

Poor oral hygiene in the mentally ill: Be aware of the problem, and intervene

Snehal Kadia, MD, Radhika Bawa, MD, Hema Shah, MD, Puneet Narang, MD, and Steven Lippmann, MD

Poor oral health is common among mentally ill people and is related to inadequate nutrition, poor self-care, substance abuse, and medication side effects.¹ Poor oral hygiene is a significant problem because it results in dental pathology that has an adverse influence on the whole body.

Compared with the general population, mentally ill patients are 3 times more likely to have their teeth removed.² In a survey of mentally ill adults, 92% were found to have tooth decay—of which 23% were untreated and 40% smoked tobacco.³ Approximately 9% have periodontal disease, which most often occurs in those who smoke cigarettes.⁴

Lifestyle contributors

Drug abuse facilitates dental diseases, as evidenced by the high rate of caries among methamphetamine users.⁵ The drug induces xerostomia, encouraging users to drink sweetened beverages; this, combined with limited oral care, results in profound dental decay (“meth mouth”). Oral cocaine users often exhibit dental erosions or abrasions, gingival lacerations or necrosis, and mucosal lesions. Smoking *Cannabis* is associated with an increased rate of gingivitis, alveolar bone loss, leukoplakia, and oral papilloma or other cancers.⁵ Heroin users are at increased risk of tooth decay, periodontal disease, and oral infection.⁵

Alcohol consumption increases the risk of oral cancer. Long-term alcohol use suppresses bone marrow function, causing leukopenia and resulting in immunosuppression and an increased incidence of dental infections.⁶ Excessive alcohol con-

sumption also can cause thrombocytopenia and bleeding, which can complicate dental procedures.

Smoking cigarettes increases the incidence of periodontal disease, especially necrotizing gingivitis and candidiasis.⁷ Ninety percent of patients with schizophrenia smoke—compared with up to 70% of patients with other psychiatric disorders, and 19% of the general population.^{7,8} Physiologic aspects of schizophrenia reinforce the smoking habit.⁷

Somatic ailments. Psychiatric disorders are strongly associated with diabetes, obesity, hypertension, stroke, heart disease, and arthritis, all of which contribute to oral pathology. Older age, greater dysfunction, longer duration of illness, and smoking are predictors of adverse dental outcomes.

Anxiety, depression, stress—all of these disorders increase the circulating level of cortisol, thus raising the risk that periodontal disease will progress.⁹ Periodontitis increases the risk of stroke and heart attack by accelerating atherosclerotic plaque formation.¹⁰ Depression, anxiety, and substance abuse can lead to temporomandibular disorders that cause pain and restrict jaw movement.¹¹ Stressed patients may experience muscle tension and bruxism, which can lead to temporomandibular joint discomfort.

Eating disorders. Patients who induce vomiting may exhibit enamel erosions (especially on the anterior maxillary teeth), increased tooth hypersensitivity, decay, and wear on dental restorative work.

Drs. Kadia, Bawa, and Shah are Observer Physicians and Dr. Lippmann is Professor, University of Louisville School of Medicine, Louisville, Kentucky. Dr. Narang is Staff Psychiatrist, Regions Hospital, St. Paul, Minnesota.

Disclosures

The authors report no financial relationships with any company whose products are mentioned in this article or with manufacturers of competing products.

Smoking Cannabis is associated with an increased rate of mouth diseases, bone loss, and cancers

Atypical odontalgia, characterized by chronic, burning pain in teeth and gums, is associated with depression and anxiety.¹¹ Misdiagnosis can result in extractions or procedures without an appropriate indication and failure to alleviate the pain.

Medication side effects. Xerostomia can increase the risk for caries, periodontal disease, and oral infections such as candidiasis, glossitis, stomatitis, and parotitis.⁹ Extrapyramidal side effects (tardive dyskinesia, dystonia) may cause tooth damage and make managing dentures difficult.⁶

What to tell patients, and what you can do for them

Encourage your patients to reduce their sugar intake, brush and floss regularly, and work to stop smoking or ingesting substances of abuse. Teach appropriate hygiene and nutrition, which reduces the risk of dental caries, infection, and related problems. Recommend periodic oral health screening and how to secure such dental care.

From your position of familiarity with patients' psychopharmacotherapy, make an effort to personalize and adjust their regimens when dental disease is present to address concerns about oral health that can be caused by medication side effects.

A multidisciplinary approach with patient advocacy, involving you and the

patient's dentist and primary care physician, facilitates health care and works to offer the patient access to global medical services.

References

1. Mental Illness Fellowship of Australia Inc. Overview of the oral health of people affected by mental illness. <http://www.wfmh.com/links/external-contacts/mental-illness-fellowship-of-australia>. Accessed June 18, 2014.
2. Kisely S, Quek LH, Pais J, et al. Advanced dental disease in people with severe mental illness: systematic review and meta-analysis. *Br J Psychiatry*. 2011;199(3):187-193.
3. Dental caries (tooth decay) in adults (age 20 to 64). National Institute of Dental and Craniofacial Research. <http://www.nidcr.nih.gov/DataStatistics/FindDataByTopic/DentalCaries/DentalCariesAdults20to64.htm>. Updated January 6, 2014. Accessed June 18, 2014.
4. Periodontal disease in adults (age 20 to 64). National Institute of Dental and Craniofacial Research. <http://www.nidcr.nih.gov/DataStatistics/FindDataByTopic/GumDisease/PeriodontalDiseaseAdults20to64.htm>. Updated January 6, 2014. Accessed June 18, 2014.
5. Maloney WJ. The significance of illicit drug use to dental practice. http://www.webmedcentral.com/wmcpdf/Article_WMC00455.pdf. Published July 28, 2010. Accessed June 18, 2014.
6. Oral health care for people with mental problems: guidelines and recommendations. British Society for Disability and Oral Health. <http://www.bsdo.org.uk/guidelines/mental.pdf>. Updated January 2000. Accessed June 18, 2014.
7. Lohr JB, Flynn K. Smoking and schizophrenia. *Schizophr Res*. 1992;8(2):93-102.
8. Centers for Disease Control and Prevention (CDC). Vital signs: current cigarette smoking among adults aged ≥18 years—United States, 2005-2010. *MMWR Morb Mortal Wkly Rep*. 2011;60(35):1207-1212.
9. Yoffee L. The link between oral health and medical illness. <http://www.everydayhealth.com/dental-health/oral-conditions/oral-health-and-other-diseases.aspx>. Updated November 9, 2012. Accessed June 18, 2014.
10. Demmer RT, Desvarieux M. Periodontal infections and cardiovascular disease: the heart of the matter. *J Am Dent Assoc*. 2006;137(suppl 2):14S-20S; quiz 38S.
11. Mental illness and the dental patient. American Dental Hygienists' Association. <http://www.adha.org/course-10>. Accessed June 18, 2014.