From the point of view of prevention, there should be programs of dental care especially targeted toward this population. These patients and their families should receive education about the importance of oral and dental care and about a correct communication with the treating physician. Dentistry schools should train their students to be able to handle this type of situations [35].

Bipolar disorder

Bipolar disorder is characterized by mood changes that vary from manic episodes to depression, sometimes these changes occur very rapidly. During the manic phase, the patients appear extremely talkative, hyperactive and with a marked disinhibition; on the other hand, patients in the

depressive state show symptoms similar to those exposed above in the segment about depression [36]. These patients are at higher risk of developing dental cavities, xerostomia, abnormalities in flavor perception, and bruxism [37]. It is important to be aware of the many interactions of the drugs used for the treatment of these patients. It is advisable for the dentist to contact the treating psychiatrist before initiating any medications [38].

Dementia

Dementia is a syndrome characterized by progressive loss of memory, disorientation, and problems with cognitive functions. It can be caused by diseases such as Alzheimer, vascular dementia, dementia with Lewy bodies, among others [39].

Studies show that patients with dementia have a deficient oral and dental health compared to the general population, there is a higher incidence of cavities in these patients and they suffer from a reduction of the flow of saliva [40],[41]. Therefore, it is important to provide education about oral health to these patients, as well as using artificial saliva substitutes and stimulants if necessary, topical fluoride, a good oral hygiene, and regular visits to the dentist [42],[43].

Patients with dementia may not be able to interpret or refer pain or discomfort, some manifestations that can be interpreted as signs of discomfort are refusal to eat, constant self-beating in the face, augments in salivation, increased restlessness, and groaning or screaming. Dental healthcare providers should be aware of these signs and should educate caregivers so that the patient can access health services in a timely fashion [44],[45],[46].

Bruxism

Although bruxism is not a mental disorder, its relationship with psychopathologic dysfunctions cannot be denied. Bruxism has been mentioned as a motor equivalent of anxiety [47], its coexistence with manifestations of panic and more sensitivity to stress has been studied [48]. Some studies show a higher prevalence of both manic and depressive symptoms in people with bruxism than in non-bruxist people [49].

Bruxism is the habit of clenching and gnashing of teeth, with nonfunctional unconscious movements that can occur during wakefulness or during sleep [50],[51]. This disorder can cause dental wear, pain in the mandibular area, headaches and, in the most sever forms, affection of speech and swallowing [52]. Peripheral, central and psychosocial factors are relevant in the pathophysiology of bruxism, among those factors are sleep disorders, stress, anxiety, depression [53], and other oral disorders [54]. Currently, treatment of this disorder has two main goals: decreasing the effects produced by bruxism and getting the patient to identify this habit. The techniques used include therapeutic exercises, manual therapy, cognitive behavioral therapy, electrotherapy and acupuncture [55],[56]. Very often, dental treatments are required to repair the occlusal harmony [57].

Conclusion

Seeing that oral health is a very important part of wellbeing in patients with mental illnesses, we should focus on providing these patients an integrated and multidisciplinary attention that includes general practitioners, psychiatrists, dentists, psychologists and nutrition professionals [58]. It is of especial importance to be aware of the common issues in this population, since they are vulnerable groups for many reasons, among which we can mention lack of motivation, lack of oral hygiene, fear of visiting the dentist, difficulty to access health services, and adverse effects of medications, mainly xerostomia. The most prevalent dental diseases among these patients are dental cavities and periodontal disease.

Notes

From the editor

The authors originally submitted this article in Spanish and subsequently translated it into English. The *Journal* has not copyedited this version.

Declaration of conflicts of interest

The authors have completed the ICMJE Conflict of Interest declaration form, and declare that they have not received funding for the report; have no financial relationships with organizations that might have an interest in the published article in the last three years; and have no other relationships or activities that could influence the published article. Forms can be requested by contacting the author responsible or the editorial management of the *Journal*.

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