

## Pediatric Pain & Knowledge Mobilization

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Ph.D. Students

CSHP Educational Session  
October 5, 2019

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## Disclosures

- Names: Yvonne Brandelli & Nicole MacKenzie
- We have no current or past relationships with commercial entities
- We have received no speaker's fee for this learning activity

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## Learning Objectives

- Become familiar with the history of pediatric pain
- Acknowledge how psychosocial factors contribute to the pain experience in children
- Understand the short- and long-term consequences of improperly managed pain
- Learn about evidence-based management for pediatric pain
- Recognize the need for knowledge mobilization
- Introduce Solutions for Kids in Pain (SKIP)

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International Association for the Study of Pain  
**IASP**  
Working together for pain relief

"An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage."

IASP, 1994  
*currently in revision*

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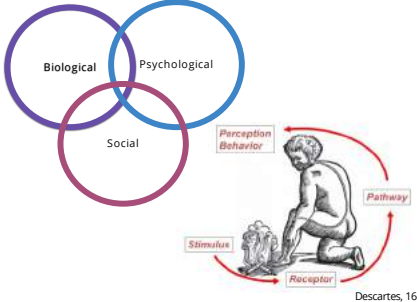
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Influences of Pain




Biological Psychological Social

Stimulus Receptor Pathway Perception Behavior

Descartes, 1644

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Biological Influences



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Psychological Influences



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Social Influences



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Juvenile Idiopathic Arthritis

What?  
•Inflammatory disease of the joints


Who?  
•1/1000 Canadian children

Why?  
•Unknown



Petty et al., 2016

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<p><b>Pharmacological</b> <small>(Davies et al., 2016)</small></p> <p>NSAIDS</p> <p>DMARDS</p> <p>Biologic Agents</p>		<p><b>Non-Pharmacological</b> <small>(Caville et al., 2015)</small></p> <p>Exercise</p> <p>Physiotherapy</p> <p>Splints</p> <p>Psychotherapy</p>
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*"[Our daughter] was unable to control her upset when receiving her injections at home. Her dad and I weren't prepared to hold her down or restrain her; getting her to calm down enough to safely receive a needle proved to be agonizing. Tears (both hers, her sisters' and ours) were inevitably shed and sometimes it would take 2 hours to finally get the shot into her... Afterwards I would feel horrible ... It was even harder when the Methotrexate made her vomit so much that we had to take her to the hospital."*

- Mother of a child with JIA

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Parent thoughts around their child's pain influence the uptake of treatments in children with arthritis and their families

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Pain Management:  
The 3 P's

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Pharmacological Treatments



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Physical Treatments



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### Psychological Treatments

**Cognitive Behavioral Therapy - Exposure Therapy**

- Problem Solving Skills Training
- Acceptance & Commitment Therapy

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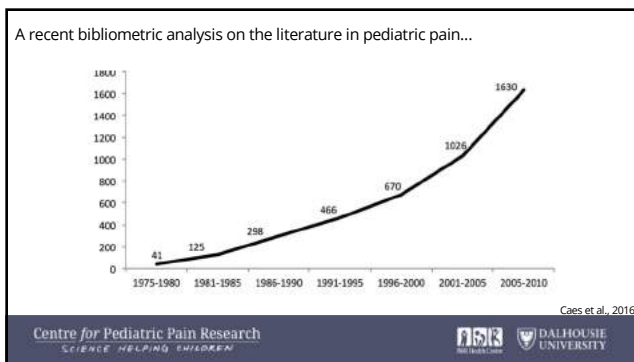
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2.5 million scientific articles published each year

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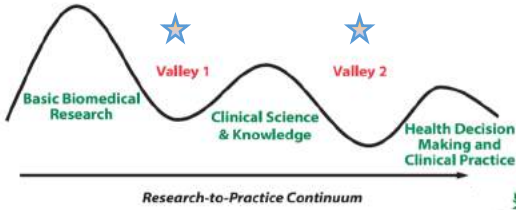
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The 2 "Death Valleys" of the Translational Continuum




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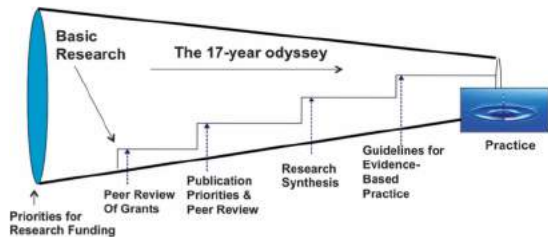
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It takes 17 years for 14% of research to find its way into practice



Green, 2008

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The Research to Practice Gap

$\frac{1}{3}$   Patients  
 do not receive evidence-based treatments

$\frac{1}{4}$   Patients  
 receive care that is not needed or is potentially harmful

$\frac{3}{4}$   Patients &  $\frac{1}{2}$   MDs  
 report not having the information they need for decision making

Dawes et al., 2003; Kiesler et al, 2006; McGlynn et al, 2003; Straus et al, 2013

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Dissemination & Implementation Science

**Dissemination:**  
The sharing and spreading of scientific findings

**Implementation:**  
The use of strategies to adopt and integrate science-based intervention to change practice and improve care



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RIGOUR



IMPACT

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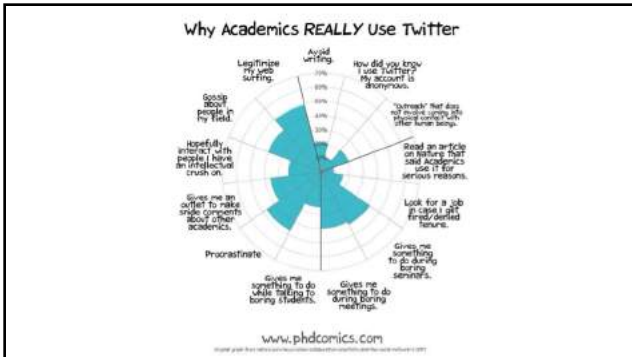
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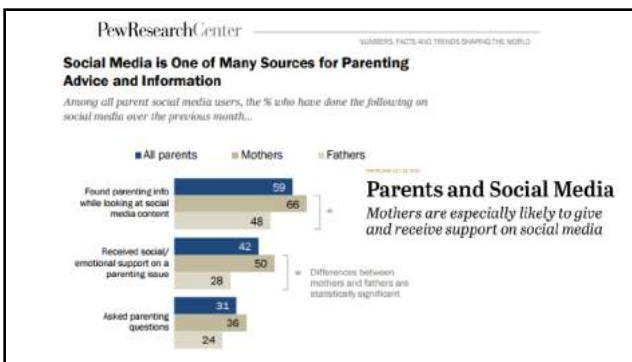
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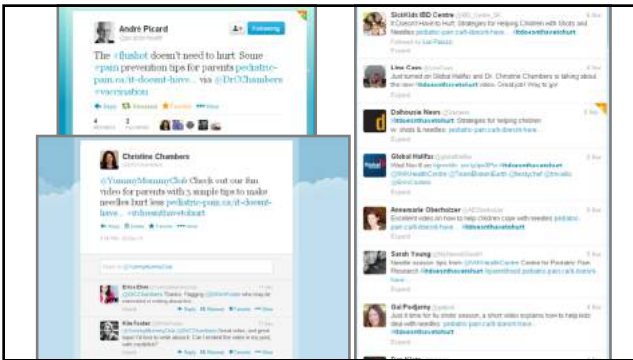
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How do we get information like this out to parents who need it?

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A screenshot of a social media post. The user is Erika Eber (@ErikaEber). The text of the post reads: "Met @DrCChambers from Halifax online. Today we met IRL &amp; are working together on a very exciting project! pic.twitter.com/WEvYrdJlHt". Below the text is a photograph of two women smiling. The post is dated 10:52 am · 09 Aug 2018. The background of the screenshot shows a 'ymc' logo and the text 'FAMILY STYLE HI Relax. We've got it' and 'Where...'.

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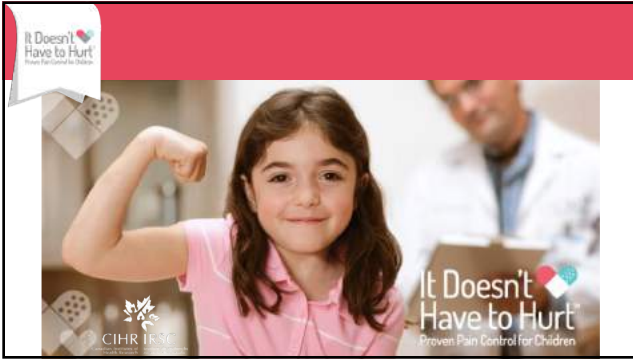
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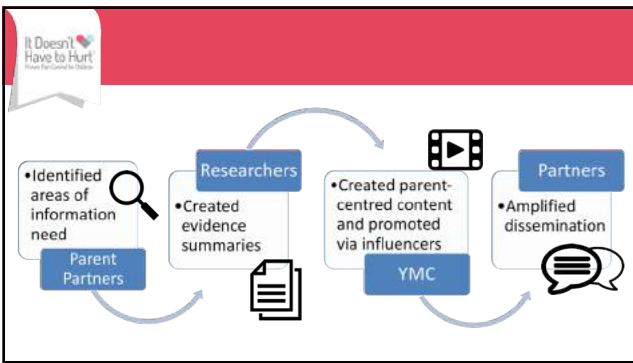
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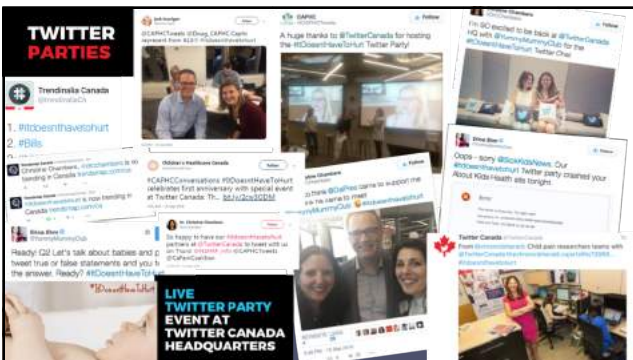
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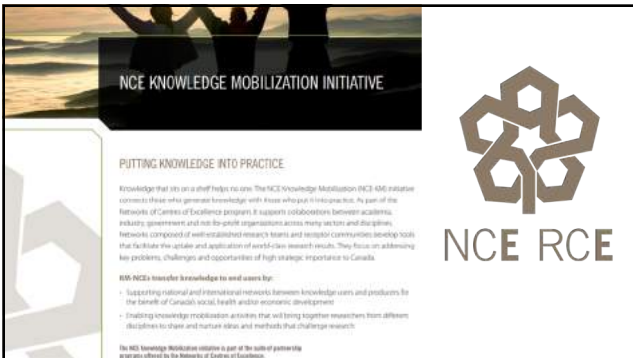
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kidsinpain.ca #ItDoesntHaveToHurt @kidsinpain

Canada is a world leader in children's pain research... but this knowledge isn't being put into practice.

Readiness, Resources & Evidence

video / vidéo | materials / matériaux | media / médiatique

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Thank you to our supporters

It Doesn't Have to Hurt | Centre for Pediatric Pain Research | DALHOUSIE UNIVERSITY | MASSU-SSSM

cassie+ friends | Health Research Foundation | ymc | Yummy Mummy Club

Arthritis | BRIC NS | CIHR IRSC

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