

Understanding Exceptional-Needs Patients



Introduction

Patients with exceptional needs are not just those with physical impairments. With the increasing number of diagnoses, it is more likely we'll see patients who have a form of mental illness, autism spectrum disorder or ADHD. Developing a greater understanding of these conditions will enable dental hygienists to offer the best care specific to patients' individual needs.

Learning objectives

1. Develop a better understanding of patients with exceptional needs.
2. Recognize the greater oral-health needs for patients with exceptional needs.
3. Understand the impact of frequently prescribed medications.
4. Recognize commonly observed oral-health implications.
5. Understand strategies for effective, patient-centered dental hygiene care.

Abstract

Through nonjudgmental and supportive care, dental hygienists can provide evidence-based, patient-specific care that will give patients improved oral health and, in turn, greater overall health. After reading this article, dental hygienists should feel more confident about providing dental care for patients with exceptional needs.

Introduction

I rarely use the term *special needs*. Quite often when we hear this term, what comes to mind is a preconceived image of someone with a physical disability, such as Down syndrome or cerebral palsy. According to the Centers for Disease Control and Prevention, the prevalence of Down syndrome is 1 in 700, and cerebral palsy is 1 in 323. Although it is vitally important to have the skills and knowledge to treat these patients, we likely won't often see patients with these conditions.

Some people may not consider individuals with attention-deficit/hyperactivity disorder or mental illness as having special needs. Perhaps these conditions are less obvious to us, and because we can't actually see a difference we assume the condition is less significant or extreme.

Because of the increasing prevalence of ADHD, mental illnesses and autism spectrum disorder (ASD), we'll very likely see more of

these patients in our offices. In my experience, the best way to serve these patients is not necessarily by altering our skill sets, but rather by developing a better understanding of these disorders. This allows us to be able to offer patient-centered and specific care to those with these exceptional needs.

Mental illness

There is a strong stigma associated with mental illness, which often is misunderstood. Individuals with mental illness are no more responsible for their illness than are those with cerebral palsy or Down syndrome. The social stigma associated with mental illness is the largest barrier for a patient seeking or retaining care. And approximately 25 percent of the North American population has a mental illness.

Yet many dental health professionals have little understanding of mental health or its potential impact on oral health.

Mental illness refers to disorders generally characterized by dysregulation of mood, thought or behavior. There are numerous forms of mental illness; some of the more common disorders are clinical depression, bipolar disorder, dementia, schizophrenia and anxiety disorders. By having a greater understanding of, and sensitivity to, our patients' mental-health status, dentists and dental hygienists can make a positive impact in helping patients manage their greater oral-health needs.

by Nadine Russell, RDH, BSc



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"In my experience, the best way to better serve this population of clientele is not necessarily in adapting our skill sets, but rather by developing a better understanding of these disorders."

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Mental illnesses are often associated with one another, and frequently are comorbid with cardiovascular disease, obesity and diabetes. Individuals with mental illness more frequently have higher risk factors that contribute to cardiovascular disease—factors like smoking, increased alcohol consumption, decreased physical activity and increased body mass index.

Many psychiatric medications also have a significant impact on glycemic and lipid control, which contribute to an individual's weight. Those with diabetes and mental-health disorders have decreased medication adherence, decreased compliance with diabetes self-care, increased functional impairment and an increased risk of complications associated with diabetes.

Patients with mental illnesses are often prescribed several different medications and may be taking them concurrently. Such medications include antidepressants, anxiolytics, beta-blockers, anticonvulsants,

antipsychotics and mood stabilizers. Xerostomia is the most commonly observed oral side effect.

Along with side effects of medications, manifestations of an individual's mental illness can also be impactful on his or her oral-health needs. Patients' understanding of their oral-health status and their ability to maintain their own oral-health care has the most impact. Often individuals struggle with self-care, while many have little to no self-care.

It is can even be considered a form of self-harm and self-deprivation if patients purposefully avoid or restrict their own personal care. After appropriate medical and pharmaceutical treatment and management of their illnesses, individuals will need to address their oral-health issues.

Many patients come into our care with overwhelming oral disease, usually in the form of rampant caries, periodontal disease and severe xerostomia. Add to these



challenges the socioeconomic factors and limited access to care faced by many of these patients, and it's not difficult for us to understand how appropriate interventions by dental-health professionals can be a crucial component to help patients attain long-term oral-health solutions.

Recognizing autism spectrum disorder

One in 68 children in North America is affected by ASD, with symptoms ranging from mild to severe. Individuals with ASD have impairments in three areas: communication, behavior and social functioning.

Up to 25 percent of individuals on the spectrum are nonverbal, meaning individuals with ASD may lack the ability to speak but have no difficulties with receptive language. Communication deficits may include impaired language skills and a lack of understanding of nonverbal communication and facial expressions.

Some stereotypical behaviors are associated with ASD, including obsessive interest or fixations, inappropriate attachment to objects, and a lack of common sense or awareness of potential dangers. Some patients may seem very passive, while others can be extremely overactive. Many may demonstrate opposition to changes in routine and may insist on sameness.

In the practice, doctors and hygienists can be on the lookout for self-stimulatory behaviors—often called “stimming”—that can be prompted by sensory sensitivities. Stimming is a repetitive action that can manifest in many ways for someone with ASD. Some examples include head-banging, hand-flapping, rocking, spinning or finger-wringing.

Some mental-health disorders, such as anxiety, depression, ADHD, OCD, bipolar disorder and schizophrenia, can also be associated with ASD.

Some data indicates that just over two-thirds those with ASD also have an associated psychiatric disorder. Additionally, an estimated 40 percent of individuals on the spectrum also have an intellectual disability.

To date there are no medications that can cure, treat or eliminate all of the symptoms of ASD. Only two approved medications are specifically used to treat symptoms associated with ASD: risperidone (Risperdal) and aripiprazole (Abilify). Both are antipsychotics.

ADHD

ADHD is one of the most common neurodevelopmental disorders of childhood, affecting up to 12 percent of school-age children. Eighty percent of children diagnosed with ADHD will continue to meet the diagnostic criteria throughout their teens. Of those, 60 percent will continue to experience symptoms into adulthood.

ADHD is characterized by difficulties with attention, hyperactivity and a lack of impulse control. There are three different types of ADHD, depending on which types of symptoms are most prevalent in the individual:

Predominantly inattentive (ADD) types:

- have trouble organizing or finishing tasks
- find it difficult to pay attention to details
- cannot follow instructions
- have trouble following a conversation
- are easily distracted
- forget details.

Predominantly hyperactive-impulsive types:

- fidget
- are talkative
- have difficulty sitting still for long periods of time
- may run, jump or climb constantly (children)
- exhibit feelings of restlessness
- are impulsive
- will interrupt others a lot
- grab things from people
- may speak at inappropriate times
- have difficulty with waiting their turn or listening to directions
- may have more accidents and injuries than others.

Predominantly combined:

- Symptoms of both previously reviewed types are equally present in the individual.

One in five individuals diagnosed with ADHD does not present with a comorbid condition. Approximately 75 percent of those diagnosed with ADHD take medications that include stimulants, antidepressants, tricyclics and anxiolytics.

Experts indicate a strong relationship between ADHD, oral health and dental anxiety. Our patients with ADHD are more likely to have greater oral-health needs and increased anxiety with dental treatment.

Oral effects from medications

Prolonged xerostomia can create an increased caries rate, mucosal changes and ulcerations, susceptibility to candidiasis, difficulty in swallowing, burning mouth syndrome, angular cheilitis, fissured tongue and overall dental hypersensitivity.

It can also create speech impairments, changes to taste, and difficulty with mastication and swallowing, thus compromising an individual's nutritional status (Douglas, 2013¹). Additionally, denture wearers may find the fit and retention of their dentures increasingly difficult.

Another side effect of some antipsychotic, psychostimulant and certain antidepressant medications is an increased incidence of bruxism and, in turn, temporomandibular joint disorders.

Tardive dyskinesia is a neurological impairment characterized by involuntary muscle movements and can be caused by use of certain antipsychotics. This can affect oral facial muscles, causing impairment to an individual's ability to chew, swallow or speak, or may cause significant involuntary muscle movements of the face.

Patients can experience orofacial pain from mucosal ulcers, fatigue of the masticatory muscles, spasms of the jaw muscles that may cause dislocation of the temporomandibular joint, and impaired gag reflex.

The abuse of readily available psychotropic drugs such as caffeine, nicotine and alcohol is more prevalent in patients with

psychiatric conditions. The detrimental effects of these can contribute to and further exacerbate their state of oral disease.

Considerations for the hygiene appointment

Do a careful and thorough review of medical history:

- Review current prescriptions, over-the-counter medications or supplements.
- Look for changes in weight.
- Look at hospitalizations.
- Determine any comorbidities or associated conditions.
- Identify potential sensory, communication and behavioral difficulties that could be encountered during the hygiene appointment.
- When necessary, contact the primary health care provider for clearance to proceed with dental hygiene care.
- Employ effective communication techniques, ensuring an empathetic and understanding approach to the patient's specific needs. Reassurance and encouragement throughout the hygiene appointment may be necessary for patient comfort.
- Timing and length of appointments may need to be shortened and planned accordingly if patient attention spans are limited, and to minimize stress and fatigue.
- Be aware of the patient's comfort level during treatment, and mindful of any signs of anxiety and stress with a procedure.
- Allow for distractions or comforters such as music, TV or a favorite toy.
- Allow caregivers to be in the operatory if this is more comfortable for the patient, especially in the case of young children or those with communication difficulties.
- Planning may be necessary for pain management. Potential sensitivity may be caused by erosion, attrition, abfraction, injury or other hard-tissue damage, or there may be sensitivity of the soft tissue from trauma, effects of medication therapy, or xerostomia.

- Make necessary documentation and observation of areas of trauma. Any significant intra- and extraoral findings should be well documented and photographed when possible. For example, if there is evidence of self-injurious behaviors or habits, make sure it's carefully documented.
- Nutritional counseling and a review of the importance of an appropriate diet in the maintenance of oral health are prudent.

Developing a strategic and individual approach to oral self-care should include information about:

- toothbrushing frequency and duration
- toothbrushing techniques and recommended devices or aids
- types of toothpaste
- flossing and an effective technique or modification to interdental cleaning
- any recommended mouth rinses
- any recommended at-home fluoride applications
- management of xerostomia.

It is important not only to give verbal instructions, but also to demonstrate accurate techniques and have patients demonstrate to you their ability to effectively apply the recommended interventions. Written instructions for care are helpful for patients to take home. For children and those who need assistance with self-care, it's important to ensure that caregivers are able to deliver oral care effectively.

Reinforce the need for increased periodontal maintenance and preventive oral health care because of increased needs.

Conclusion

This is just small example of the population of patients we work with who need special considerations for their oral-health needs. When factoring in the significance of their disorders, compounded by medication issues and patient limitations to self-care, it's not difficult to understand why these

patients may have greater oral-health needs.

We must develop a deeper understanding of our patients' unique needs and the oral-systemic disease connection. In doing so, we can ensure we are offering evidence-based, patient-specific care that will give our patients improved oral health, and in turn, greater overall health. ■

Reference:

1. Douglas, L. *Profile in Oral Health: Substances for Targeting Xerostomia.*

Additional references:

- Davidson I, Judd F, Jolley D, Hocking B, Thompson S, Hyland B. Cardiovascular risk factors for people with mental illness. *Aust NZJ Psychiatry.* 2001 Apr;35(2):196-202.
- Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Canadian Diabetes Association 2013 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. *Can J Diabetes* 2013;37(suppl 1):S1-S212.
- Carlsson V, Hakeberg M, Blomkvist K, Wide Boman U. Attention deficit hyperactivity disorder and dental anxiety in adults: relationship with oral health. Available at: *Eur J Oral Sci.* 2013 Jun;121(3 Pt 2):258-63. doi: 10.1111/eos.12016. Epub 2013 Jan 19.
- Falisi GI, Rastelli C, Pantì F, Maglione H, Quezada Arcega R. Psychotropic drugs and bruxism. *Expert Opin Drug Saf.* 2014 Oct;13(10):1319-26. doi: 10.1517/14740338.2014.947262. Epub 2014 Sep 6.
- Winocur E, Hermesh H, Littner D, Shiloh R, Peleg L, Eli I. Signs of bruxism and temporomandibular disorders among psychiatric patients. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2007 Jan;103(1):60-3. Epub 2006 Jun 6.
- Alcohol, nicotine, caffeine, and mental disorders. *Dialogues Clin Neurosci.* 2003 Jun; 5(2): 175-185.

Additional references and resources

Center for Disease Control, 2016

cdc.gov/mentalhealth/basics/mental-illness.html
cdc.gov/ncbddd/birthdefects/downsyndrome.html
cdc.gov/ncbddd/cp/data.html
cdc.gov/mentalhealth/data-stats.html
cdc.gov/ncbddd/autism/data.html
cdc.gov/ncbddd/adhd/facts.html

Autism Speaks, 2016

autismspeaks.org/what-autism

CADDRA, 2014/2016

caddra.ca/pdfs/caddraGuidelines2011Chapter02.pdf

CDHO Advisory 2011

cdho.org/my-cdho/practice-advice/the-knowledge-network

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- The current reported prevalence of autism spectrum disorder is:**
 - 1 in 68
 - 1 in 200
 - 1 in 165
 - 1 in 88
- Individuals with autism spectrum disorder demonstrate impairments in:**
 - Personality, communication and adaptive behavior
 - Communication, self-care and social awareness
 - Communication, social functioning and behavior
 - Intellect, unusual behaviors and socialization
- The social stigma associated with mental illness is the largest barrier to a patient seeking or retaining care.**
 - True
 - False
- The most commonly observed oral side-effect of medications frequently prescribed to treat mental illnesses is:**
 - Bruxism
 - TMJ disorders
 - Root caries
 - Xerostomia
- _____ is the one of the most common neurodevelopmental disorders of childhood.**
 - Autism spectrum disorder
 - Childhood schizophrenia
 - ADHD
 - Clinical depression
- Only one out of _____ individuals diagnosed with ADHD does not present with a comorbid condition.**
 - 20
 - 5
 - 3
 - 10
- Patients with psychiatric conditions are more likely to abuse readily available psychotropic drugs such as caffeine, nicotine and alcohol.**
 - True
 - False
- A neurological impairment characterized by involuntary muscle movements often caused by certain types of antipsychotic medications is known as:**
 - Mental illness
 - Autism
 - ADD
 - Tardive dyskensia
- Prolonged xerostomia can create lasting and significant disease in the oral cavity. All of the following are caused by prolonged xerostomia, except:**
 - An increased caries rate
 - Mucosal changes and ulcerations
 - Susceptibility to candidiasis
 - Bruxism
- What should be provided in the dental hygiene appointment?**
 - Verbal and written self-care instructions to patients and caregivers, and demonstrations of accurate brushing and flossing techniques
 - A comprehensive review of the patient's medical history and medication
 - Intraoral photos of areas of trauma
 - All of the above

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