

Reducing the Tears and Fears During Infant and Childhood Immunizations

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OUTLINE

This presentation will provide an overview of:

- effective pain management strategies for infants and children during immunizations
- the benefits of collaboration between researchers and nurses in community health nursing
- strategies for implementing similar knowledge translation initiatives in community health organizations



THE BE SWEET TO BABIES TEAM

Principle Investigator:

- Denise Harrison RN, PhD
- Chair in Nursing Care of Children, Youth and Families
- CHEO RI and University of Ottawa

Focus of Research:

- Procedural pain management in neonates, infants and children



WHY FOCUS ON IMMUNIZATION PAIN?

- Early childhood immunizations: vital for public health
- **But** painful & distressing for infants, children and family
- Untreated pain potentially leads to:
 - fear of needles
 - non-adherence to immunization schedule
 - avoidance of healthcare
 - Long-term effects on pain responses and developmental outcomes



PAIN MANAGEMENT STRATEGIES

Effective for all ages:

- Injection technique
 - Rapid injection, no aspiration
 - Most painful injection last



PAIN MANAGEMENT STRATEGIES (cont'd)

Effective for infants:

- Breastfeeding
- Sweet solutions (sucrose)
- Secure, upright, front to front holding



PAIN MANAGEMENT STRATEGIES (cont'd)

Effective for toddlers and school-aged children:

- Age appropriate holding
- Topical anesthetics (>3 years)
 - Especially for children who are fearful/previous negative experience
- Ice or vapocoolants (> 4 years)
- Age-appropriate distraction/deep breathing



RESEARCH TO ACTION GAP

But these evidence-based immunization pain management strategies are not always used in clinical practice

Possible solutions?



RESEARCH TO ACTION GAP (cont'd)

Collaboration between researchers and clinicians

Three examples:

1. Joint fact sheet with Ottawa Public Health (OPH)
2. Development of research project with Carlington Community Health Centre (CHC)
3. Collaboration with CHEO at Annual Family Flu Clinic



EXAMPLE 1 - OPH

- **Who:** OPH and CHEO RI Be Sweet team
- **What:** Development of joint fact sheet on immunization pain
- **Why:** Need to improve pain management during infant and childhood immunizations identified by OPH



EXAMPLE 1 – OPH (cont'd)

- **How:**
 - Meetings and ongoing communication for planning and development of content
 - Joint media appearances
 - Joint presentations to public health nurses



EXAMPLE 2 - CHC

- **Who:** Carlington CHC and CHEO RI Be Sweet team
- **What:** Planning of research project comparing sucrose to placebo in toddlers receiving their 12 month immunization
- **Why:** Uncertainty regarding effectiveness of sucrose >12 months



EXAMPLE 2 - CHEO (cont'd)

- **How:**
 - Meetings to discuss current knowledge gaps and potential for research project
 - Joint collaboration on development of grant submission to fund future study on sucrose in toddlers
 - If grant submission successful – future collaboration on study



EXAMPLE 3 - CHEO Flu Clinic

- **Who:** CHEO and CHEO RI Be Sweet team
- **What:** Implementation of age appropriate pain management strategies for all infants and children at annual CHEO Family Flu Clinic
- **Why:** Identified need to better support nurse immunizers and families to implement pain management strategies during flu shot



EXAMPLE 3 – CHEO Flu Clinic (cont'd)

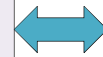
- **How:**
 - Collaboration with occupational health, child life teams, Pain Resource Nurses, and Nurse Unit Managers
 - Ongoing meetings and communication to plan effective pain management strategies
 - Collaboration during flu clinic to implement planned strategies and evaluate



BENEFITS OF RESEARCHER-CLINICIAN COLLABORATIONS

For researchers

- Informs research questions to ensure it is relevant for end users
- Informs conduct of research studies to be feasible in local context
- Increases potential for the research evidence to actually be used



For clinicians

- Strengthen your evidence based practice
- Opportunities to address knowledge gaps from your own practice



POSSIBLE STRATEGIES

What are some possible strategies for implementing knowledge to action initiatives in your own community health organization?



POSSIBLE STRATEGIES (cont'd)

- Identify knowledge gaps from your own practice
- Find out what work has been done and is currently happening:
 - Consult literature (ex. systematic reviews)
 - Search trial registries
 - What are other organizations doing?
- Connect with researchers in your area:
 - Resources and support
 - Opportunities for research projects
 - Utilizing undergraduate and graduate students



POSSIBLE STRATEGIES (cont'd)

Other ways to move research into action from
your own practice?



QUESTIONS & DISCUSSION

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