

Behaviors, Medications and Teeth, Oh My!



Rita Marie Bilello, DDS
Dental Director
Metro Community Health Centers
November 16, 2018

Why do patients care about their teeth?

- Smile
- Publicity
- Self Esteem
- Function
 - Eating
 - Talking
- Comfort/ Lack of Pain



Why do DD/IDD patients care about their teeth?

- Lack of Pain
- Function
 - Eating
 - Speaking
- Appearances
- Self Esteem
- Stress Relief



Why should Physicians/Caregivers care about the DD/IDD patient's teeth?

- Portal for bacteria/foreign objects to enter the body
- Mirror into other medical conditions
 - Inflammation
 - Diabetes
 - Behavioral issues
- Medication Side effects and interactions
- Potential source of pain and infection
 - Tooth infections
 - Gum infections
 - Inflammatory reactions
 - Trauma
- Patient quality of life issues

Oral health and general medical health

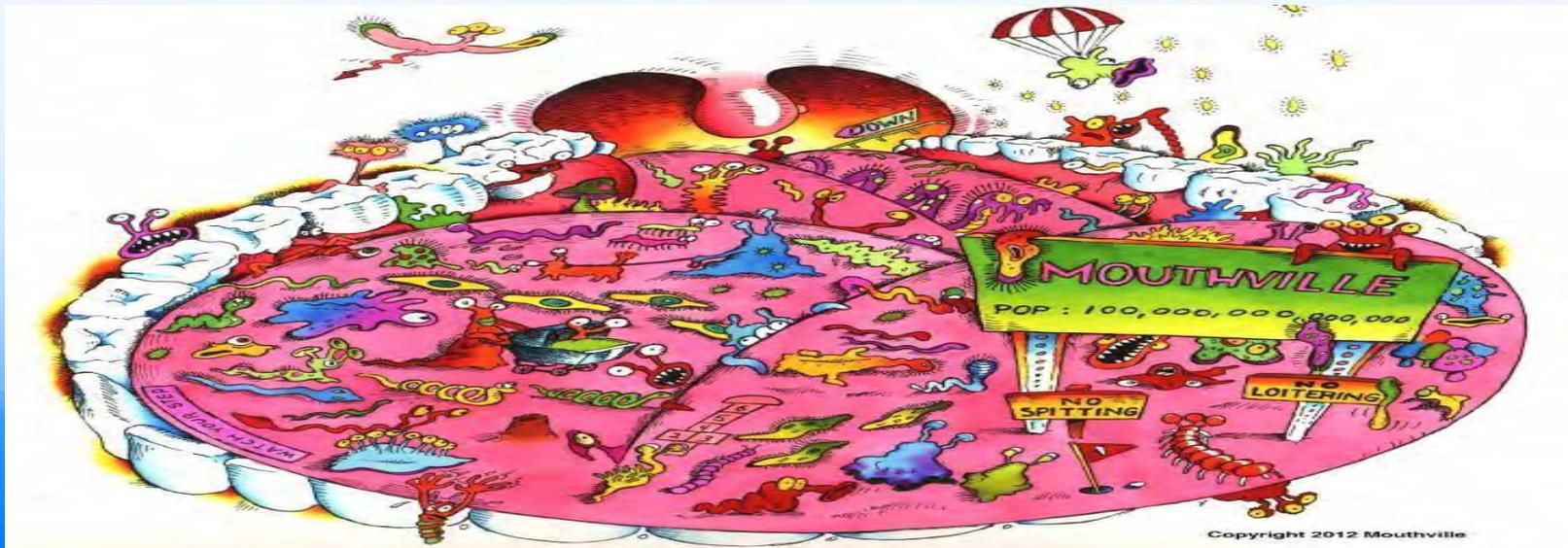
- There needs to be an appreciation that there is a direct correlation between a patient's general health and their oral health.
- Research has proven connections between oral health and cardiac disease, prenatal complications, diabetes, autoimmune disorders, respiratory disease and psychiatric management.
- As clinicians we need to remember to treat the whole patient from an integrated approach and not just the disease.

Does this look comfortable?



Oral Health and general health

- Oral cavity provides one of the body's greatest defenses
 - Entry point for bacteria, foreign bodies and insults to enter into the body
 - Healthy oral conditions allow for an effective means of reducing the chance of pathogen introduction
 - The more oral disease there is – the less effective a barrier to pathogens the oral cavity can provide

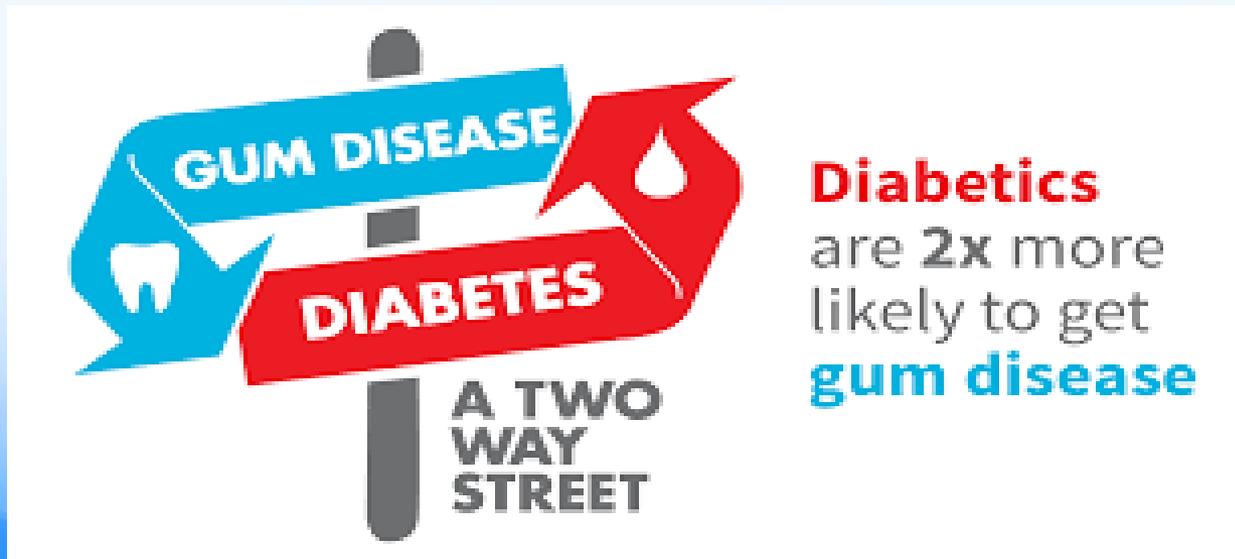


Oral health and comorbidities

- Inflammatory Diseases
 - Rheumatoid arthritis
 - Periodontal Disease
- Diabetes
 - Microvascular changes, periodontal breakdown, decreases wound healing
- Cardiac Conditions
 - Increase in cardiac complications; decrease success in surgical outcomes
 - Increased risk of cardiac infections
- Respiratory Diseases
 - Increase in risk for aspiration pneumonia
 - Poorer management of respiratory condition with associated poor oral health
- Autoimmune Disorders
 - Increase risk of infections, ulcerations, poor wound healing

Diabetes and Dental care

- Increased risk of periodontal disease
- Poor oral health leads to poorer nutrition
 - Poorer regulation of blood sugars
 - Chronic oral infections



Bisphosphonates

- Bisphosphonates are associated with significant abnormal healing of alveolar bone after trauma or disruption
- Dental extractions or trauma while on particularly IV bisphosphonates can lead to Bisphosphonate Related Osteonecrosis of the Jaw (BRONJ)
 - Treatment for BRONJ are complicated and include hyperbaric oxygen treatment, jaw resections and surgical interventions as well as aggressive antibiotic therapy
- Patient may be taking bisphosphonates for treatment of Multiple Myeloma, Paget Disease, Osteoporosis, multiple malignancies, etc.
 - Oral - Actonel, Fosamax, Skelid, Boniva, Didronel
 - Intravenous - Zometa, Boniva, Aredia, Didronel
- Dental treatment for patients on bisphosphonate therapy often requires significant interaction and planning between the dental and medical teams.

Why is oral health more important in the DD/IDD population??

- Same challenges – more complications
 - Physical barriers to oral care
 - Communication issues
 - Small problems not detected until they are significant
 - Multiple medical conditions
 - Medication Complications
 - Polypharmacy issues and side effects
 - Direct effect of medications on oral tissues
 - Behaviors that impeded dental care



Physical disability barriers to oral care

- Respiratory issues
 - Aspiration risks
 - Infection risks
- Swallowing/dysphagia and feeding issues
 - PEG
 - pocketing
- Coordination issues
 - Difficulty in oral function and care
- Dexterity issues
 - Homecare issues
- Muscular issues
 - Spasms, tone, spasticity, laxity
 - Difficulty with dental prosthesis
 - Parafunctional habits

Communication

- Communication difficulties often lead to a small dental problem becoming a significant issue that risk oral health and sometimes a patient's general health
 - Discomfort is often masked as a “behavioral” episode if the patient chooses not to eat or begins to self-harm
 - Delays in detection of oral pain often lead to more aggressive treatment such as extraction which lead to other issues with nutrition, digestive issues and quality of life concerns

Multiple medical conditions

- The more complicated and extensive a patient's active diagnosis list is – the more oral complications you will often find
- The more comorbidities a patient presents with dictates the need to be more proactive and more aggressive with pursuing dental care both within a professional and a home care environment.

Problem List		All	!	+	...
10	M24.50	Contracture, unspecified joint			
10	M62.838	Other muscle spasm			
10	G80.0	Spastic quadriplegic cerebral palsy			
10	F72	Severe intellectual disabilities			
10	Q53.20	Undescended testicle of both sides			
10	R09.89	Pulmonary congestion			
10	I10	Essential (primary) hypertension			
10	R13.10	Dysphagia, unspecified			
10	E87.0	Hyperosmolality and hypernatremia			
10	D64.9	Anemia, unspecified			
10	E55.9	Vitamin D deficiency, unspecified			
10	E56.8	Deficiency of other vitamins			
10	E63.8	Other specified nutritional deficiencies			
10	J45.998	Other asthma			
10	K21.0	Gastro-esophageal reflux disease with esophagitis			
10	K59.00	Constipation, unspecified			
10	Z76.0	Issue of repeat prescriptions			
10	L24.9	Irritant contact dermatitis, unspecified cause			
10	J45.998	Other asthma			
10	K21.0	Gastro-esophageal reflux disease with esophagitis			
10	K59.00	Constipation, unspecified			
10	Z76.0	Issue of repeat prescriptions			
10	L24.9	Irritant contact dermatitis, unspecified cause			
10	J40	Bronchitis			
10	J18.0	Bronchopneumonia, unspecified organism			
10	L25.9	Contact dermatitis and other eczema, due to unspecified cause			
10	Z23	Encounter for immunization			
10	F73	Profound intellectual disability			
10	M41.45	Neuromuscular scoliosis, thoracolumbar region			
10	Z01.110	Encounter for hearing examination following failed hearing screening			
10	H61.23	Bilateral impacted cerumen			
10	G40.A09	Absence epileptic syndrome, not intractable, without status epilepticus			
10	H91.90	Unspecified hearing loss, unspecified ear			

Depression and Oral Health

- Neglect of oral healthcare
 - Increase in decay, periodontal disease
- Poorer overall nutrition
- Side effects of antidepressive medications
- Avoidance of dental care
- Lack of self valuation of care
- Increase engagement in high risk activities that decrease oral health

ADHD and Oral Health

- Decreased attention span manifests in poor homecare attention
 - Associated increase with caries and periodontal diseases
- Increase in bruxism
 - Associated with increase in orofacial pain
 - Associated with increase in dental sensitivities and subsequent avoidance of some foods
- Increase in oral injuries associated with trauma

Cerebral Palsy and Oral Health

- Increase in genetically predisposed oral conditions
 - Enamel hypoplasia, delayed tooth eruption
 - Increase in malocclusions
- Increase in enamel erosion secondary to GERD
- Increase risk of bruxism and atypical bite reflexes
- Increase in tongue thrust and mouth breathing
- Increase in altered gag reflex
- Increase risk of oral hypersensitivities
- Increase risk for oral injuries secondary to trauma

Autism Spectrum and Oral Health

- Increase in bruxism
- Increase in non-nutritive chewing
- Increase in sensory aversions
 - Leads to decreases in ability to tolerate dental treatment and oral care
- Increase in oral self-injurious behavior
- Increase in dental caries
 - Not innate to autism but related to dietary preferences and rewarded behaviors

Epilepsy and Oral Health

- Increase risk for oral traumas
 - Dentition and soft tissue related
- Increase in Temporomandibular joint dysfunctions
- Increase in bruxism/clenching, oral abrasion
- Increase in periodontal disease
 - Medication induced gingival issues including hyperplasia, bleeding and delayed healing

Down Syndrome and Oral Health

- Significant dental manifestations
 - Delayed eruption
 - Anodontia
 - Malformation of teeth (peg teeth, microdontia)
 - Hypoplasia of enamel
- Significantly increased risk in periodontal disease
- Significant skeletal malocclusions
- Macroglossia and tongue thrust
- Mouth breathing
- Bruxism and clenching



Intellectual Disabilities and Oral Health

- Decreased ability to participate in activities of daily living
 - Significant decrease in oral hygiene
 - Increase in periodontal disease
 - Increase in dental caries
- Increase in oral traumas and injuries
- Increase in parafunctional habits
 - Bruxism, biting, picking, self injury
 - Tongue thrust, mouth breathing
- Increase in oral malformations
 - Enamel hypoplasia, anodontia, malocclusions

Alterations in feeding and oral health

- Changes in diet directly impact oral health
 - Pureed liquid diet
 - PEG/ g-tube feeding
 - Decrease in chewing lead to decrease in oral function and increase in dental accretions and disease
- Nonnutritive chewing
 - Increase in oral traumas
 - Soft tissue pain, mobility, traumatic injury
- Reward eating behaviors
 - Increase in caries

Non-orally fed patients and dental needs

- Patients fed other than by mouth have significantly greater oral health needs
 - Significantly greater accumulation of accretions
 - Increased incidence of periodontal disease
 - Marked increase in oral hypersensitivity
 - Greater risk of aspiration pneumonia with oral cleanliness being paramount to reducing risk
 - Increased risk of oral erosions
 - Greater difficulty with homecare due to inability to use water and hypersensitivities



Medications with Oral Health Implications

- Comorbidities and multiple diagnoses leads to extensive polypharmacy
- Dental implications of pharmaceuticals involve both direct effects on the oral tissues as well as side effects
 - Many of the side effects can be exacerbated by the polypharmacy

Current Medications

Taking

- Folic Acid 1 MG Tablet 1 tablet Via G tube Once a day
- Econazole Nitrate 1 % Cream 1 application to affected area Externally to Rt hand & bet' fingers Once a day
- Nystatin 100000 UNIT/ML Suspension 1 application to tongue Mouth/Throat Three times a day, Notes: Pharmacy
- Ferrous Sulfate 325 (65 Fe) MG Tablet 1 tablet Via G tube Twice a day
- Dilantin Infatabs 50 MG Tablet Chewable as directed VIA PEG TUBE 2 TABLETS EVERY 8 HRS
- Peridex 0.12 % Solution as directed wipe gums with peridex moistened gauze after brushing teeth 2x daily
- Valium 5 MG Tablet 1 tablet one hour prior to dental appointment Orally Once
- Keppra 100 MG/ML Solution 10 ml in the am and 10 ml in the pm Orally every 12 hrs
- Dilantin 125 MG/5ML Suspension 4 ml at 8 am via G tube QD
- Baclofen 10 MG Tablet 1 tablet with food or milk Orally Three times a day, stop date 07/14/2017
- Metoprolol Tartrate 50 MG Tablet 1 tablet Via G tube Twice a day
- Calcium Carbonate 1250 MG/5ML Suspension 5 ml Via G tube Three times a day
- Vitamin D 400 UNIT Tablet 1 tablet Orally Once a day
- Multivitamin/Iron tab tab 1 tablet Via G Tube od
- Ester-C 500-550 MG Tablet 1 tablet Via G Tube Once a day
- Acetylcysteine 20 % Solution 2 ml mix with 2ml n.s. via nebulizer Inhalation every 12 hrs prn
- MiraLax 17 Powder 17gm Orally Once a day
- Nexium 40 MG Packet 1 packet mixed in 15 ml of water Via G Tube Once a day
- Bisacodyl 10 MG Suppository 1 suppository as needed for constipation Rectal If no Bowel Movement in 48 HRS
- Ammonium Lactate 12 % Lotion 1 application to affected area Externally Twice a day
- Eucerin - Lotion as directed Externally BID to face
- Irrigation Supplies - Miscellaneous as directed externally Four times a day
- Feeding Tubes - Bags - Miscellaneous as directed via G tube feeding Four times a day
- Valium 5 MG Tablet 1 tablet one hour prior to dental appointment Orally Once
- Pro-Stat 101 Liquid Liquid 30 ml Via G tube Twice a day
- Chlorhexidine Gluconate 0.12 % Solution wipe gums with moistened gauze Mouth/Throat Twice a day after brushing teeth
- Jevity 1.2 Cal Liquid Liquid 5.5 cans G- tube TID as directed by MD FOR DYSPHAGIA 787.2

Selective Serotonin Reuptake Inhibitors (SSRIs)

- Prozac (Fluoxetine), Celexa (Citalopram), Zoloft (Sertraline), Paxil, (Paroxetine), Lexapro (Escitalopram)
- Commonly used to treat Depression, Anxiety, Autism Spectrum Disorders, ADHD, Insomnia
- Oral Side Effects
 - Xerostomia
 - Increase in caries, halitosis
 - Including dryness of mouth, lips, throat
 - Dysphagia
 - Stomatitis
 - Alterations in taste
 - Glossitis
 - Gingivitis
 - Bruxism
 - Abrasion and abfraction injuries
 - Oral Ulcerations/Abrasions
 - Burning Mouth Syndrome

Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs)

- Cymbalta (Duloxetine), Effexor (Venlafaxine)
- Used to treat Depression, Anxiety, Autism Spectrum Disorder, Obsessive-Compulsive Disorder, ADHD
- Oral Side Effects
 - Xerostomia
 - Dysphagia
 - Bruxism

Tricyclic Antidepressants

- Elavil (Amitriptyline), Norpramin (Desipramine), Tofranil (Imipramine)
- Used to treat Depression, Anxiety, ADHD, Autism Spectrum Disorders, OCD, Inattention/Repetitive Behaviors
- Oral Complications
 - Xerostomia
 - Stomatitis
 - Alterations in taste
 - Discoloration and swelling of tongue
 - Increased oral infections
 - Periodontal and candida

Atypical Antidepressants

- Wellbutrin (Bupriopion)
- Used to treat Depression, Autism Spectrum Disorder, OCD, ADHD, Anxiety, Repetitive Behaviors
- Oral complications
 - Xerostomia
 - Alterations in taste
 - Glossitis
 - Bruxism
 - Angioedema
 - Dysphagia

Antipsychotics

- Zyprexa (Olanzapine), Risperdal (Risperidone), Invega (Paliperidone), Haldol (Haloperidol), Prolixin (Fluphenazine), Thorazine (Chlorpromazine), Clozaril (Clozapine)
- Used to treat Autism Spectrum Disorder, Bipolar Disorder, ADHD, Schizophrenia, Psychotic/Severe Depression, Delirium, Dementia, Eating Disorders, PTSD, OCD, Anxiety
 - Tend to target aggression, agitation and delusions
- Oral Side Effects
 - Extrapyramidal movements
 - Tardive Dyskinesias, restlessness, parkinsonian syndromes, dystonias
 - Orthostatic Hypotension
 - Alterations in salivation (xerostomia +/- sialorrhea)
 - Rabbit syndrome
 - Stomatitis/Oral Ulcerations
 - Glossitis
 - Dysphagia
 - Alterations in Taste
 - Angioedema

Medications for Mania, Bipolar Disorder and Nonseizure Disorders

- Medications used to treat Mania, Bipolar Disorders, Nonseizure disorders, Aggressive Behaviors, Autism Spectrum Disorder, ADHD
 - Mood Stabilizers
 - Lithium
 - Anticonvulsants
 - Tegretol (Carbamazepine), Neurontin (Gabapentin), Klonopin (Clonazepam), Lyrica (Pregabalin), Lamictal (Lamotrigine), Topamax (Topiramate), Depakote/Depakene (Valproic Acid)
- Oral Manifestations
 - Gingival hyperplasia
 - Stomatitis/Mucositis/ Oral Ulcerations
 - Glossitis
 - Alterations in Taste
 - Gingivitis
 - Gingival bleeding
 - Xerostomia
 - Angioedema
 - Delayed oral healing

Anxiolytics

- Benzodiazepines
 - Used to treat anxiety, spasticity and rigidity, Autism Spectrum Disorders, Antispasmodic
 - Valium (Diazepam), Klonopin (Clonazepam), Xanax (Alprazolam), Halcion (Triazolam), Ativan (Lorazepam)
 - Used as an anxiolytic for enteral sedation in dental treatment
 - Provide some degree of anterograde amnesia
- Oral complications of Benzodiazepines
 - Alterations in salivation
 - Xerostomia and/or hypersalivation
 - Gingival irritation
 - Angioedema
 - Coating/lesions on the tongue
 - Dystonia of the facial muscles/tongue

Medications targeting ADHD, Hyperactivity, Impulsivity and Inattention

- Stimulants
 - Adderall, Dexedrine, Dextrostate (Amphetamine and Dextroamphetamine), Ritalin, Concerta, Focalin (Methylphenidate, Dexamethylphenidate)
- Non Stimulants
 - Strattera (Atomoxetine)
- Antihypertensives
 - Catapres (Clonidine), Tenex, Intuniv (Guanfacine)
- Also uses to treat some patients with Autism
- Oral Complications
 - Xerostomia
 - Alterations in taste
 - Bruxism
 - Dyskinesias
 - Gingival recession
 - Mucositis/Stomatitis
 - Dysphagia
 - Orthostatic hypotension

Seizure Medications

- Anticonvulsants
 - Tegretol (Carbamazepine), Depaote/Depakene (Valproate), Dilantin (Phenytoin), Neurontin (Gabapentin), Keppra (Levetiracetam), Lamictal (Lamotrigine), Lyrica (Pregabalin), Topamax (Topiramate), Trileptal (Oxcarbazepine), Zongran (Zonisamide)
- Oral side effects
 - Gingival hyperplasia
 - Xerostomia
 - Stomatitis/Mucositis
 - Glossitis
 - Alterations in taste
 - Gingival bleeding
 - Angioedema
 - Delayed oral healing
- Muscle Relaxants and Antispasmodics
 - Lioresal (Baclofen), Valium (Diazepam), Dantrium (Dantrolene Sodium), Zaanalex (Tizanidine)

Medications associated with Gingival Hyperplasia

- Anticonvulsants
 - Dilantin (Phenytoin) – most common
 - Depakote (Valproate)
- Immunosuppressants
 - Cyclosporin (Cellcept, Restasis)
- Calcium Channel Blockers
 - Nifedipine (Procardia)
 - Verapamil



Xerostomia

- Common side effect of many medications
- Increases rate of plaque and calculus formation
- Decreases ability for normal oral cleansing
- Inhibits the ability of teeth to remineralize
- Can lead to other oral complications
 - Lip picking, oral ulcerations and soft tissue abrasions
- Contributor to increase in decay and caries
 - Alteration in bacterial flora
 - Increase in dietary compensations

Dental Caries

- Also associated with sugar/carb intake
- Associated with oral hygiene abilities
- Xerostomia
- GI problems
- Dysphagia
- Oral aversions
- Behavioral rewards



Bruxism

- Common finding in the disabled population
 - Related to medication side effects
 - Associated with decrease in cognitive development
 - Directly related to stress levels
- Leads to significant dental complications
 - Abrasion
 - Abfraction
 - Tooth Fracture
 - Occlusal Trauma
 - Soft Tissue Changes
 - Pain



Behaviors and Dental Care

- People do not like going to the dentist ... this is a fact. It is invasive not only physically but also it is also invasive of one's personal space.
- For DD/IDD patients this invasion of their space is often incredible disruptive and responses vary
 - Anxiety, fear and anger
 - Refusal of treatment
 - Physical aggression
 - Spitting
 - Biting
 - Crying and screaming
 - Personal harm



Behaviors and Dental Treatment

- The majority of disruptive behavior from IDD/DD patients within a dental setting can be directly related to a patient having associated dental discomfort and/or pain.
- Dental pain in any person will create an increased fear and anxiety related to treatment.
- Many patients do not appropriately or adequately identify dental pain and often negative behavior is seen in a dental office because of the pain that is present prior to treatment.

Expressions of Dental Pain

- Atypical presentation of dental pain in IDD/DD patients
 - Refusal to eat certain foods
 - Noncompliance with oral hygiene care
 - Self injurious behavior to face and head
 - Pulling on ears
 - Biting on hands/objects
 - Picking at skin on face
 - Generalized acting out and negative behaviors
 - Oral hypersensitivity and aversions
 - Aggressive behavior when accessing oral cavity
 - Swelling, bleeding, redness of oral cavity or face



Keys to Dental Success

The key to dental success for the DD/IDD patient is simple – take a step backward to the basics and remembering to respect the following:

Time
Patience
Humanity



Time

- Nothing is more effective in treating special needs patients than time.
 - Allow the patient to direct the pace of treatment rather than completion of the procedure
 - Know what time the patient will allow you and respect that time; push gently but respect the patient's limits.
- Take time to spend with the patient.
 - Patients are people who because of their disability may demand more time to relate to them. Taking time is the first step in building a relationship.
 - Many patients have had negative experiences in the past because they were not given the time and attention they deserved and required

Patience

- Respect the needs and the ability of the patient and work within the “normal” dental framework
 - Treatment environment challenges
- Give the patient the opportunity to communicate and listen to what the patient says
 - All patients communicate whether verbally or physically and all patients appreciate someone taking the time to at least try and acknowledge what they are expressing
- Do not ignore the patient
 - It is much easier and quicker to deal with the caregiver but that will not including the patient will decrease the effectiveness of your treatment.

Humanity

- No matter what the disability is --- your patient is a person that should command respect and dignity.
- Patients, no matter how disabled, recognize genuine humanity and compassion - remembering this will help to build the trust that a dentist needs to move forward with any treatment
- Dentistry for all people – is a relationship of trust and successful treatment to a large degree is predicated on whether the patient has a sense of trust in the provider.

Physical Challenges to Dental Care

- Treat a patient where they are either most comfortable or where they are the most protected.
 - Wheelchair
 - Patient transfers
 - Protective stabilization
- Instrument adaptation
 - Choice of instrumentation based around specific patient need and tolerance
 - Sensory adaptations, mobility adaptations
 - Safety concerns

Keys to Dental Success

- Begin all treatment with a conversation.
 - Play detective
 - Gather as much information about the patient
 - Watch and engage the patient as much as they will allow
 - Where is the patient comfortable
 - What are they gravitating towards and away from
 - Patient likes and dislikes
 - Past experiences both positive and negative
 - Homecare issues
 - Always engage the patient as much as they will allow
 - Simple as saying hello or a high five
 - Include the patient as much as they will allow



TRUST IS KEY TO A DENTAL RELATIONSHIP
LEARNING ABOUT YOUR PATIENT
IS THE START OF BUILDING THAT TRUST

Keys to Dental Success

- BE REALISTIC IN YOUR EXPECTATIONS
 - Be honest with patient and caregiver
 - Goal is dental treatment but the success is not dictated by the outcome of the procedure but the process moving forward
 - Patient should always leave on a positive note
- Adapt the dental environment when possible to accommodate the patient
 - Examinations in unusual locations (chairs, floors)
 - Turn off the lights
 - Turn on music and dance
 - Noise cancelling headphones
 - Favorite toys



Behavior Management

- All treatment should be adapted to the individual.

Desensitization

Tell-show-do techniques

Reinforcement

Anxiolytics

Protective Stabilization

IV/General Anesthesia

Desensitization

- Desensitization does not need to be a formalized process to be successful.
- Incorporate the manner in which the patient learns
 - Social stories
 - Tactile play techniques
- Utilize techniques and tools that the patient is familiar with
 - Familiar songs/pictures/toys
 - Presence of caregivers
 - Do not rush the process - desensitization takes time!

Tell-Show-Do

- Let the patients safely interact with the dental environment
- “Play” and make dental treatment fun
- Allow, whenever possible, patient to touch and use the instruments and become familiar
- Most important aspect is that the patient participates and feels engaged in the process

Positive Reinforcement

- Make this individualized to the patient
- Make every visit end on a positive note – even if the visit was a difficult one
- Thank you to the patient for their help in the visit.
 - High five, smile, job well done



Success in Dental Treatment

Flexibility

Advocacy and confidence

Dental home a priority

Clear referral pathways

Flexibility

- Adaptation is the key
- Be attune to the environment and body language
 - Hyperempathy
- Make treatment less clinical
 - Examinations in atypical areas (hall ,floors)
 - Penlights to address light aversions
 - “Play” dentist
- Devote whatever time it takes
- Friendly environment

Dental environment

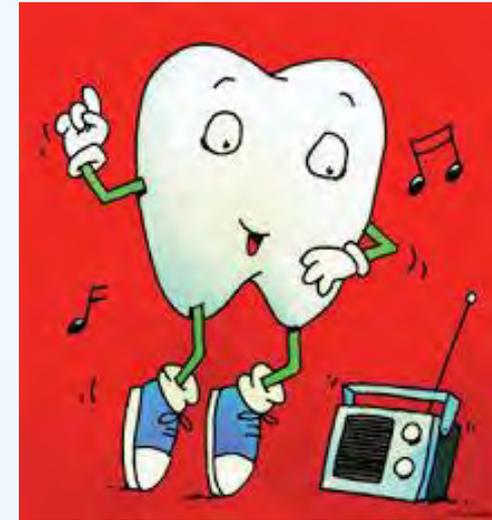
- Dental office is the home of sensory overload
 - Auditory – drills, vacuum suction
 - Olfactory – smell of acrylics
 - Visual – bright lights
 - Tactile – gloves, cotton, toothpastes, instruments
 - Taste – Gloves, dental materials, fluoride, medications
 - Movement – Dental chair motion (up/down, forward/back)
 - Spatial Proximity – proximity of people to personal space

Advocacy and Confidence

- Dependence on caregiver for assistance in home care
- Need someone to assist in detecting symptoms and signs of problems
 - Changes in eating/drinking
 - Changes in behavior and mood
 - Self injurious behaviors
 - Ear tugging
- Advocate for the patient – help the patient in their challenges to obtain dental care.

Dental Homecare

- Creativity
 - Dance party
 - Music as a timer
 - Games
- Adapt to patient needs, abilities and tolerances
 - Washcloths, toothettes
 - Modified brushes
 - No toothpaste is okay
- Don't be afraid to ask what the challenges are
 - Teach and train caregivers alternatives
- Make the patient and caregiver confident that they have an ally in their dentist and “dental home”



Dental challenges for disabled populations

- Uncooperative behaviors during dental treatment
- Significant gaps during dental care
- Often inadequate home care
- Hard to find qualified providers/adequate facilities
- Oral aversions/ sensory aversions
- Increased fear and anxiety

MANY OF THESE CHALLENGES PREDICTATE THE NEED FOR
ADVANCED TECHNIQUES AND
CLEAR REFERRAL PATHWAYS

Safety Issues in Dental Treatment

- Unpredictable patient movements
- Unpredictable patient behaviors
- Aggression and Impulsivity
- Sharp Instruments
- Loud noises
- Moving equipment

Advanced dental interventions

- Passive restraint/immobilization
- Oral Sedation
 - Anxiolytics
- IV sedation
- General Anesthesia



General Anesthesia for Dental Treatment

- Definitely has an appropriate place for some situations and circumstances
- Patient dental treatment need must justify the risk of the anesthesia and other treatment modalities should be exhausted
- For some it is a great option to get a patient back to a healthy baseline and then need to proceed forward not with the plan for future anesthesia but for successful dental treatment without it
 - Dissociate potentially negative treatment from routine dental treatments

Disparity in dental care

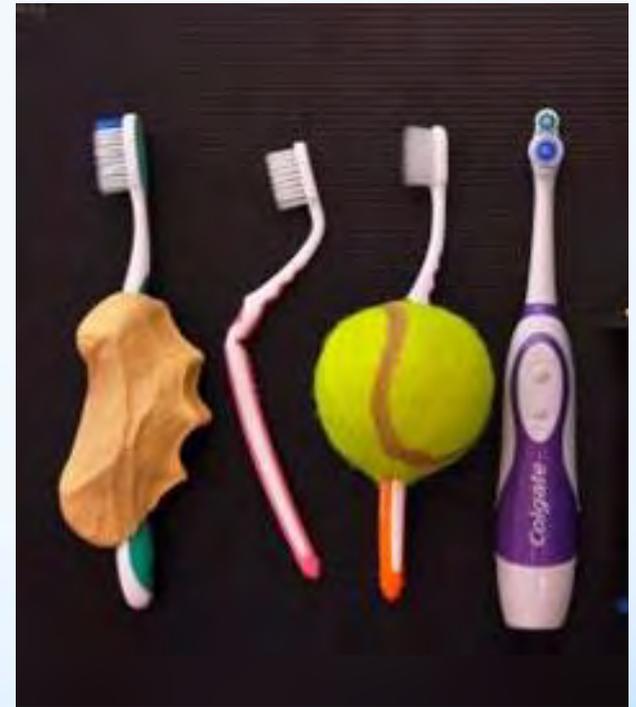
- Dentistry has been reported to be the most prevalent unmet health need in children
- If there are other coexisting medical conditions there is an increased risk of dental problems.
 - Greater risk of specifically dental issues
 - Greater risk of systemic illness secondary to untreated dental caries and infection
 - Medical conditions that require attention often supersede dental care and neglect of oral health results
 - We need medical providers to advocate for the oral health of their patients --- oral health is important systemically.

Barriers to dental care

- Dentistry is often not considered a “medical necessity”
 - No allowances for financial reimbursement outside of the “normal” dental allowance
 - Leads to increased financial burdens
- Difficulty finding qualified providers
 - Inadequate training and education
 - Inadequate reimbursement to compensate for more extensive time and frequency of needed treatment
- Long wait time for qualified and equipped providers
 - Hospital programs – often unable to accommodate for 18+ months and wait lists are beyond capacity

Challenges to providing dental care for the disabled

- Unusual treatment locations
 - Wheelchairs and hospital beds
 - Beanbag chairs and floors
- Language and communication barriers
 - Nonverbal
 - Adaptive language modifications
- Need to adapt oral homecare devices
 - Tennis balls, modified grips
- Inadequate training of dental providers
- Need unique and individualized treatment
 - Must be creative and think outside the box



Dental problems associated with special needs population

- Increased prevalence of untreated dental caries
- Increased incidence of gingivitis
- Increased prevalence and severity of periodontitis
- Greater occurrence of dental and skeletal oral malformations
- More significant incidence of oral traumas
- Significant dental complications from medication side effects

Special needs dentistry is the stuff not in the books

- Need to have an open mind and an open heart
- Need to get closer to your patient
- Need to work on instinct and creativity as opposed to didactic training and the rulebook
- It is not for every provider
- It is the most rewarding patient experiences you can have

Be your patient's SUPERHERO!!

- Need to be hypervigilant and aware of what is going on when treating a special needs patient
- Anticipate the potential next move
- Be an advocate for your patient
- Eyes, ears open at all times --
- you never know what may happen next.

