Equipping Yourself to Care for Patients with Special Needs

Disclosure

I am the co-founder of Dental Desensitization Systems and inventor of the DDS Take Home kit and bite block

I have not been paid to promote any specific dental products in my lectures. All products are what I personally recommend and use in my private practice

All opinions in this lecture are my own, and are not representative of any group, school, or association.

Jacob Dent, DDS, FADI

- 21 years in practice- LSUSD 2003
- Multi-practice owner(12)
- UT Houston Dental School- Clinical Assistant Professor
- Special Olympics Clinical Director
- Fellow Academy of Dentistry International
- ADA, LDA, scda, AADMD-member
- Dental Desensitization Systems co-founder
- Special needs Dad

Ben’s Story

Barriers to Care

Time

Ignorance

Money

Who

Where

What

TIME

It takes longer to treat patients with special needs than neurotypical patients

I don’t get paid for the extra time it takes

I don’t get paid for my time if a patient doesn’t allow anything to be done at their visit.

I don’t know where to schedule them. I’m too busy to block my schedule just for one patient at a time.

I-Ignorance

I had limited or no training or hands on experience in dental school .

I am scared of treating patients with special needs because of the possibility of non-compliance and negative behavior.

I am not a specialist, so it is not my responsibility or problem to treat patients with disabilities.

MONEY

I can not afford to accept Medicaid because it doesn’t pay as much as insurance.

I do not get paid for the extra time I have to spend with my special needs patients

I lose money on days I treat patients with IDD because I can’t see as many patients as I normally do.

WHO

WHO HAS THE EXPERIENCE AND TRAINING NEEDED TO HELP ME WITH MY SPECIFIC DENTAL NEEDS?

WHO WILL BE PATIENT AND UNDERSTANDING THAT I AM NOT “TYPICAL” AND WILL REQUIRE MORE TIME?

WHO DO WE REFER TO IF WE CAN NOT TREAT OUR SPECIAL NEEDS PATIENT IN THE OFFICE?

WHERE

WHERE DO WE GO THAT IS SET UP WITH SENSORY AND PHYSICAL ADAPTATIONS THAT FIT MY NEEDS?

WHERE DO WE GO THAT TAKES OUR INSURANCE?

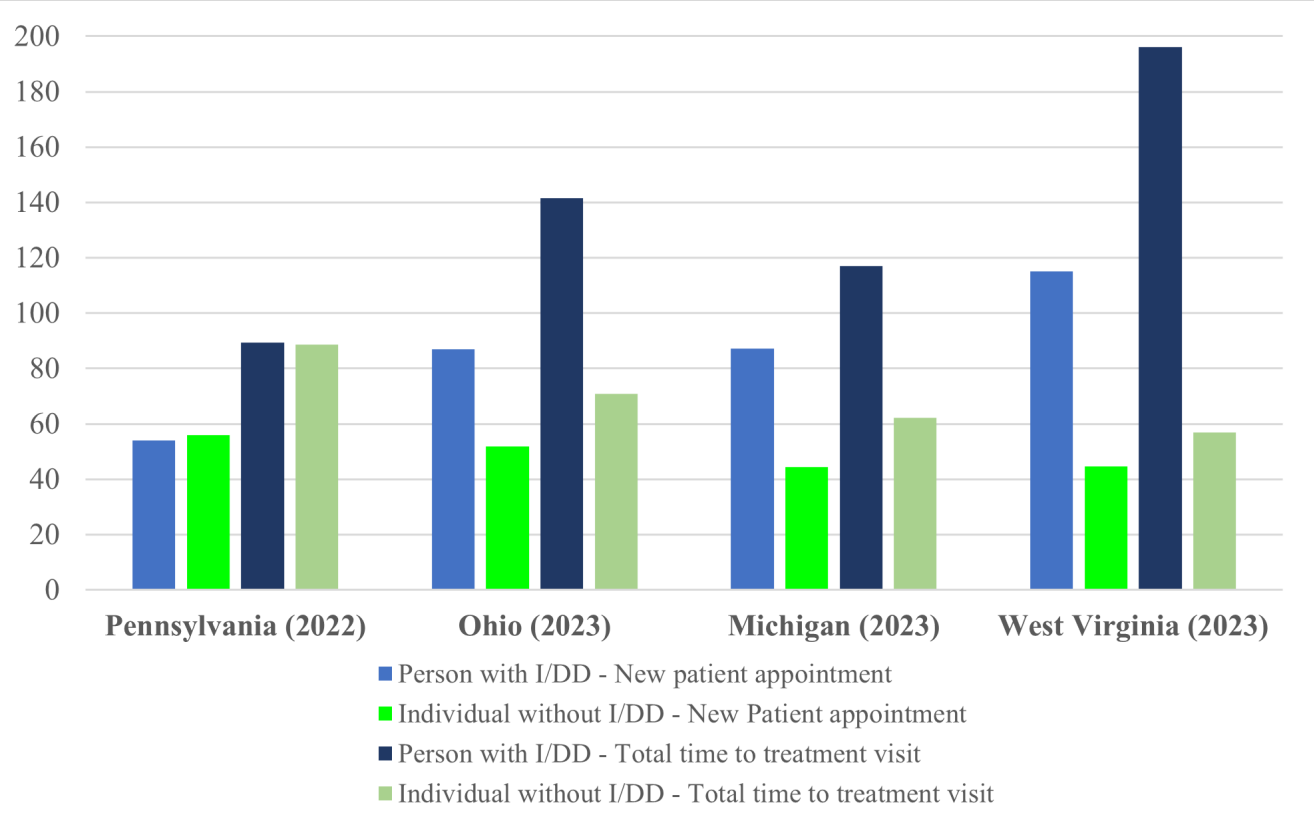
WHAT

WHAT TYPE OF MATERIALS DO THEY USE AND DO THEY OFFER ALTERNATIVE OPTIONS?

WHAT IS THEIR AVAILABILITY?

March 2024

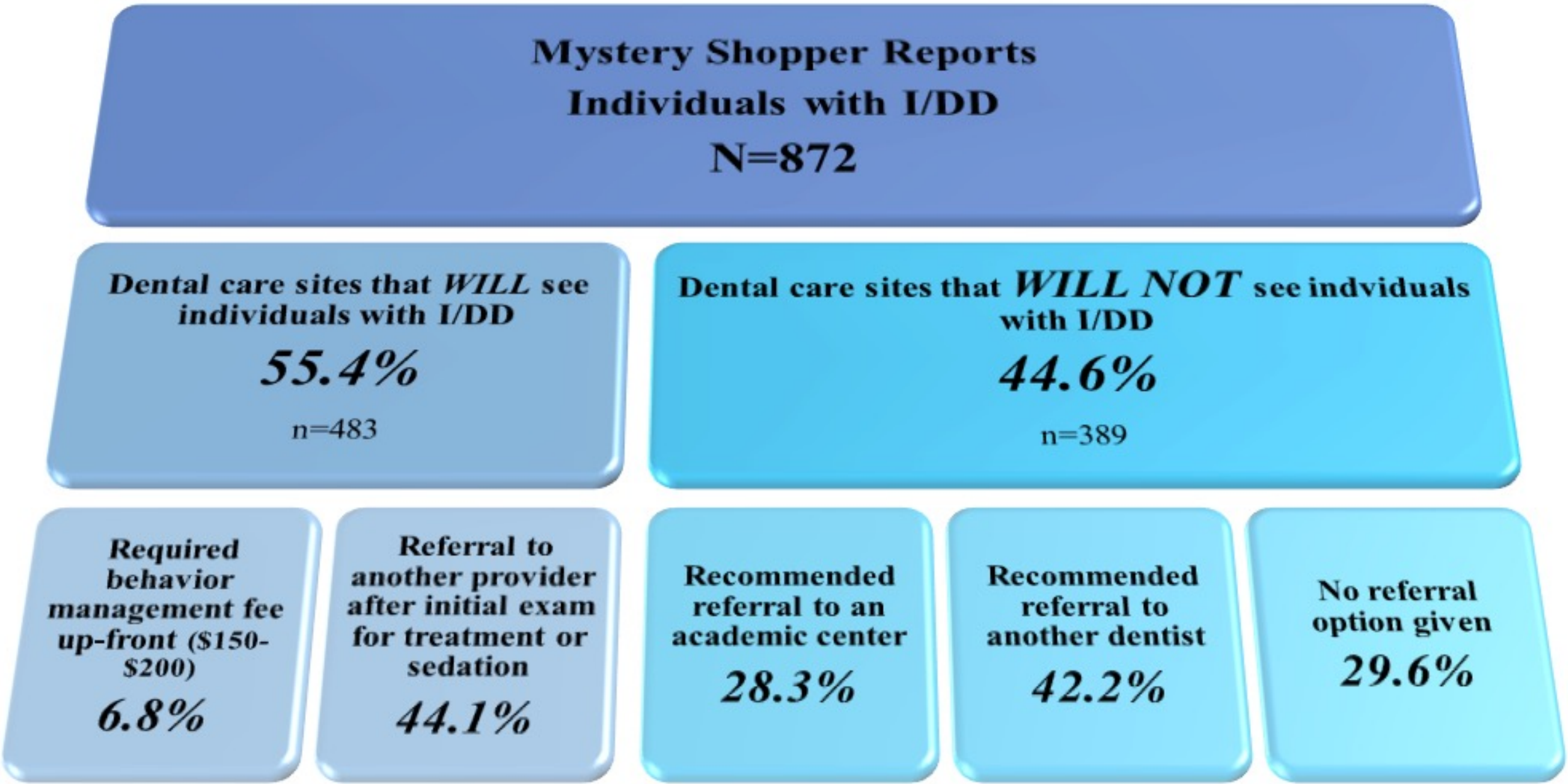
Unheard Voices: Shedding Light on the Overlooked Dental Care Challenges of I/DD Populations



Struggle Accessing Oral Health

Figure 1: Comparison of mystery shopper program scenarios for patient wait times (days) between individuals with a disability and those without that have commercial insurance and ability to pay. (ref 13,18-20)

Figure 2: A mapping of the difficult patient journey for persons with I/DD in achieving dental care access



ADA CODE OF PROFESSIONAL RESPONSIBILITY

EXPLICITLY PROHIBITS DENTAL CARE PROVIDERS FROM DENYING CARE TO PATIENTS BECAUSE OF THEIR DISABILITY AND ALSO SPECIFIES THAT PATIENTS WITH DISABILITIES IN NEED OF ANOTHER DENTIST'S SKILLS, KNOWLEDGE, EQUIPMENT, OR EXPERTISE SHOULD NOT BE TURNED AWAY AND SHOULD INSTEAD BE REFERRED TO DENTISTS ABLE TO PROVIDE THE NECESSARY CARE.

Most Common Disabilities Seen in the Dental Office

- AUTISM SPECTRUM DISORDER
- DOWN SYNDROME
- CEREBRAL PALSY
- ALZHEIMERS/DEMENTIA
- EPILEPSY

Bonus Issues

- Anxiety
- ADHD
- Sensory Processing Disorder

Autism

Autism Facts

1 in 36 children identified with ASD

Boys are 4x more likely to be diagnosed

Girls are typically more severe

Autism Prevalence has increased 178% since 2000

Oral Health Concerns with ASD

- Home care limitations
- Increased caries
- Periodontal concerns
- Xerostomia
- Possible self-injury
- Parafunctional habits(bruxism)
- Pouching of food
- Orthodontic malocclusion
- Pica
- Tongue thrusting
- Hyper gag reflex

Down Syndrome

Down Syndrome Statistics

Down syndrome is the most commonly occurring chromosomal condition.

There are **1 in 700 babies** born with Down syndrome in the US.

It's estimated that there are about **400,000 people** were living with Down syndrome in the US.

The average life expectancy of individuals with Down syndrome is 60 years old.

Oral Health Concerns of Patients with Down Syndrome

- Delayed Tooth Eruption
- Small and Missing Teeth
- Orthodontic Bite
- Increased Risk of Periodontal Disease

Cerebral Palsy

Cerebral Palsy Oral Health Concerns

- High caries risk because of acid reflux / vomiting and seizure medications that may be sugary for flavoring
- Trouble chewing and swallowing (drooling)
- Misalignment of upper and lower teeth
- Excessive gagging
- Gingivitis due to seizure medications
- G-tube fed in some cases
- High risk of aspiration respiratory infections

Leave it on or remove it?

PROFESSIONAL CALCULUS REMOVAL DOES NOT CAUSE AP, BUT PRESENCE OF CALCULUS DOES

There was concern that disruption of this calculus during its removal may trigger an episode of AP; however, Jawadi et al. (2004) reported professional calculus removal does not cause AP, but the presence of calculus intraorally did. #4

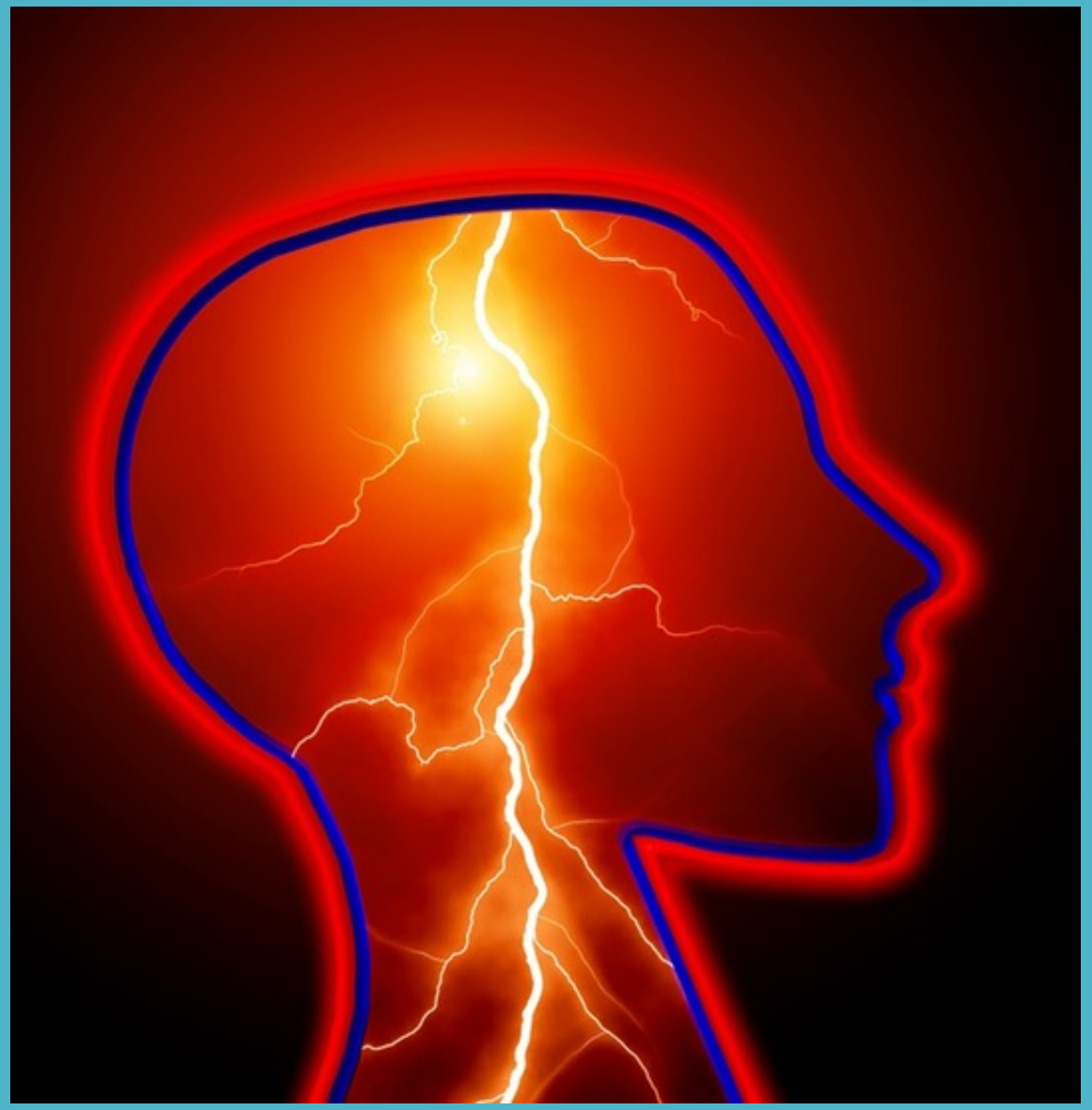
Jawadi, A.H., Casamassimo, P.S., Griffen, A., Enrile, B. and Marcone, M. 2004. Comparison of oral findings in special needs children with and without gastrostomy. Pediatric dentistry.

Dementia/Alzheimer's Disease

Dementia/Alzheimer's Disease Oral Health Concerns

- Poor home care
- Lack of cooperation
- Increased caries risk
- Increased risk of gum disease
- Dry mouth caused by Rx drugs (Antipsychotics)

EPILEPSY



Epilepsy Oral Health Concerns

Anti-seizure medications can cause dry mouth, gingival hypertrophy, delayed healing, bleeding gums, postoperative bleeding, and increased risk of infection

Dental trauma from falls associated with seizures

Trauma to tongue from biting during seizures

Anxiety

a mental condition characterized by excessive apprehensiveness about real or perceived threats, typically leading to avoidance behaviors and often to physical symptoms such as increased heart rate and muscle tension.

ADHD

- Impulsivity
- Hyperactivity
- Inattention

ADHD Oral Health Concerns

- Behavioral changes – inability to sit still, aggression, excitability
- Poor oral hygiene
- Side effects of medicine (e.g., dry mouth)

SENSORY PROCESSING DISORDER

Health condition that sees children and adults experience an unusual sensitivity or reaction to certain environmental and sensory stimuli

Comments

Treatment Challenges

- Mental Capabilities
- Behavioral Problems
- Mobility Problems
- Uncontrolled Movements
- Complex Medical Issues

Levels of Disability

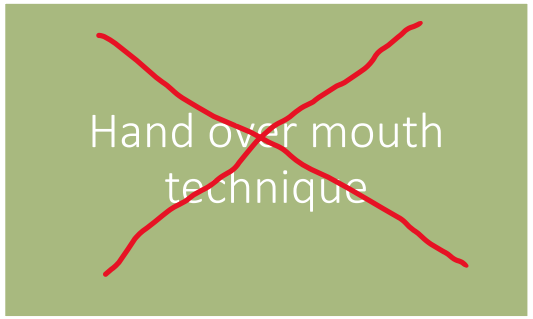
- Mild- 85%-3rd-6th grade level, can hold a job and live independently
- Moderate-10%-require some level of supervision/oversight
- Severe-5%-require full time supervision in daily activities
- Profound-less than 1%-require intensive support

Behaviors Dentist Fear

Biting	Temper Tantrums	Poor Listening	Screaming/yelling
Non-compliant	Hitting/Kicking	Cursing	Will not open mouth

Most common reasons for Increased negative behavior

Classic Behavior Management Strategies

Tell-show-do	Modeling	Positive and negative reinforcement	Distraction
 Voice Control	 Hand over mouth technique	MIPS	Pharmacological approach: oral conscious premed, nitrous oxide, general anesthesia.

Behavior Modification

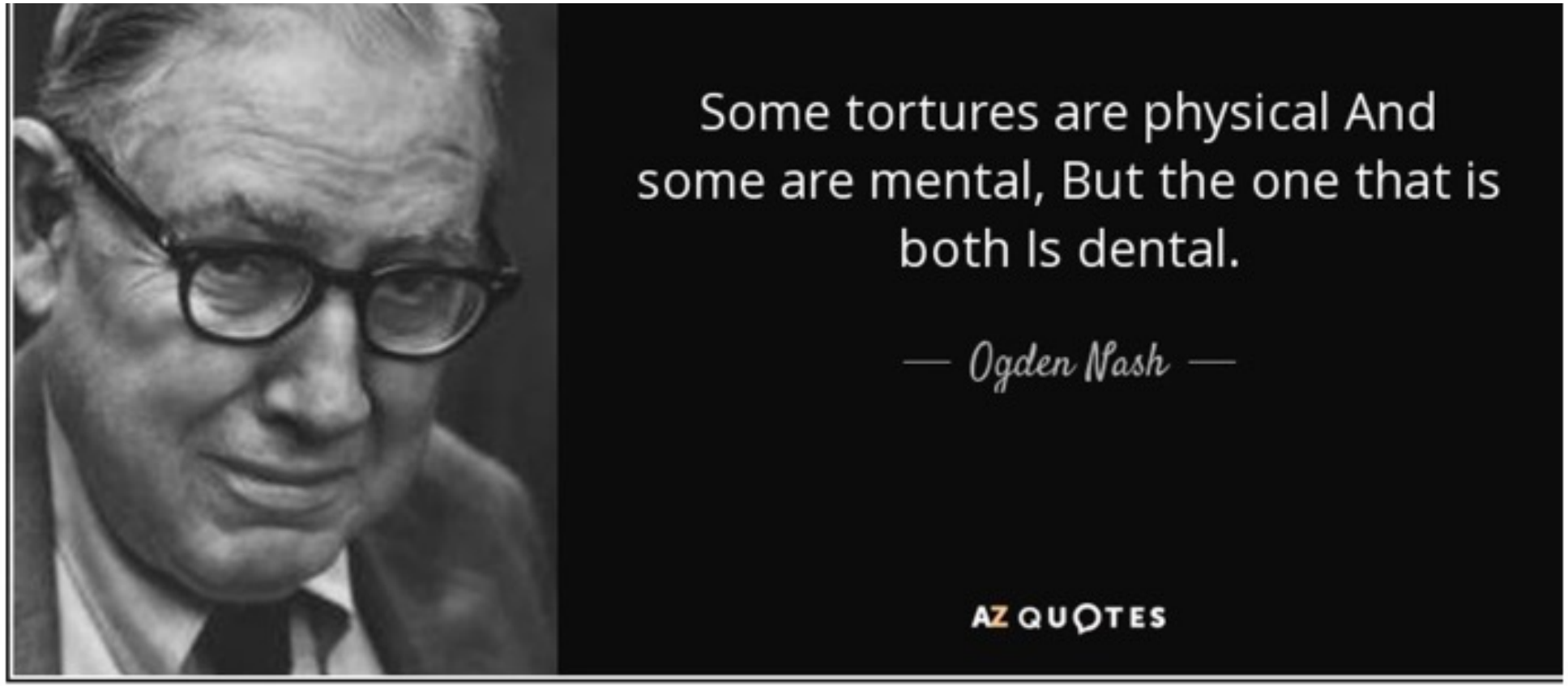
a treatment approach, based on the principles of operant conditioning, that replaces undesirable behaviors with more desirable ones through positive or negative reinforcement.

developed by American behaviorist B. F. Skinner (1904-1990)

Operant Conditioning

Operant conditioning is a form of learning in which the motivation for a behavior happens after the behavior is demonstrated. An animal or a human receives a consequence after performing a specific behavior. The consequence is either a reinforcer or a punisher.

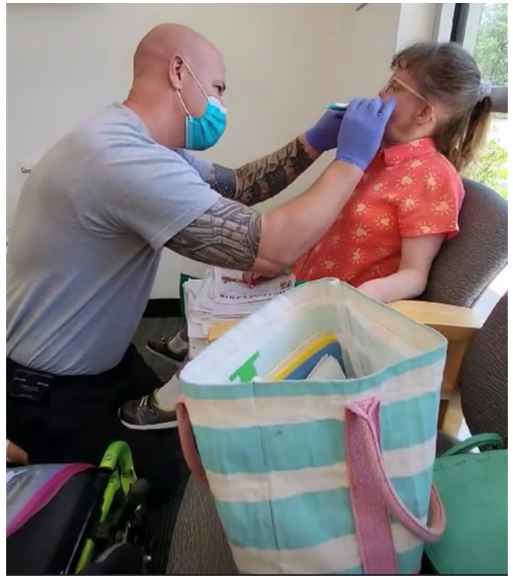
BEHAVIOR MODIFICATION WITH POSITIVE REINFORCEMENT


Some tortures are physical And some are mental, But the one that is both Is dental.
— Ogden Nash —
AZ QUOTES

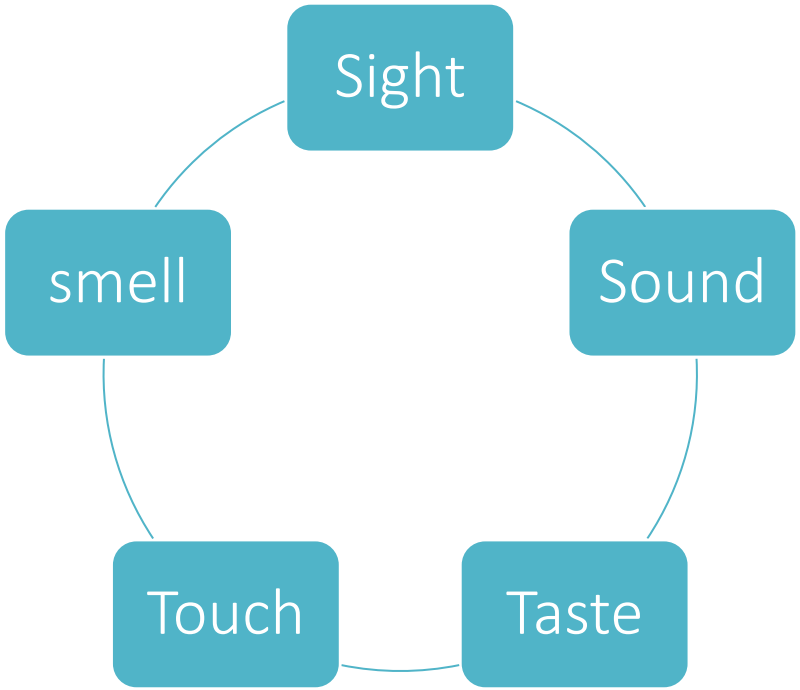
Treatment Options

- Desensitization
- MIPS
- Nitrous Oxide
- Oral Sedation
- IV Sedation
- General Sedation
- Alternatives

Desensitization



our ~~5~~... 8 senses



Proprioception(muscles and joints)

Vestibular(Balance and Movement)

Interoceptive(what's going on inside)

2021 TEACH-S Educational Symposium

Poster Code: P-062

An interdisciplinary approach to improving access to dental care for adults with intellectual/developmental disabilities

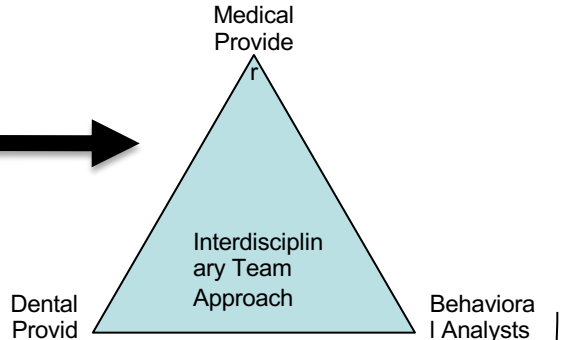
John Berens, MD; Larry Laufman, PhD; Cynthia Peacock, MD; Dorthea Lerman, PhD; David Fray, DDS; Loukia Tsami, MA; Ben Warner, DDS, MD

[1]Baylor College of Medicine, Department of Medicine; [2]The University of Texas Health Science Center at Houston School of Dentistry; [3]Department of Clinical Health and Applied Sciences, University of Houston

Background

- Adults with intellectual/developmental disabilities (AIDD) experience poorer oral health compared to the general population[1]
- Contributing factors include[2-3]:
  - Perceived behavioral concerns (cooperation with dental exam)
  - Lack of healthcare professionals trained to care for AIDD
  - Lack of awareness of the problem
  - Frequent use of general anesthesia, sedation, protective stabilization (restraint)

How do we overcome these barriers to improve access to preventative dental care?



Address perceived behavior concerns

Address lack of awareness

Address lack of training/exposure

Interdisciplinary Program Development

- **Target population**:
  - AIDD unable to get preventative dental care without sedation, general anesthesia, or protective stabilization
  - Identification, referral from medical → behavior team
- **Intervention**:
  - Series of gradually more intensive behavioral strategies during *mock exam* with behavioral therapist
  - Refer for real dental exam when mock exam successful
  - Communication & behavior strategies between dental ←→ behavior team
- **Findings**:
  - 37 individuals recruited pre-pandemic, 14 recruited post-COVID via telehealth platform
  - 28 have attempted focused dental exam, 22 successfully completed
  - Most needed minimal behavioral intervention
- **Discussion**:
  - Supports use of behavioral supports in this setting
  - Suggests AIDD should have opportunity to participate in their dental care / importance of reassessing ongoing need for invasive supports
- **Future direction**:
  - Observations durable? (test in community dental setting)
  - Observations generalizable? (test in other settings)
  - Recreate interdisciplinary team in other settings

Knowledge dissemination

- **Host interdisciplinary seminar**:
  - Two seminars hosted with ~100 total attendees of various backgrounds (medical, dental, behavioral health, research, administrative, self/family advocate, etc)
  - Speakers including dental/medical/behavioral professionals & family/self-advocates
- **Publish scholarly work**:
  - Manuscript submitted for publication that outlines the issues and preliminary findings of the interdisciplinary program
  - Multiple presentations at local, regional, and national level discussing these issues and the program
- **Findings**:
  - Feedback: 100% of survey respondents (~50% of attendees) across first two seminars reported the overall quality as “good” or “excellent”
  - Attendees’ self-reported rating of their comfort level caring for adults with IDD significantly increased (pre-conference mean 4.0, post-conference mean 4.7 [1 = Very Uncomfortable, 5 = Very comfortable]; p = 0.008)
- **Future direction**:
  - Host annual seminar, ideally with hands-on training/workshop component
  - Continue to disseminate knowledge on national scale (eg conferences)

Educating learners/trainees

- **Dental student elective**:
  - Formal elective developed at dental school
  - Includes didactic lectures and opportunity to observe dental clinic portion of the interdisciplinary program
- **Fellowship program development**:
  - 1-year fellowship for recent graduates of dental school or medical residency program
  - Includes participation in LEND, active involvement in dental/behavioral program, and other hands-on learning opportunities
- **Curriculum development**:
  - Currently developing formal learning objectives & content required to understand oral health disparities & how to overcome them
  - Includes interdisciplinary learning to take place while observing dental clinic + involvement of self/family advocates
- **Future direction**:
  - Finalize curriculum for distribution
  - Analyze ongoing feedback from trainee experiences to improve experience and learning

Acknowledgements & References

Special thank you to the Texas Council for Developmental Disabilities and the Working for Inclusive and Transformative Healthcare (WITH) Foundation for their financial support of these programs.

1) Ward, L. M., Cooper, S. A., Hughes-McCormack, L., Macpherson, L., & Kinnear, D. (2019). Oral health of adults with intellectual disabilities: a systematic review. Journal of Intellectual Disability Research, 63(11), 1359-1378.
2) Morgan, J. P., Minihan, P. M., Stark, P. C., Finkelman, M. D., Yantsides, K. E., Park, A., ... & Must, A. (2012). The oral health status of 4,732 adults with intellectual and developmental disabilities. The Journal of the American Dental Association, 143(8), 838-846
3) Casamassimo, P. S., Seale, N. S., & Ruehs, K. (2004). General dentists' perceptions of educational and treatment issues affecting access to care for children with special health care needs. Journal of dental education, 68(1), 23-28

Collaborative Care Approach

- Primary Care Physician
- ABA Therapist
- Occupational Therapist
- Physical Therapist
- Speech Therapist
- Parent/Caregiver

Primary Care Physician

Provides clinical diagnosis

Creates referral program to health care and psychological specialist

ABA Therapist

Chaining

Desensitization

Social Stories

Positive Reinforcement

Occupational Therapy

- Assess fine and gross motor issues
- Use sensory integration techniques to desensitize the mouth to oral aversions

Physical therapist

Help with jaw movement and function through exercise

Muscle Relaxation

Treat TMJ pain

Speech Therapist

Oral Motor assessment to identify issues causing oral aversion

Sensory desensitization

Parent/Caregiver

Responsible for daily oral hygiene at home

Reinforces desensitization program at home through repetition and consistency

“We must adapt our environment and delivery of care to meet our patients where they are instead of making them adapt to us.”- Dr. Jacob Dent

Sensory Rooms

- Flexible seating
- Screens with sensory games
- Toys
- TV
- Non-restrictive
- Optional Music/Quiet
- Adjustable Lighting

Sensory Operatories

Handi-accessible space

Room for caregiver seating/modeling(if applicable)

Sensory items(trampoline, canoe, TV)

Optional delivery systems


INFINITY
BANK
POLICE
H
H
MARKET

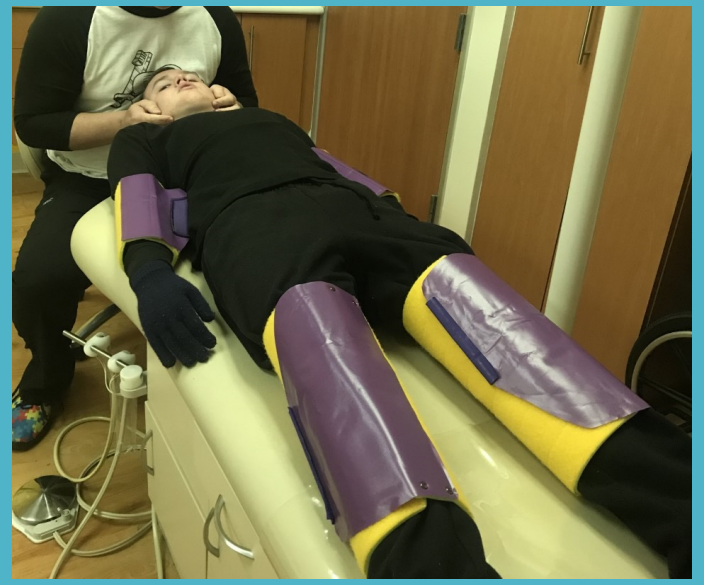
Nitrous / Laughing Gas

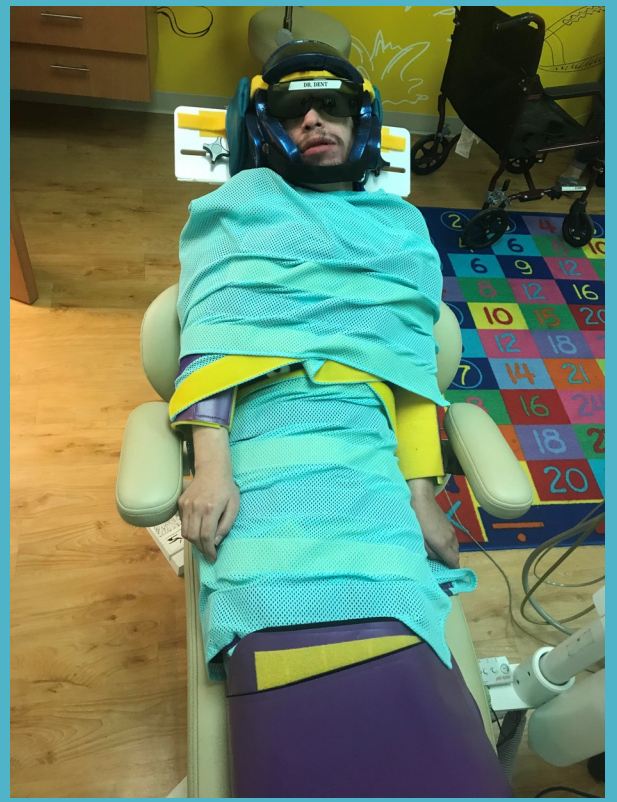
Objections:

Mouth breather

Patient cooperation to wear nose

Medical Immobilization Protective Stabilization





Stabilization

Active – being held down by another person

Passive- using equipment or mechanical devices

Oral Sedation

Objections:

- Reverse or adverse effects
- Will not swallow liquid
- Will not swallow pills

IV Sedation

Objections:

Cost

Availability

Fight to start the IV

Post-op side effects

General Anesthesia

Objections:

Cost

Availability

Fight to start the IV

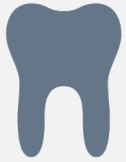
Post-op side effects

Killing of brain cells

Over-reliance on Sedation

The over-reliance on sedation not only perpetuates a cycle of denying essential oral health care but also poses significant physical risks, raising ethical concerns about the balance between ensuring safety through sedation and the potential harm it may inflict.

45-60% of IDD population receive sedation treatment when only 25% need it



Average wait time for sedation dental treatment ranges from 6 months to 5 years around the country

Alternative Treatments

Benefit/Risk of Medical Marijuana

According to the late Bernard Rimland, founder of the Autism Society of America and former director of the Autism Research Institute, "Of all drugs, the psychotropic drugs [e.g., Risperdal] are among the least useful and most dangerous, and the benefit/risk profile of medical marijuana seems fairly benign in comparison…The reports we are seeing from parents indicate that medical marijuana often works when no other treatments, drug or non-drug, have helped."

Source: Sircus, M. (2014). *Medical marijuana*. IMVA Publications.

Comments

Tools Needed to Start Treating Patients with Special Needs

Special Needs Questionnaire

Getting to Know You

Patient name:
_____

Parent/guardian/caregiver name:
_____

Describe the patient's disability:
_____
_____
_____

Is the patient on a special diet? yes ___ no____
Type of foods patient likes to eat regularly:
_____
_____

Does the patient have any physical challenges that the team should be aware of? Example: In a wheelchair, delayed fine motor skills, uses a walker:
_____
_____
_____

Has the patient visited the dentist before?
yes____ no____
If yes, when was the last visit?: _____

Please describe the experience for both caregiver and patient: _____
_____

Describe the patient's at-home dental care:
How frequent does the patient brush?
_____

Does patient need brushing assistance?
yes ____ no ____
Manual toothbrush? yes ____ no____
Electric toothbrush yes ____ no ____
What flavor of toothpaste do they prefer?
_____

How frequent does the patient floss?
_____

Does the patient need flossing assistance?
_____

How often does the patient use mouthwash?
_____

Does the patient have any issues spitting?
yes ____ no____
Is fluoride/varnish ok to use on patient?
yes ____ no ____
Who aides the patient during their homecare routine?
_____
_____

Where is the brushing performed and in what position? Example: in bathroom/standing or in bedroom/lying on bed
_____
_____
_____

Does the patient have any challenges with brushing and flossing at home? yes ____ no ____ if yes, please describe:
_____

Can the patient communicate verbally?
yes____ no ____
If yes, is communication level age appropriate?
yes ____ no____
If no, what age level are they at? _____
Are there any certain cues that might help the dental team? Example: hands quiet, mouth quiet
_____
_____

Does the patient use non-verbal communication? yes ____no ____
If yes, please describe:
_____
_____

Dental Desensitization Systems

Dental Desensitization Systems

Take Home Desensitization Kit

Education Videos

Collaborative Care approach with parent/caregiver, Therapists, Educators

Dental
Desensitization
Systems

The DDS Kit Contains:

1. Triple Bristle Manual Toothbrush

2. DDS Bite Block

3. Mask

4. Gloves

5. Patient Bib

6. Dental Mirror

7. Metal Tongue Cleaner

8. Suction Tip

9. Prophy Paste

10. Listerine Flosser

SCAN TO WATCH

Dr. Dent Explains:
The Dental Desensitization Systems Kit

Dental Desensitization Systems

SCAN TO WATCH

Dr. Dent Demonstrates:
How To Overcome Common Dental Problems At Home

Dental Desensitization Systems

SCAN TO WATCH

Dr. Dent Demonstrates:
How To Brush Using the DDS Dental Kit

Dental Desensitization Systems

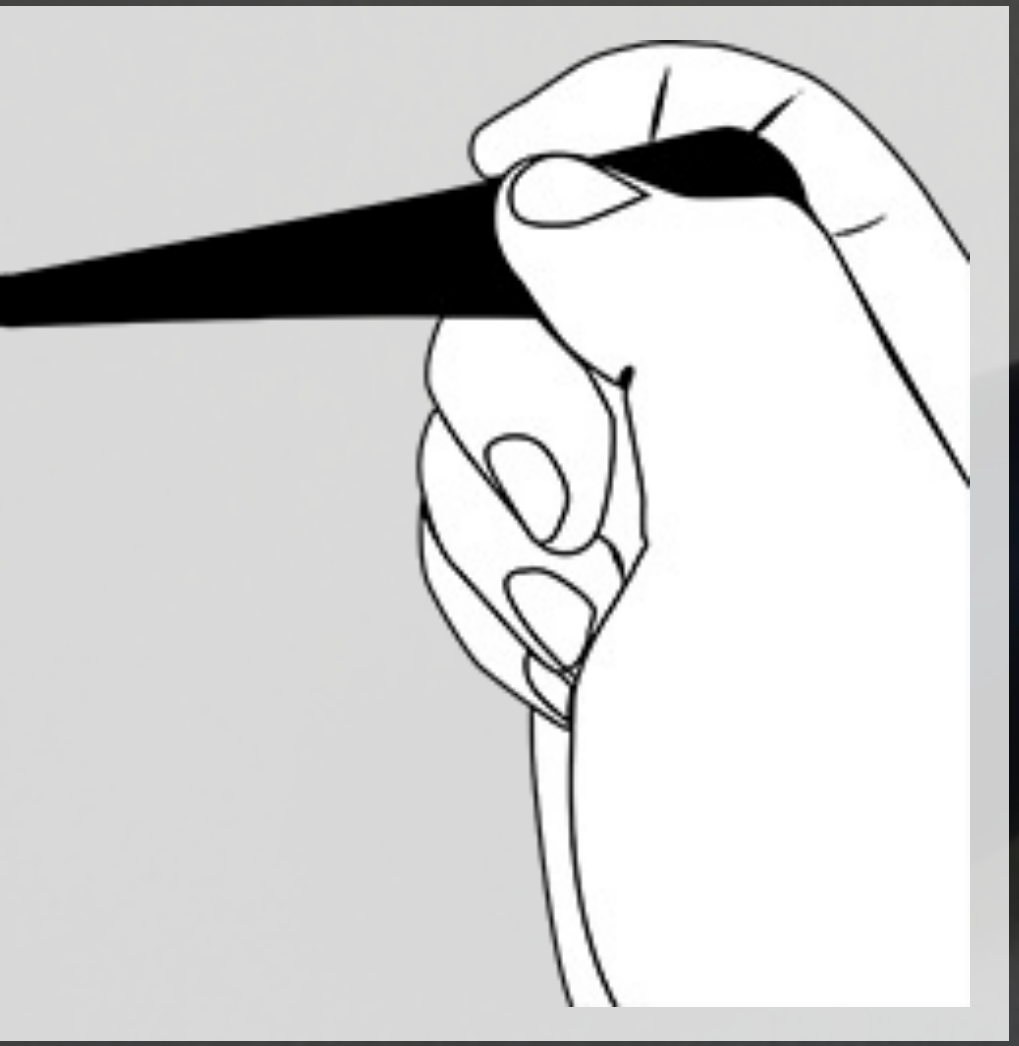
SCAN TO WATCH

The Rule Of 5

Dr. Dent Demonstrates:
Proper Positioning Brushing Teeth at Home

Dental Desensitization Systems

Bite Blocks



DDS Bite Block

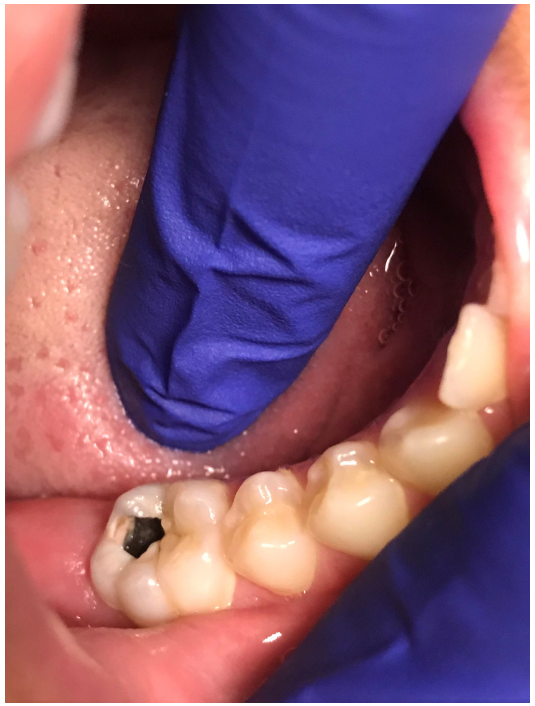
Atraumatic mouth opening

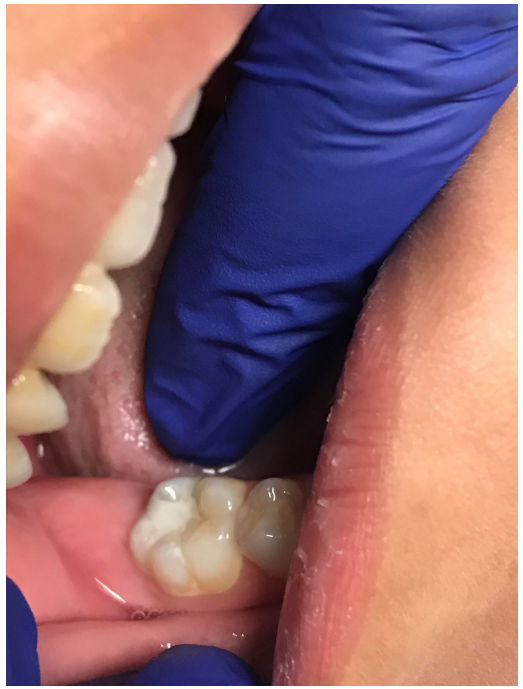
Cheek retractor

Bite block

Tongue depressor

MIPS



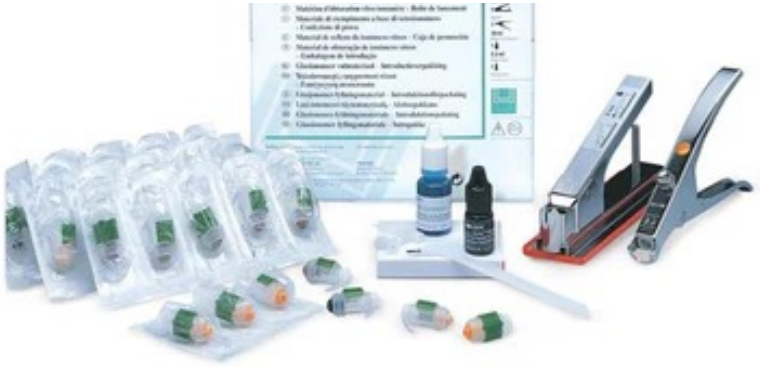


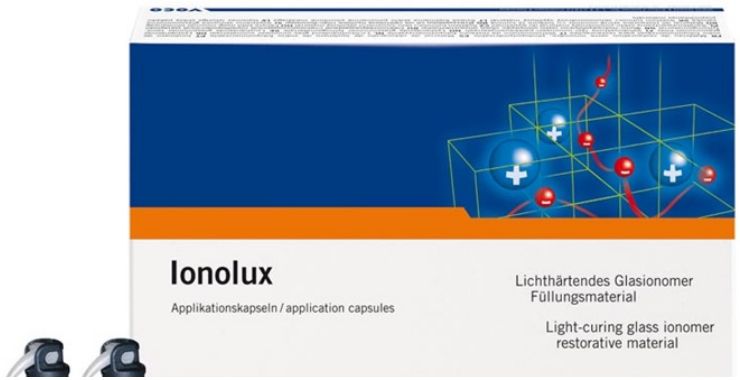
SMART-Silver Modified Atraumatic Restorative Treatment


KEEP OUT OF REACH OF CHILDREN
USE STRICTLY AS DIRECTED
riva star
SDI


AA Gel
0.1 ml SDF 38%
2024-09-30
LOT 21368C
AA Gel
0.1 ml SDF 38%
2024-09-30
LOT 21368C

SDF





Glass Ionomers

Permanent restorations

Bulk Fill

Hydrophilic

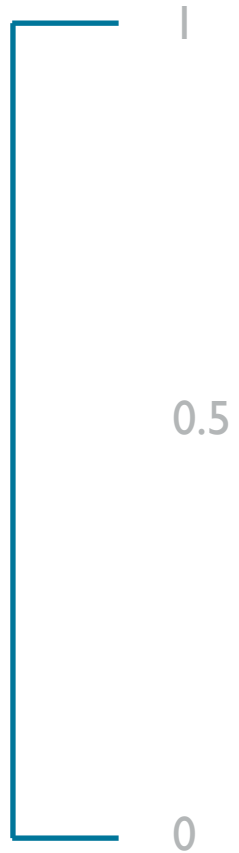
Povi•One™: 10% PVP-I

- Water resistant box of 6, 0.45 mL unit-doses
  - Controlled dose
  - Simplified application
- Moderate or high-risk protocol
  - Every other month - Moderate
  - Once per month - High/Extreme

Fluoride Varnish

Summary of Preventives

1.	Xylitol in MOMs of 3-15 mos.	74%
2.	F varnish + Iodine	70%
3.	Silver Diamine Fluoride	61%
4.	Vitamin D/UV	50%
5.	Iodine	48%
6.	F Varnish	43%
7.	Daily Pro-Flossing	40%
8.	Xylitol in Infants/Toddlers	40%
9.	High F Toothpaste	37%
10.	F Toothpaste	22%
11.	Prophies, MI paste, CHX, Daily Self-Flossing	00%



Home Care Recommendations

Floor Stabilization

Swaddling

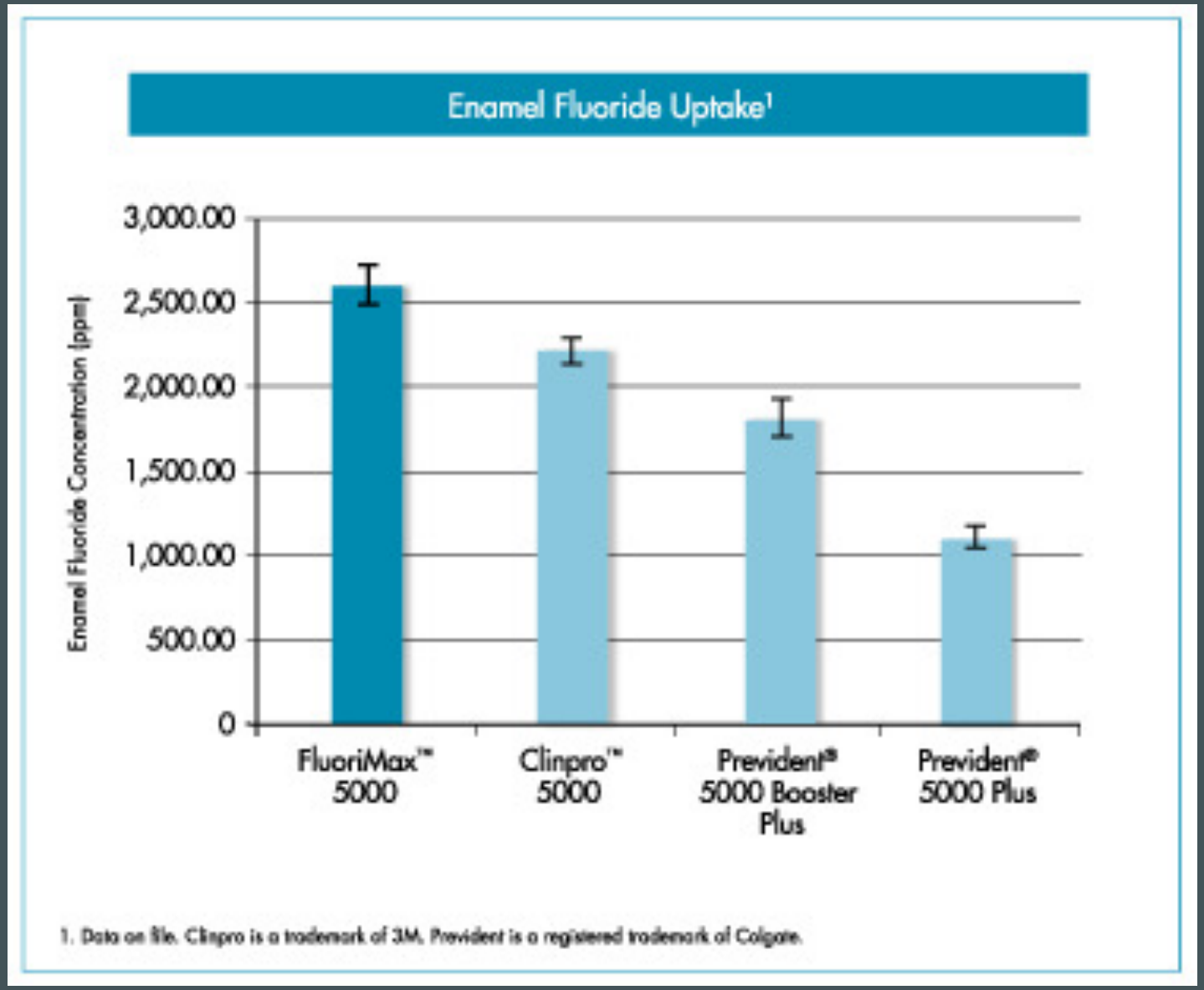
PillowCase Arm Stabilization

Toothbrushes

3-sided

Full arch

Vibrating



Rx Fluoride Toothpaste

IMAGE SOURCE: FLUORIMAX TOOTHPASTE PRODUCT IMAGE AND INFORMATION COURTESY OF ELEVATE ORAL CARE, LLC

Dry Mouth OTC

Water Flossers

Daily Preventative Products

Special needs

TEETH
- Prone to caries (interdental & surface)

GUMS
- Gingivitis
- Perio Disease

Primal Health

Functional dental hygiene products


Gums
PROtektin™
Supports gums and helps maintain healthy gum tissue.
Teeth
pHossident®
Supports teeth and helps promote natural remineralization.

Recommended patient use

1-2 lozenges after meals and snacks

1 sachet in 8-16 oz of water, sip throughout the day

2 lozenges after brushing teeth, right before bed

Epic

Gum

Mints

Toothpaste/mouth wash

Words of Wisdom

" Be the change you wish to see in the world"-Ghandi

"The most valuable thing you can make is a mistake. You can not learn anything from being perfect."- Adam Osbourne

Websites

ddskit.com

Specializedcare.com

Funandfunction.com

Elevateoralcare.com

Triplebristle.com

Curaprox.us

Dailydentalcares.com

Go be a special needs warrior!

Thank you

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Dr. Jacob Dent