The National Association of Mental Illness defines mental illness as "a medical condition that disrupts an individual's thinking, feeling, mood, ability to relate to others, and daily functioning. The change in mental awareness may often result in a diminished capacity for coping with the ordinary demands of life." Often this inability to deal with daily mundane tasks includes oral self-care. People with mental illness may also experience xerostomia caused by medication use. This combination can lead to severe oral complications. Dental hygienists who are responsive to such challenges have the opportunity to provide patients with quality treatment and recommendations that may restore balance to the oral cavity. This month's Sunstar Spotlight features Doyle, Longley, and Brown, all of whom have extensive experience in assisting people with these specific needs. Their expertise provides dental professionals with a wealth of information to help ensure successful dental visits and improve the oral health of this vulnerable population.

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**Article**

One in three adults in the United States will experience mental illness at least once. One in four has suffered a mental illness in the past year. Approximately 3% of American adults are affected by severe and chronic forms of mental illness. Diminished oral health is often a direct result of mental illness. In general, the longer a person has been mentally ill, the more likely his or her oral health needs have gone unmet.

Prior to the Community Mental Health Act of 1963, large state hospitals provided much of the shelter, support services, and oral health treatment received by patients with mental illness. Its success was mixed, but deinstitutionalization did open the door for community dental hygienists to help meet these needs. Today, dental hygienists can effectively treat patients with mental illness by providing oral health care that considers the whole person. To implement this approach, dental hygienists need to understand the basics of psychiatric disorders and their effects on oral health and treatment delivery (Table 1).

**Barriers to Oral Health Care**

Mental illness can interfere with the ability to work and/or perform ordinary social functions, including making and keeping dental appointments. Patients dealing with severe depression, schizophrenia, or substance abuse may find even basic oral self-care impossible (Figure 1). People with mental illness may also experience altered taste perceptions and reduced salivary flow caused by medication use. Xerostomia can promote caries and mucosal infection; inflamed, fissured tongue; enamel erosion; and glandular enlargement, as well as infection and inflammation of the gingiva. Many patients with severe mental illness smoke, and high sugar consumption is common. About 40% of those with mental illness also have a substance abuse disorder. In short, the odds are against optimal oral health for patients who are mentally ill.
Mental illness can also affect the ability to receive treatment. Patients with a history of panic attacks may avoid the stress of seeking professional dental care. Individuals with dental phobias may seek treatment only when oral pain persists. Unless the phobia is addressed, these patients may continue to avoid oral health care once the pain is resolved. People with schizophrenia can be excellent dental patients, but their delusions can extend to the oral cavity.

Cost is another barrier to care among people with mental illness. Those with severe mental illnesses are often supported by Social Security disability programs and have very little income. Dental professionals serving these populations need to be willing to explore options for payment, including dental insurance, Medicaid, family support, community clinics with sliding fee scales, and private practice discounts. If applicable, the patient's case manager should be included in the search for payment options and helping him or her make and keep dental appointments. When working with state agencies, advocating for what is medically necessary is a must. The consequences of overlooking oral health needs can be devastating (Figure 2) and even fatal.

**How Can Dental Hygienist Help?**

Initial intake is critical to providing quality care, and it is the first opportunity to get acquainted with the whole person. Questions about psychiatric or mental health care, substance use, dental fear, and depression or anxiety are helpful in eliciting mental health history. Because 60% of mental illnesses go undiagnosed, dental professionals may be the first to notice psychiatric disorders. If a referral for mental health treatment seems advisable, stepping out of the "dental role" and caring for the whole person may encourage the patient to seek help.
Prescription, over-the-counter, and alternative medications taken in the past 12 months should be listed, along with the condition being treated. Systemic health problems are more common among people with mental illness, and some medical illnesses can cause psychiatric symptoms. Psychotropic medications have both short and long-term effects. They may interact with drugs used in dentistry, as well as other medications patients are taking. For example, epinephrine and other vasoconstrictors should be limited or avoided in patients taking certain psychotropic drugs due to the potential for serious hypotension and/or hypertension and/or cardiac arrhythmias. Nitrous oxide can interact with psychotropic medication, causing hypotension, and may increase the risk of hallucinations in patients with psychosis.11

The patient's prescribing physician(s) should be identified, but patient consent is required for consultation. A matter-of-fact approach should be used. The patient will express what he or she is comfortable discussing. Developing an ongoing relationship with patients is critical. If possible, work closely with family, mental health professionals, or friends to facilitate comprehensive dental care. Schedule appointments for patients with cognitive impairment on the same day of the week and time of day. Appointments should be short with frequent breaks. Begin with simple procedures, such as prophylaxis, to give the patient a good experience, and offer consistent positive reinforcement. Let the patient be the guide to what can be accomplished during one appointment. For some patients, emergency care may be all they can handle.

TABLE 1. Mental Illnesses and their Dental Implications5–7 (See larger version at end of paper – page 6).

Successfully delivering oral health care to patients who are mentally ill is a balancing act. Dental hygienists must balance their communication style with what they know about the patient. While patients who are anxious respond well to reassurance, suspicious patients require lots of information. Receiving professional dental care is stressful for some patients. Watch for signs of fear and anxiety, and ask the patient if he or she is OK. Give fearful patients control over when procedures begin and end. Establish signals to use when talk is difficult, and help the patient deal with fear by using distractions, such as music or by teaching relaxation techniques.8 Respond appropriately to complaints of pain because uncontrolled pain can itself create dental phobias. While pre- and postoperative medication can be useful, patients who learn to achieve control of fear and anxiety through cognitive–behavioral methods will be more successful in dealing with recare appointments. Learning cognitive–behavioral methods to address fear can also help patients with mental illness in other settings.
Psychosocial factors often contribute to chronic or disabling orofacial pain, and dental treatment may be most effective when provided in combination with psychological treatment. The possible association between stress and medication side effects makes some dental problems, such as temporomandibular disorder, more common in people with mental illness.

Dental treatment and manipulation in the mouth can trigger strong feelings that may be unrelated to the procedures at hand. Patients with a sexual or physical abuse history may have particular difficulty accepting dental treatment. For example, tipping the dental chair back can trigger flashbacks symptomatic of post–traumatic stress disorder. Dental hygienists can give patients control over what happens in the dental chair by asking their feelings as the work progresses and responding appropriately. Ensuring that patients will return for recare is far more important than completing a specific amount of work during one appointment.

Oral self–care regimens need to be simple for patients with chronic mental illness. Individualized instruction on how to use a toothbrush, toothpaste, and interdental cleaners is integral to success. If cost isn't an issue, prescription mouthrinses, professional fluoride application, and products for xerostomia management can be beneficial. An instruction checklist should be created for the patient's bathroom wall, and compliance should be reinforced with praise.

Summary

Dental, mental, and physical health are not separate entities. Still, recognizing the importance of their interrelation has been a slow process. Dental hygienists will definitely encounter patients with mental illness in the operatory, thus, understanding its possible effects on oral health and treatment delivery is key to developing successful approaches to providing oral health care. The added physical comfort and social acceptance that accompany good oral health significantly impact quality of life. Learning how to treat the whole person expands and elevates the practice of dental hygiene.

Patricia E. Doyle, RDH, BS, FADPD, works in a general private practice in Seattle. She is also an affiliate faculty member in the Department of Oral Medicine at the University of Washington (UW) School of Dentistry in Seattle and a guest lecturer for UW's Dental Education in Care of People with Disabilities Program. Doyle volunteered for 29 years at Harborview Medical Center Mental Health Services, Outpatient Programs in Seattle, assisting clients with mental illness achieve better oral health. She is a fellow of the Academy of Dentistry for Persons with Disabilities. Doyle's life's work has focused on the dental–mental connection and she has received national recognition for her contributions to this field.

Alison J. Longley, BA, PhD, is a writer and a neuroscientist at the Pacific Sciences Institute in Friday Harbor, Wash, and has published in the fields of neuroscience and mind–body interactions.

Patricia S. Brown is the information specialist and coordinator for the UW Oral Health Collaborative. She is a past chair of the Washington State Oral Health Coalition and founder of the Yakima County Oral Health Coalition.


NOTE:

Additional content on the Web – Resources for dental hygienists and patients experiencing mental illness are available with the online version at: [www.dimensionsofdentalhygiene.com](http://www.dimensionsofdentalhygiene.com)
**TABLE 1. Mental Illnesses and their Dental Implications**

**Anxiety Disorders**
Anxiety disorders include panic disorders, phobias, and post-traumatic stress disorder (PTSD). Panic disorders manifest as a sudden onslaught of symptoms of panic such as pounding heart, nausea, and fear of dying, that occur within a specific period-reaching their peak within 10 minutes. Dental fear intense enough to interfere with a person's ability to receive dental treatment is an example of specific phobia. PTSD can occur following extreme trauma with symptoms including flashbacks (intrusive recollections) and/or distress in response to reminders of the event.

**Cognitive Disorders**
Cognitive disorders are interruptions in the brain's ability to think, and they include dementia, delirium, and amnestic disorders. Dementia is characterized by impairments of memory, language, motor skills, object recognition, and the ability to plan, organize, sequence, and think abstractly. Patients with dementia may be able to converse and follow instructions, but over the course of 15 minutes to 20 minutes, they may forget where they are and how they got there. Dental professionals may need to reintroduce themselves periodically and explain what they are doing. Family members or caregivers should be involved in dental care plans, written checklists of instructions for self-care should be provided, and the dental condition should be stabilized as early as possible. Preventive measures such as antimicrobial mouthwashes and fluoride varnish should be implemented.

**Eating Disorders**
Eating disorders are characterized by abnormal eating habits. Bulimia nervosa, anorexia nervosa, and binge eating disorder are the most common. The presence of dental erosion, particularly among young women, should raise the possibility of bulimia, an eating disorder characterized by binge eating and inappropriate compensatory behaviors, such as self-induced vomiting. Increased caries and enlarged parotid glands may also be present. Dental hygienists are in a unique position to recognize undiagnosed eating disorders. Providing appropriate dental care includes initiating referral to a mental health professional.

**Mood Disorders**
Mood disorders, which include major depressive and bipolar disorders, are quite common. For every patient in a dental practice with hypertension, there is one experiencing depression. People with major depressive mood disorder may suffer depressed mood, loss of interest in almost everything, and experience other symptoms such as chronic fatigue. Bipolar disorders are characterized by periods of abnormally elevated mood, as well as depressed mood. While patients with mood disorders may have a low pain tolerance, pain medication use can increase the risk of self-harm and should be considered carefully.

**Personality Disorders**
Personality disorders are enduring patterns of inner experience and behavior that vary significantly from cultural norms and lead to distress or functional impairment. While patients with personality disorders may be suspicious, dependent, or perfectionists, dental professionals can help them deal with their emotions in a positive way. Choices should be offered and good communication with active listening is important.

**Psychotic Disorders**
Psychotic disorders include schizophrenia and other disorders characterized by delusions, hallucinations (perceptions that are felt as real in the absence of an external stimulus), and/or disorganized speech or behavior. People with schizophrenia experience abnormally reduced emotions, thinking, or volition. The symptoms persist for at least 6 months and significantly interfere with the patient's ability to function. The confusion, apathy, and limited social support often associated with psychotic disorders can make oral self-care and dental care difficult. Distorted pain perception may create the inability to distinguish tooth pain from psychic pain. Supportive, calm appointments where the patient knows what to expect work best. Antipsychotic medications have numerous side effects that relate to oral health and the delivery of care. For the patient with orthostatic hypotension, the change from horizontal to vertical positioning should be done slowly. If the patient has extrapyramidal syndrome or tardive dyskinesia—which cause motor symptoms such as involuntary movements—a consultation with his or her physician to discuss a change in medications may be helpful. Nitrous oxide can potentially increase the risk of hallucinations, and should be avoided.

**Somatoform Disorders and Atypical Odontalgia**
Somatoform disorders include somatization disorder and body dysmorphic disorder. The person with somatization disorder has a history of physical complaints unexplained by a medical condition or the direct effects of a substance. These complaints begin before age 30 and may include pain, gastrointestinal, sexual, and neurological symptoms that are not intentionally produced or feigned. Somatization disorders can present with medically unexplained pain or other symptoms. Potentially leading to extractions, root canals, or other invasive treatments without resolving the original symptoms. If a psychogenic origin of symptoms is suspected, the possible causes—including stressors and emotional factors that may be reduced by psychological or psychiatric treatment—should be discussed with the patient.

Those with body dysmorphic disorder are preoccupied with imagined defects in appearance that cause significant distress and/or impaired function. Informed patient consent to treatment is very important, as illustrated by a case where the wisdom teeth of a dental patient with body dysmorphic disorder were extracted, although she felt helpless to stop the procedure.

Atypical odontalgia is characterized by chronic oral or dental pain without a clear cause and it originates from sensitization of nerves. Tying at a pain center may spare patients unnecessary dental procedures and lead to effective treatment.

**Substance-Related Disorders**
Substance-related disorders result from dependence on or abuse of substances such as alcohol, hallucinogens, or other addictive drugs and/or intoxication with or withdrawal from substance use. They also include mental disorders brought about by the use of alcohol or drugs, e.g., substance-induced persistent dementia. People dually diagnosed with mental illness and a history of substance abuse may have cognitive impairment, low pain tolerance, unpredictable drug metabolism, bleeding, and susceptibility to infection. Nitrous oxide and mouthwashes with alcohol should be avoided.

Although drug dependence resulting from pain control in a medical setting is extremely rare, mood altering drugs, such as narcotics, as well as pain medication, should be implemented with caution.