INTERPROFESSIONAL COLLABORATIVE CARE WITH OCCUPATIONAL THERAPY

Improving outcomes in oral health and beyond

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Interprofessional Education Collaborative (IPEC)

Interprofessional education:  
“When students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes.” (WHO 2010)

Interprofessional collaborative practice:  
“When multiple health workers from different professional backgrounds work together with patients, families, [careers], and communities to deliver the highest quality of care.” (WHO 2010)
IPEC four core competencies

**Competency 1** Values/Ethics for Interprofessional Practice

**Competency 2** Roles/Responsibilities

**Competency 3** Interprofessional Communication

**Competency 4** Teams and Teamwork

Several sub competencies reside within each competency
Reduce the per capita cost of health

IPEC Triple Aim

Improve the patient experience of care

Improve the health of populations
Occupational Therapy

- **Occupational therapy maximizes health, well-being, and quality of life for all people, populations, and communities through effective solutions that facilitate participation in everyday living.**

- **Occupation – Meaningful and relevant activities that occupy one’s daily life**

- **Founded - 1917 - social worker, Psychiatrist, Architect, crafts and textiles teacher, a technical education teacher who rehabilitated soldiers,**
Occupational Therapy

• Today, OT practitioners include:
  • Occupational therapist, registered (OTR): Evaluation, consultation, intervention
    • OTD – Individuals with a doctorate in occupational therapy (OTR)
    • Masters level occupational therapists
    • Bachelors level occupational therapists
  • Certified Occupational Therapy Assistants (COTA): Consultation, Intervention
    • Bachelors level
    • Associates level
OT Practice Framework

The OT practice framework is based on the WHO International Classification of Function, Disability and Health (ICF) framework.
OT Practice Framework

**Figure 1. Domain of Occupational Therapy.** This figure represents the domain of occupational therapy and is included to allow readers to visualize the entire domain with all of its various aspects. No aspect is intended to be perceived as more important than another.
PERSON – ENVIRONMENT - OCCUPATION

based on diagram by Law et al
How does this fit into oral health care?

• Daily oral hygiene is an activity of daily living, including obtaining and using supplies, cleaning mouth; brushing and flossing teeth; and removing, cleaning, and reinserting dental orthotics and prosthetics.

• Attending doctor and dental appointments is an Instrumental Activity of Daily living
Difficulty with oral health care (N=138)

**Difficulty at home**

- **Current:** 59%
- **Past:** 13%
- **Never:** 28%

**Difficulty In Dental Office**

- **Current:** 44%
- **Past:** 12%
- **Never:** 40%
### Barriers to oral health for individuals with IDD (N=138)

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Home n (%)</th>
<th>Dental Office n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensory</td>
<td>71 (51%)</td>
<td>62 (45%)</td>
</tr>
<tr>
<td>Vision</td>
<td>4 (3%)</td>
<td>15 (11%)</td>
</tr>
<tr>
<td>Sound</td>
<td>17 (12%)</td>
<td>31 (22%)</td>
</tr>
<tr>
<td>Touch*</td>
<td>49 (36%)</td>
<td>41 (30%)</td>
</tr>
<tr>
<td>Smell</td>
<td>8 (6%)</td>
<td>8 (6%)</td>
</tr>
<tr>
<td>Taste</td>
<td>31 (22%)</td>
<td>23 (17%)</td>
</tr>
<tr>
<td>Motor and positioning</td>
<td>55 (40%)</td>
<td>16 (12%)</td>
</tr>
<tr>
<td>Behavioral challenges</td>
<td>71 (51%)</td>
<td>57 (41%)</td>
</tr>
</tbody>
</table>

Desiderio, et al., 2018.
## Behavioral
Facilitators to oral health for individuals with IDD (N=138)

<table>
<thead>
<tr>
<th>Barriers at Home</th>
<th>n (%)</th>
<th>Barriers in the Dental Office</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Compliance</td>
<td>38(32%)</td>
<td>Non-Compliance</td>
<td>32(27%)</td>
</tr>
<tr>
<td>Distractibility</td>
<td>9(3%)</td>
<td>Aggression</td>
<td>6(5%)</td>
</tr>
<tr>
<td>Person Preference</td>
<td>4(3%)</td>
<td>Stress Behavior</td>
<td>20(17%)</td>
</tr>
<tr>
<td>Aggression</td>
<td>11(9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress Behavior</td>
<td>10(8%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Desiderio et al., 2018.
Facilitators to oral health for individuals with IDD
At home

Sensory:
• Flavor free or alternative flavored toothpaste
• Electric toothbrush or sonic toothbrush
• Allowing individual to do it themselves
• Brushing teeth outside of bathroom

Motor & Positioning
• Brushing teeth in alternate position such as sidelying or in wheelchair
• Stand behind the individual when brushing his teeth

Behavioral:
• Complete brushing before a preferred activity can be started
• Sing a song (Raffi brush your teeth song is popular)
Facilitators to oral health for individuals with IDD
In the Dental Office

Sensory:
• Dim lights
• Headphones/ music
• Sunglasses
• Quiet room

Motor & Positioning
• No real solutions reported by caregivers

Behavioral:
• Draw a smile on the mask
• Always use “tell-show-do”
• Preparing for the Dental visit including Social stories *
Sensory Adapted dental Environment
Pioneered at University of Southern California under the guidance of Sharon Cermak, EdD, OTR, FAOTA

University at Buffalo/ University Pediatric Dentistry Partnership

2014-15- Four-hour training for hygienists
  • Sensory
  • Motor
  • Behavioral

2015-16- One-hour training for therapists
  • Oral health needs of individuals with IDD
  • Reinforcing OT skills to benefit dental health

2016-17- Local survey of facilitators and Barriers
  • 20 participants

2016-17- ADE study- 30 participants

2017-18- National survey of facilitators and Barriers- 118 participants

2018-19- Planned ADE study

2019-2020 – Planned Online Training for dental health professionals
OT/ Hygienist Collaboration

1. OT Students meet clients and help clients to settle into chair/Assess sensory and motor needs
2. Client is positioned to reduce muscle tone and promote relaxation
3. Sensory needs are addressed
4. Modifications are made as needed

2016-17 pilot study indicated hygienists and parents found benefit to this partnership.

Currently – developing the Assessment of the Prophylaxis Exam—to measure success of dental visit (% of visit completed) to determine if the dental exam in the adapted environment is more successful than in the standard environment.
Tools for teeth
Examples of Sensory tools
Examples of Sensory and Motor Adaptations
Weighted Blanket

Sommorfly Relaxer with Wipe-Down Cover
Positioning tools

Regular Headrest

Lateral Headrest
Potential Future work

Is there a role for Occupational Therapy in other areas of Primary Health Care for Individuals with IDD?

Can we better achieve the triple-aim of improved patient experience, Improved health of populations, and reduce cost by including OT in primary care for individuals with IDD?
References


IPEC Core Competencies for Interprofessional Collaborative Practice: 2016 Update retrieved from [https://nebula.wsimg.com/2f68a39520b03336b41038c370497473?AccessKeyId=DC06780E69ED19E2B3A5&disposition=0&alloworigin=1](https://nebula.wsimg.com/2f68a39520b03336b41038c370497473?AccessKeyId=DC06780E69ED19E2B3A5&disposition=0&alloworigin=1)
OT Student Collaborators


University Pediatric Dentistry – Buffalo, NY

https://www.universitypediatricdentistry.com
Thank You