Webinar Series on Pain in Children

Supported by the CIHR Team in Children's Pain, the CIHR Synthesis Grant: Knowledge Translation and CAPHC

Webinar Series for 2010

1. From Pokes to Post-op: An Overview of Pain Prevention and Management in Hospitalized Children ~ Bonnie Stevens & Fiona Campbell
   Monday, March 1, 2010 @ 2:00 – 3:30 pm (EST)

2. Reducing Pain in Infants and Young Children During Pokes and Other Procedures ~ Denise Harrison, Christine Chambers & Janet Yamada
   Tuesday, March 23, 2010 @ 12:00 – 1:30 pm (EST)

3. Pain Matters in Children and Adolescents: TBA ~ Presenters to be determined
   Tuesday, September 21, 2010 @ 12:00 – 1:30pm (EST)

Reducing Pain in Infants and Young Children During Pokes and Other Procedures

Presenters:

Denise Harrison RN, RM, PhD
Christine Chambers PhD, RPsych
Janet Yamada RN, PhD (c)

Disclaimer Statement

All presenters have no financial relationships to disclose or conflicts of interest.

CIHR Team in Children's Pain, the Translating Research on Pain in Children (TROPIC) and the Knowledge Synthesis Grants are funded by CIHR.

Objectives

1. Present evidence-based pain management strategies for pokes and other procedures for neonates, infants and toddlers
2. Discuss pain assessment tools used in this population
3. Describe the context where evidence based pain practices are implemented

Pain in Infants

Denise M. Harrison RN RM PhD

The Hospital for Sick Children

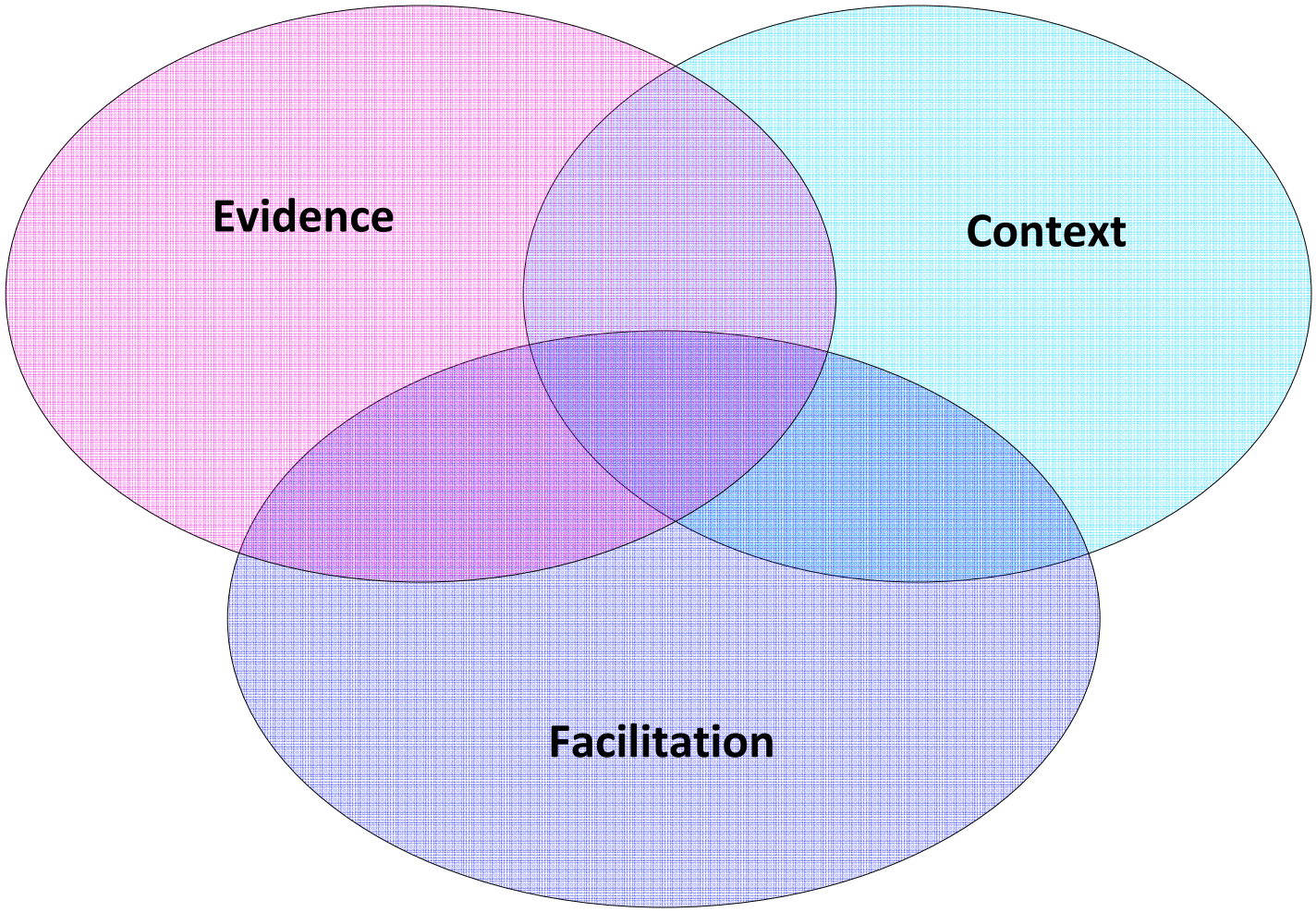
Lawrence S. Bloomberg Faculty of Nursing,
University of Toronto

Pain in Infants: Background

- Infants and toddlers are exposed to large numbers of painful procedures
  - Childhood immunization - 14-20 injections before 2 years
  - Hospitalized infants - 4-10 procedures/day

- Ongoing surveys/audits report minimal or no provision of pain management strategies
- Yet, there is good evidence to support use of pain reduction strategies

Promoting Action on Research Implementation in Health Services (PARiHS) Framework



Adapted from Kitson et al.1998 - Promoting Action on Research Implementation in Health Services (PARIHS)

What is the evidence for pain management strategies in infants?

- Breast Feeding
- Kangaroo care
- Sucrose
- Other sweet solutions
- Topical anesthetics

Analgesic effects of breastfeeding

"The food for infants is human milk; it is, with certain exception, the only one which ought to be given to weaklings and newly born children"

(P Budin, 1902, The Nursling)

How is breastfeeding analgesic?

- Combination of:
  - Skin to skin contact
  - Suckling/food intake
  - Pleasant taste
  - Intake of naturally occurring endorphins in breast milk

Although BF is analgesic, small volumes of EBM are less effective

Analgesic effects of breastfeeding during procedures

- Systematic review of BF in neonates during heel lance/venepuncture (Shah et al. 2006):
  - Reduced heart rate, pain scores, cry duration compared to placebo, no treatment & maternal holding
  - No reduction when compared to sucrose or glucose
- 3 trials during immunization in older infants
  - Efe and Ozer (2008) – 2 to 4 months of age
  - Dilli et al (2009) - up to 6 months of age
  - Razek and El-Dein (2009) from 1 to 12 months of age – 50% were 8-12 months of age

International Journal of Nursing Practice 2009; **15**: 99–104

RESEARCH PAPER

Effect of breast-feeding on pain relief during infant immunization injections

Aida Abdel Razek DNsc MSN BSN
Associate Professor, Faculty of Nursing Philadelphia University, Philadelphia, Jordan

Nagwa AZ El-Dein DNsc MSN BSN
Assistant Professor, Faculty of Nursing Philadelphia University, Philadelphia, Jordan

- Reduced cry duration
- Reduced facial pain rating scale
- Reduced heart rate response during injection

"This pain reduction approach can be easily adopted as part of standard immunization injection programmes" (p. 104)

Further questions

- Effectiveness & feasibility in sick infants
- Feasibility & practical challenges:
  - Organizational support
  - Low chair/stool required for clinicians performing heel lance/venepuncture
- Myths to dispell:
  - Belief that the infant will aspirate
  - Belief that BF could be associated emotionally with painful procedure
  - Belief that procedure will take longer to perform

Kazak, A.E., & Kunin-Batson, A. (2001). Psychological and integrative interventions in pediatric procedure pain. In G.A. Finley, P.J. McGrath (Eds.). *Acute and procedure pain in infants and children* (pp. 77-100). Seattle: IASP Press.

Kangaroo care / Skin to skin care

- 7 studies of analgesic effects of skin to skin care (Kangaroo Care) during heel lance or IM injection
  - All studies show reduced pain scores and behavioral responses compared to placebo/no treatment
  - Conflicting results when Kangaroo Care compared to sucrose/glucose
  - Physiological responses variable

Soon to be a systematic review: Cochrane protocol: Skin-to-skin care for procedural pain in neonates (Johnston et al, 2010)

Further questions

- Feasibility & practical challenges
  - Coordinating times of blood tests/other procedures where feasible
- Feasibility, effectiveness and safety for:
  - Pre-term infants
  - Sick infants
  - Post-operative infants

POLL QUESTIONS

How frequently do you/your unit/organization use breast feeding or kangaroo care to reduce pain in infants during heel lance?

POLL QUESTIONS

Do you think we can implement breast-feeding/kangaroo care for ALL non-urgent procedures in infants in hospital and outpatient settings?

Sucrose

The most extensively studied intervention to decrease procedural pain in infants

Calming effect of sweet taste have been known for a long time

- 569-632 AD: Prophet Mohammed. “give infants a well chewed date”
- 1545: Boke of Chyldren: For crying at night: “...and if ye can gette any syrup of popye, geue it the chylde to licke…”
- 1845: Perry Davis Pain Killer (sugar, alcohol & opiates)
- 1917: Mixture of sugar and alcohol during circumcision
- 1960’s-1970s: Honey/glycerine on pacifiers
- 1981-1998: Nilstat used in the NICU to stop babies crying (12.5% sucrose)

How does sucrose work?

- Thought to be 2 mechanisms:
  - Sweet taste →
    - Release of endogenous opioids:
      - Peak effects at around 2 minutes
      - Not effective if given Narcan, as Narcan competes for the same receptor sites

Systematic review of sucrose for procedural pain in neonates (2010)

- 44 trials (3496 infants) included:
  - 23 studies and 1880 infants more than the 2004 review
  - Key findings: Abundant evidence of sucrose effectiveness for heel lance & venepuncture
  - Conflicting evidence for more prolonged and distressing procedures

Stevens et al. Sucrose for analgesia in newborn infants undergoing painful procedures. *Cochrane Database of Systematic Reviews* 2010, Issue 1.

What about other sweet solutions?

Findings: As increased sweetness is associated with improved analgesia, as long as solutions are *sufficiently sweet*; analgesic effects are reported.

Yamada, et al. Unpublished data

POLL QUESTION

How frequently to you/your unit/organization use sucrose or glucose for infants during heel lance?

Do sweet solutions work in older infants and children?

- 1-12 months: 17 studies
  - 14 during immunization
  - 1 each during heel lance, venepuncture and urethral catheterization
- > 12 months: 6 studies
  - 3 during immunization
  - 2 during cold pressor testing
  - 1 during venepuncture

Infants 1 – 12 months

- *Immunization:* Sucrose and glucose effective; effects more moderate than in the newborn (Harrison et al. In press)
- *Venepuncture* (Curtis et al. BMC Pediatrics 2007) *& Urethral catheterization* (Rogers et al. Acad Emerg Med 2006)*:* 1 dose given 2 minutes before commencement of procedures - not effective
- *Heel Lance:* (Longitudinal study) Sucrose remained effective for infants 1-5 months (Harrison et al. Nursing Research 2009)

Children 1 – 16 years

- Varied effects & conflicting results
- Only 2 studies in infants during 18 month immunization – results were conflicting
- Systematic review in progress

Clinical Implications for Sucrose

- Can be recommended for use for infants up to 12 months of age during acute painful procedures
- Only *small* volumes required
- Effects are short lasting. Most likely will be more effective if given in small increments over whole procedure, *especially* for more prolonged procedures
- Give in increments prior to each needle stick for multiple attempts/immunizations

Guidelines for Sucrose Use

- Royal Children's Hospital Melbourne; Clinical Practice Guidelines:

http://www.rch.org.au/rchcpg/index.cfm?doc_id=8590

- Lefrak et al and the Vermont Oxford Network, 2006

What about *over-use* of sucrose?

- Do not promote use of sucrose for crying
- Use sucrose for management of short-lived acute procedural pain – NOT for ongoing distress, agitation, irritability, hunger, chronic pain
- Only small amounts of sucrose are *required* for procedural pain reduction

Ongoing questions about sucrose

- Effectiveness and safety for *ongoing* use in:
  - ELBW infants
  - Sick infants receiving morphine/other strong analgesics
- Additional effectiveness with skin-skin contact?
- Effectiveness in toddlers

Recipe for Sucrose

SickKids®

http://www.sickkids.ca/pdfs/Pharmacy/16666-Sucrose_Solution.pdf

Topical Anesthetics

- EMLA, AMETOP, AnGEL, Maxilene
  - Ineffective for heel lancing
  - Sucrose/glucose generally more effective in neonates
  - Variable effects for venepuncture and PICC lines
  - Most effective for immunization (Shah et al. Clinical Therapeutics, 2009)
    - Clinical implications for immunization?

Schechter et al. Pediatrics 2007;119(5):e1184-1198.

POLL QUESTION

How frequently do you use topical anesthetics for infants and toddlers during venepuncture, lumbar puncture, IM injection?

Combination of strategies

- Non-nutritive sucking
- Parental involvement
- Swaddling
- Supportive environment
- Developmentally supportive care

Be sweet to babies

Do we actually *use* the evidence for infants?

2007: 24-hour chart audit of pain practices in hospitalized children in Canada (Project 1)

- 8 participating paediatric hospitals - 4 units in each site (32 units)
- Unit types: medical, surgical, NICU, PICU
- 30 patient charts/unit collected at 4 time points = 120 charts/unit x 32 units = 3840 total patient charts
- Data for infants <12 months of age extracted

Conclusions

- Hospitalized infants 12 months of age and younger, were exposed to large numbers of painful procedures
- Despite evidence supporting the analgesic benefits of breast feeding, skin to skin contact, sucrose and topical anesthetics, they were rarely *used* for infants in Canadian Paedatric hospitals

Evaluation of effectiveness of evidence based pain reduction strategies?

Assessment of pain is important to systematically evaluate the effectiveness of interventions

What measure to use?

What measure to use?

- Some examples:
  - Neonatal Facial Coding System (NFCS): Facial expressions form basis for majority of neonatal and infant pain scores (Grunau et al, 1998)
  - Neonatal Infant Pain Scale (NIPS) (Lawrence et al, 1993)
  - Premature Infant Pain Profile (PIPP) (Stevens et al, 1996)
  - Pain Assessment Tool (PAT)
  - Neonatal Pain, Agitation and Sedation Scale (N-PASS) (Hummel et al, 2003)
  - COMFORT Scale (Ambuel et al, 1992)

Review of 30 scales in: Stevens et al. Assessment of pain in neonates and infants. In: Anand et al. Pain in neonates and infants. 2007. p. 67-90.

Conclusion – Pain in Infants

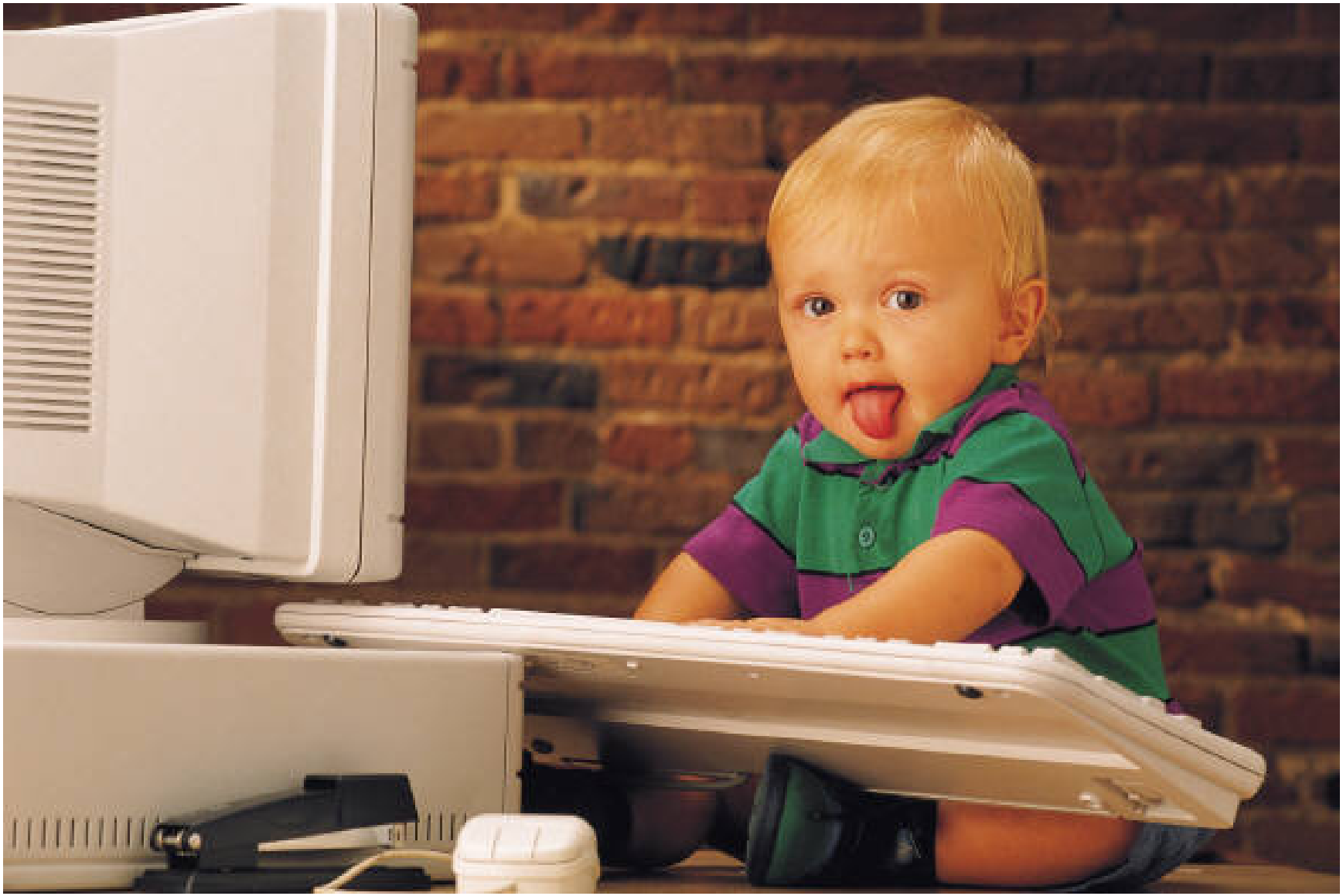
- There are high levels of *evidence* to support analgesic benefits of numerous interventions for pokes and other procedures
- There is infrequent *use* of interventions during painful procedures
- It is mportant to consistently use validated *pain assessment methods* for ongoing evaluation of effectiveness of interventions

Pain in Toddlers

Christine T. Chambers, PhD RPsych

Departments of Pediatrics and Psychology

Dalhousie University and IWK Health Centre

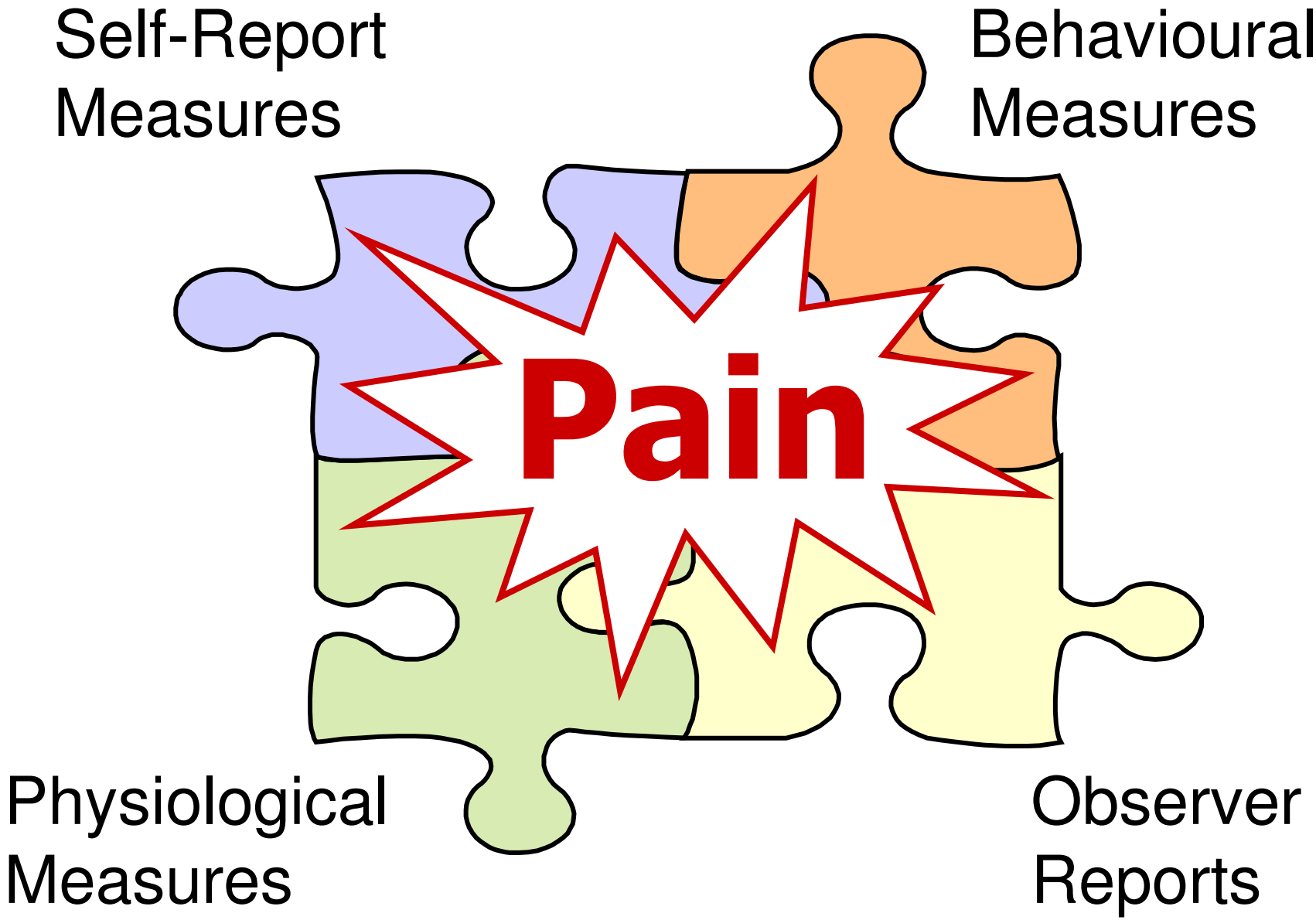


Pain Assessment

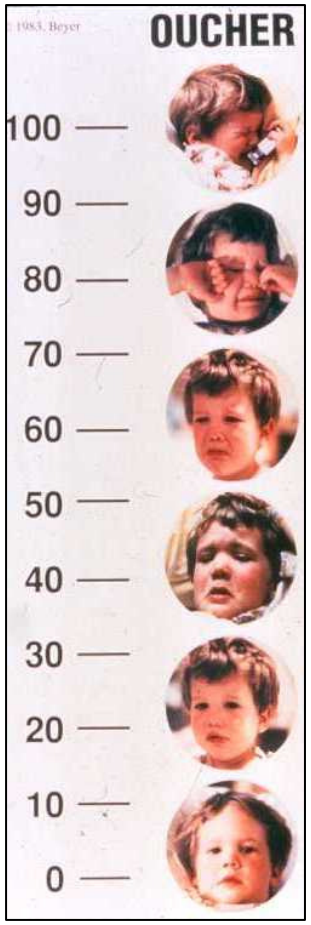
POLL QUESTION

Which method do you most commonly use to assess pain in toddlers?

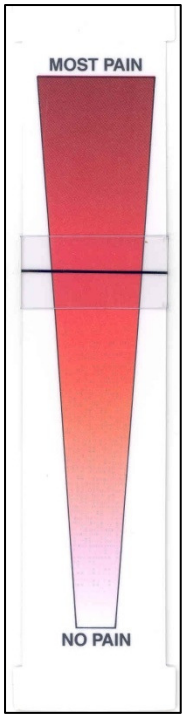
A. The child's self-report
B. Observing their behaviour
C. Physiological measures
D. Parent report
E. A combination of these methods

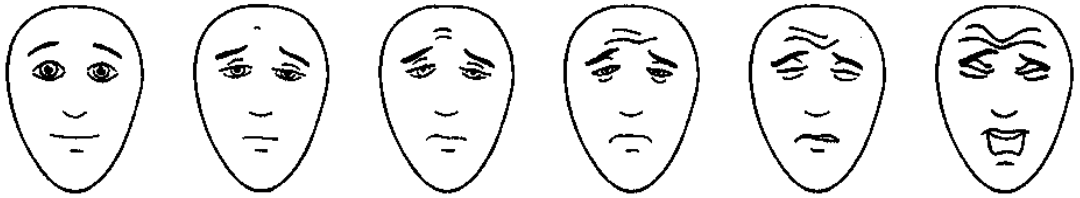

Self-Report Measures
Behavioural Measures
Pain
Physiological Measures
Observer Reports

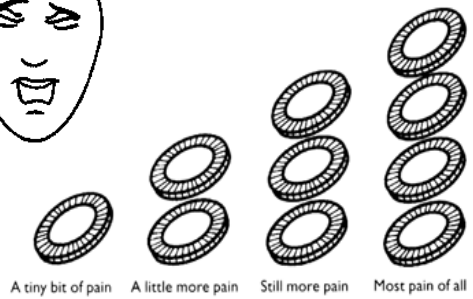
Self Report Measures



- Numeric Rating Scale
  - = 0-5 or 0-10*
- Poker Chip Tool
- The "Oucher"
- Colored Analogue Scale
- Faces Pain Scale - Revised

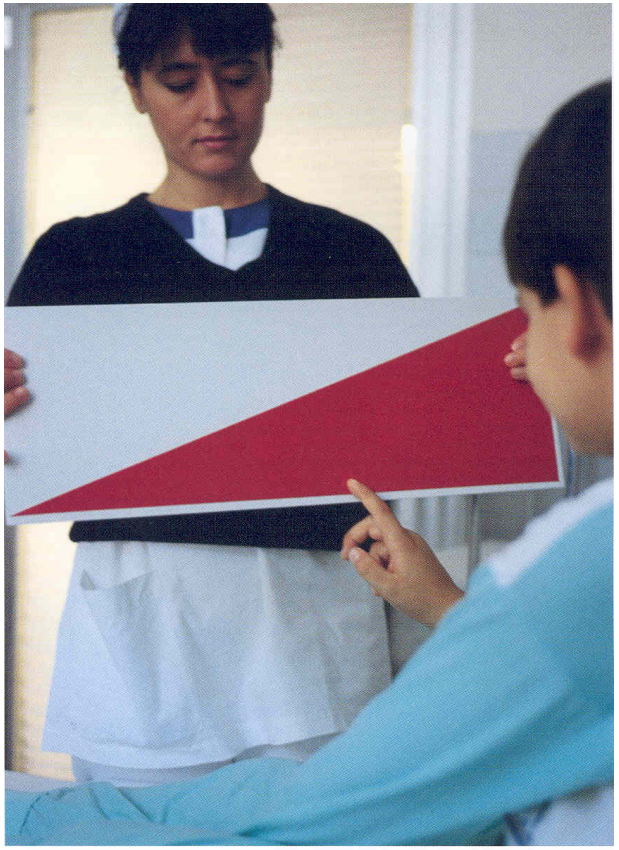




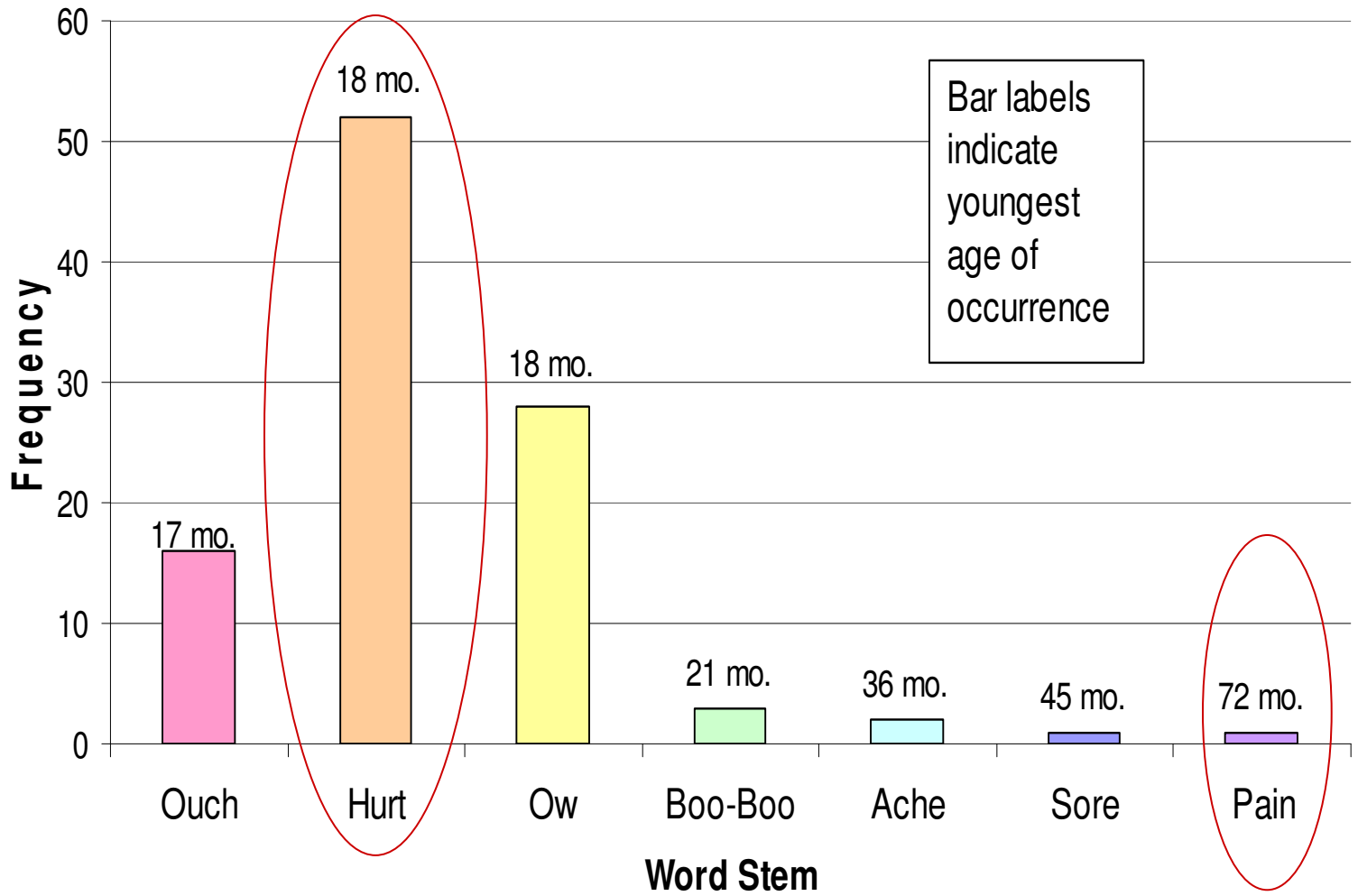


Is it as easy as it looks?

- The abilities required to provide a self-report of pain include:
  - Classification
  - Seriation
  - Attention
  - Memory
  - Language comprehension and production
  - Understanding of emotions



Pain Language Development



Behavioural Measures

- FLACC: Merkel et al. (1997)
  - Face, Legs, Arm, Cry, Consolability
  - For use with procedural and postoperative Pain
- Parents Postoperative Pain Measure: Chambers et al. (1996)
  - 15 behaviours (E.g., Whine or complain more than usual? Want to be close to you more than usual?)
- Also: Toddler Preschool Postoperative Pain Scale, the CHEOPS

Pain Management

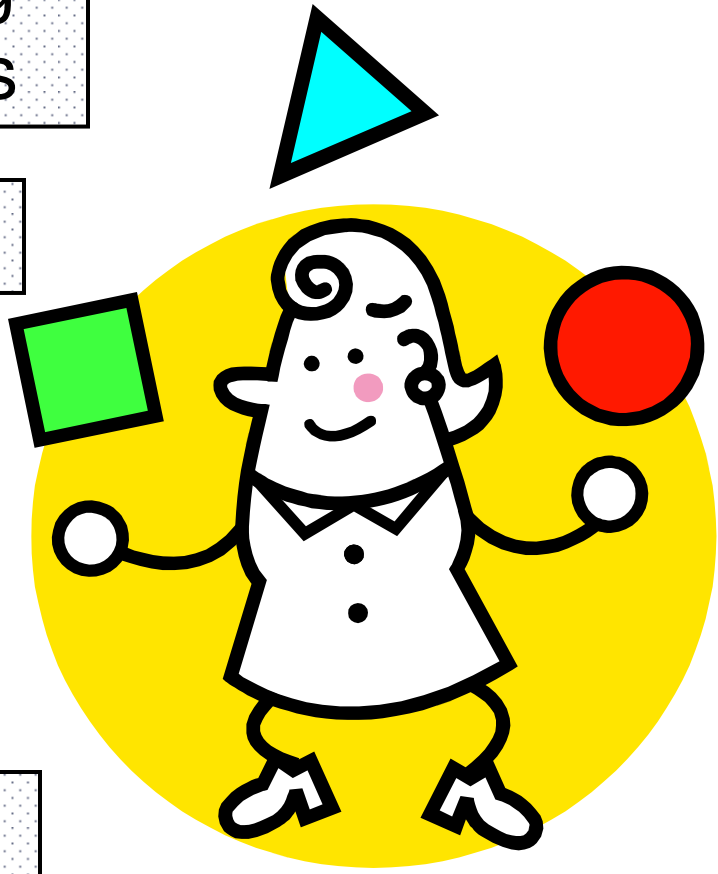
POLL QUESTION

Which psychological pain management strategy do you think works best with toddlers?

A. Breathing exercises
B. Hypnosis
C. Distraction
D. Cognitive coping skills training

Psychological Strategies

- Relaxation
- Breathing Exercises
- Modeling
- Hypnosis
- Behavioural Rehearsal
- Imagery
- Reinforcement
- Cognitive Coping Skills
- Parent Involvement
- Distraction



Distraction

- *Infant:* Pacifier, bubbles, toys
- *Toddler:* Bubbles, songs, pop-up books, party blower, kaleidoscope, toys
- *School-age:* Videos, stories, jokes, counting, talking about other things
- *Adolescent*: Music (iPod), video games, talking about other things, focusing on something else

Parent Behaviour

- Things that parents say that help
  - Non-procedural talk (distraction),
  - Humour
  - Suggestions on how to cope
- Things that parents say that makes it worse
  - Criticism
  - Reassurance
  - Apologies
  - Empathy
  - Giving control

AboutKidsHealth: Health A-Z: Pain-Free Injections - Windows Internet Explorer

http://www.aboutkidshealth.ca/HealthAZ/Pain-Free-Injections.aspx?articleID=13873&categoryID=AZ7f

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Trusted answers from The Hospital for Sick Children

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Pain-Free Injections

Tips for parents and children on making vaccinations as easy and pain-free as possible

Vaccines are medicines that protect against infectious diseases. Vaccines are given with a needle, which is painful. Children, their families, and health care providers are often concerned about pain during injections.

Here are some ways pain and anxiety can be reduced during injections.

Preparing yourself in advance

Stay calm

Your actions and words can affect your child's reaction. Children often look to their parents to understand how to act and feel. If you are calm, use your normal voice, and smile, your child will feel that everything is okay.

Distract your child

Take your child's attention away from the injection using distraction.

This is effective for children of all ages. Get your child to take slow deep breaths. Children can do this by using bubbles, pinwheels, or balloons, which also distract the child. Other examples of age-appropriate distraction strategies include:

- Babies: toys, pacifiers, singing, directing the baby's attention to something in the room that would be of interest for them
- Toddlers: toys, pop-up books, songs, party blowers, kaleidoscopes, singing, directing the toddler's attention to something in the room that would be of interest for them
- School-age: toys, stories, videos, books, joking, counting

Recently Published

TeleLink: helping kids at a distance

72 hours: Is your family prepared for an emergency?

Dating in Junior High?

Internet 100%

Important

- Psychological interventions can be used on their own

- OR as a supplement to pharmacological interventions which are known to be effective
  - E.g., use distraction with a child who has also had a topical anesthetic cream applied

What's the Evidence?

A Systematic Review of Randomized Controlled Trials Examining Psychological Interventions for Needle-related Procedural Pain and Distress in Children and Adolescents: An Abbreviated Cochrane Review*

Lindsay S. Uman,[1,2] Christine T. Chambers[1,2,3] Patrick J. McGrath,[1,2,3,4] and Stephen Kisely[4,5,6]
[1]*Department of Psychology, Dalhousie University,* [2]*IWK Health Centre,* [3]*Department of Pediatrics,*
[4]*Department of Psychiatry,* [5]*Department of Community Health & Epidemiology, Dalhousie University, and*
[6]*School of Medicine, Griffith University, Australia*

Objective To report the results of a systematic review of randomized controlled trials (RCTs) of psychological interventions for children and adolescents undergoing needle-related procedures. **Methods** A variety of cognitive-behavioral psychological interventions for managing procedural pain and distress in children and adolescents between 2 and 19 years of age were examined. Outcome measures included pain and distress as assessed by self-report, observer report, behavioral/observational measures, and physiological correlates. **Results** Twenty-eight trials met the criteria for inclusion in the review and provided the data necessary for pooling the results. Together, the trials included 1,039 participants in treatment conditions and 951 in control conditions. The largest effect sizes for treatment improvement over control conditions were found for distraction, combined cognitive-behavioral interventions, and hypnosis, with promising but limited evidence for several other psychological interventions. **Conclusions** Recommendations for conducting future RCTs are provided, and particular attention to the quality of trial design and reporting is highlighted.

Key words adolescents; children; procedural pain; psychological interventions; systematic review.

Psychological Interventions for Reducing Pain and Distress During Routine Childhood Immunizations: A Systematic Review

Christine T. Chambers, PhD, RPsych[1,2]; Anna Taddio, MSc, PhD, RPh[3,4]; Lindsay S. Uman, BA[2,5]; and C. Meghan McMurtry, BA[2,5]; for the HELPinKIDS Team*

[1]Departments of Pediatrics and Psychology, Dalhousie University, Halifax, Nova Scotia, Canada; [2]Centre for Pediatric Pain Research, IWK Health Centre, Halifax, Nova Scotia, Canada; [3]Division of Pharmacy Practice, Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, Ontario, Canada; [4]Child Health Evaluative Sciences, The Hospital for Sick Children, Toronto, Ontario, Canada; and [5]Department of Psychology, Dalhousie University, Halifax, Nova Scotia, Canada

ABSTRACT

Background: Immunizations are a common source of pain and distress for children. Psychological interventions consist of a variety of techniques for relaxing and distracting children during immunization with the goal of reducing pain and distress.

Objective: We conducted a systematic review to determine the efficacy of various psychological strate-

–0.17; $P = 0.005$). Self-reported distress ratings appeared to be lower with breathing exercises, but the difference was not statistically significant. No evidence was found to support suggestion as a psychological intervention for reducing pain associated with pediatric immunization. Child-directed distraction was effective in reducing self-reported pain (SMD, –0.28; 95% CI, –0.54 to –0.03; $P = 0.03$). Parent-led

POLL QUESTION

What do you perceive as your biggest barrier to implementing psychological pain management strategies with your toddler patients?

A. Lack of training in these techniques
B. Lack of time to implement these techniques
C. Lack of support from my institution
D. Other

Why manage pain in toddlers?

- 90% of toddler display behavioural distress during painful medical procedures
- Children learn to associate health professionals with painful events at a very young age
- 1 in 10 individuals develops needle phobia

Available online at www.sciencedirect.com

ELSEVIER

The Role of Child Life in Pediatric Pain Management: A Survey of Child Life Specialists

Nancy F. Bandstra,* Linda Skinner,† Chantal LeBlanc,† Christine T. Chambers,‡ Ellen C. Hollon,§ Debbie Brennan,† and Chantal Beaver†

*Department of Psychology, Dalhousie University, Halifax, Nova Scotia, Canada.
†Child Life Department, IWK Health Centre, Halifax, Nova Scotia, Canada.
‡Department of Pediatrics, Dalhousie University and IWK Health Centre, Halifax, Nova Scotia, Canada.
§Child Life Department, Children's Medical Center Dallas, Dallas, Texas.

Abstract: Pain management is often described as a component of child life specialists' work. No research has described the specific pain management strategies used by child life specialists. The objectives of this study were to determine child life specialists' use of nonpharmacological strategies, to describe the perceived efficacy of these strategies, to determine how much training child life specialists had in these various strategies, and to determine what demographic characteristics predict the use of evidence-based techniques. Six hundred seven child life specialists from hospitals and health centers across North America responded to an online survey (response rate: 85.4%). Results indicate that child life specialists use a variety of techniques with varying degrees of perceived efficacy. The most commonly endorsed techniques were providing information/preparation, comforting/reassurance, and positive reinforcement. Respondents reported receiving substantial training in some techniques (eg, providing information/preparation, medical play) and high interest in receiving additional training in all techniques. Certification status, the proportion of patients for whom participants reported providing pain management services, and participants' perceived levels of knowledge and skill emerged as significant predictors of the use of evidence-based strategies. The results of this survey suggest that child life specialists are actively involved in pediatric pain management.

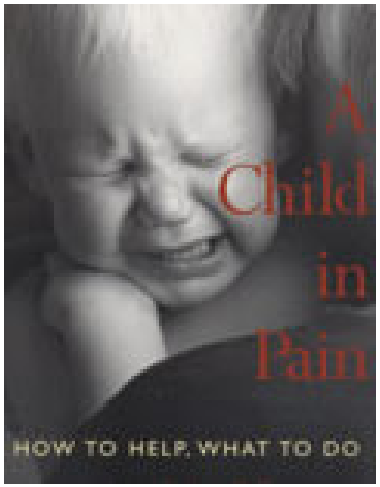
Summary – Pain in Toddlers

Summary

- Toddlers experience considerable pain and distress during painful procedures
- Pain assessment in toddlers can be a challenge
- There are a variety of psychological pain management strategies that can be used with toddlers

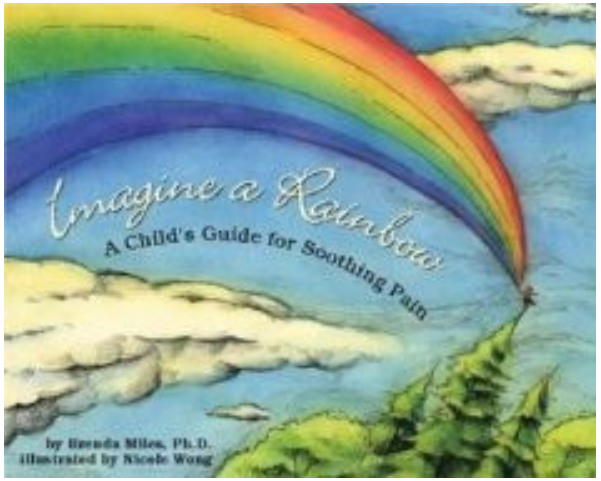
Resources

- Kuttner, L. (1996; reprinted 2006, 2010). *A Child in Pain: How to Help, What to Do.* Hartley & Marks Publishers



- http://www.aboutkidshealth.ca

- Miles, B.S. (2006). *Imagine a Rainbow: A Child's Guide for Soothing Pain*. APA Press.



The Role of Context in Supporting the Use of Best Evidence

Janet Yamada RN, PhD(c)

The Hospital for Sick Children

Lawrence S. Bloomberg Faculty of Nursing,
University of Toronto

Disconnect

KNOWING THE EVIDENCE

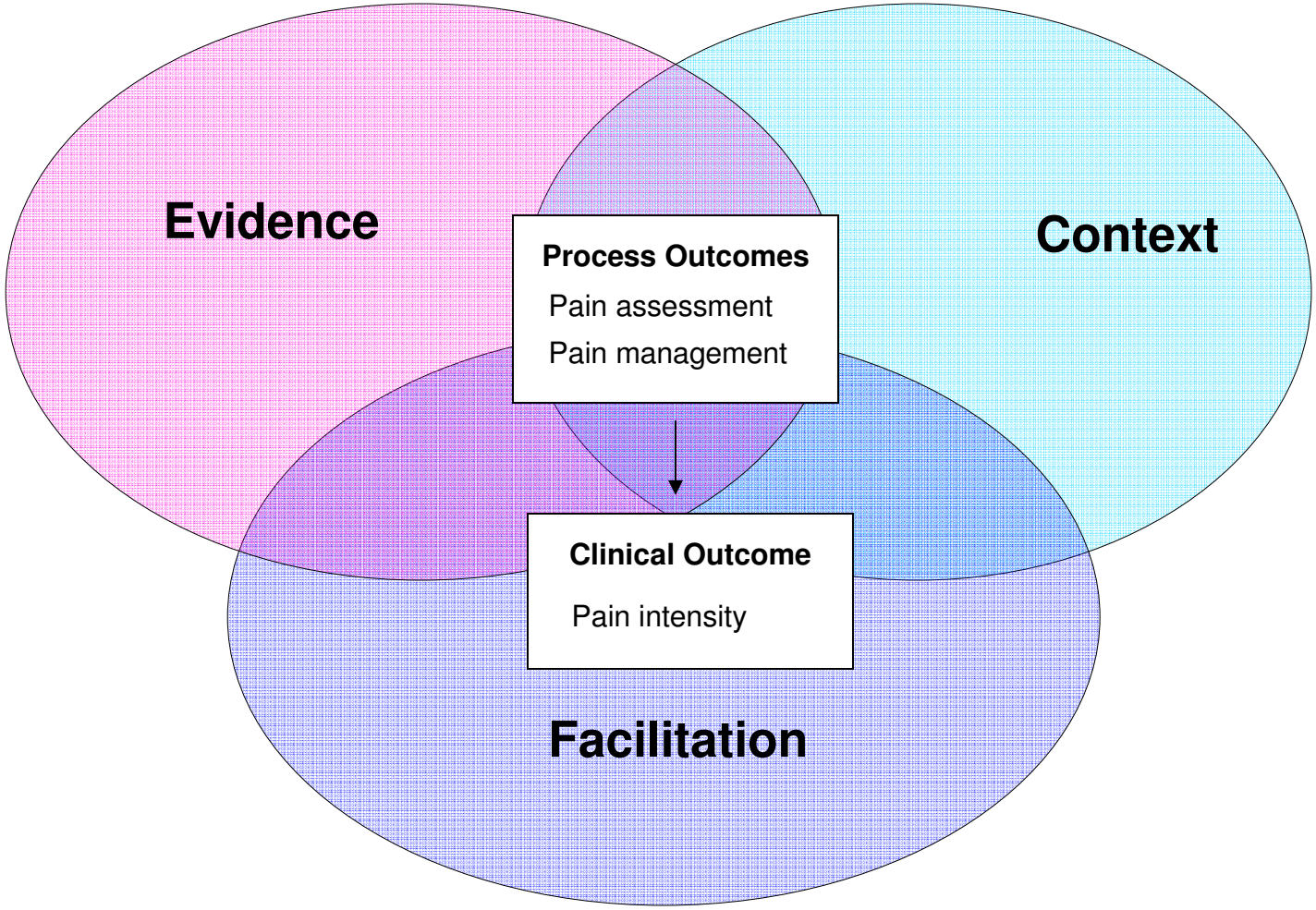
USING THE EVIDENCE

Objectives

- To discuss how evidence, context and facilitation are integrated in the knowledge translation process
- To highlight how the work context influences use of evidence

Integration of Evidence, Context and Facilitation

Promoting Action on Research Implementation in Health Services (PARiHS) Framework



Adapted from Kitson et al., 1998 - Promoting Action on Research Implementation in Health Services (PARIHS)

PARiHS

- Proposes that successful use of research is a function of the interplay of evidence, context and facilitation.
- The PARiHS framework integrates **evidence**, **context** and **facilitation;** 3 constructs considered essential for successful implementation of research into practice.
- This integration is thought to account for the complexity of implementing practice changes and each construct is rated on a continuum from low to high.

Constructs

- Translation of research will be the most effective and efficacious when the Evidence, Context and Facilitation are High
  - **Evidence** is scientifically robust and matches professional consensus and patient needs (high evidence);
  - **Context** is receptive to change with sympathetic cultures, strong leadership and appropriate monitoring and feedback systems ("high/strong" context);
  - Appropriate **facilitation** of change with input from skilled external and internal facilitators (high facilitation)" (p. 174).

Rycroft-Malone et al., 2002

Construct: EVIDENCE

Evidence includes research evidence, clinical expertise, local data/information and patient experience.

- Research evidence that is rigorous, relevant, valued and generalizable is highly rated on the continuum.
- Evidence from clinical expertise is considered high when the experience is reflected on, tested, valued and relevant.
- Patient experience rates highly when patients engage with health professionals in the change process.
- Local evidence, from audit and performance data is highly rated when data are valued, rigorously evaluated and interpreted

Kitson et al., 1998; Rycroft-Malone et al., 2004; Rycroft-Malone, 2004)

Construct: FACILITATION

- **Facilitation** is the enabling or "making the implementation of evidence into practice easier".
- As KT and utilization are social processes, evidence requires tailoring to the context before it will be acceptable to clinicians.
- Effective facilitators provide face-to-face communication and focus on enabling individuals to change practice.

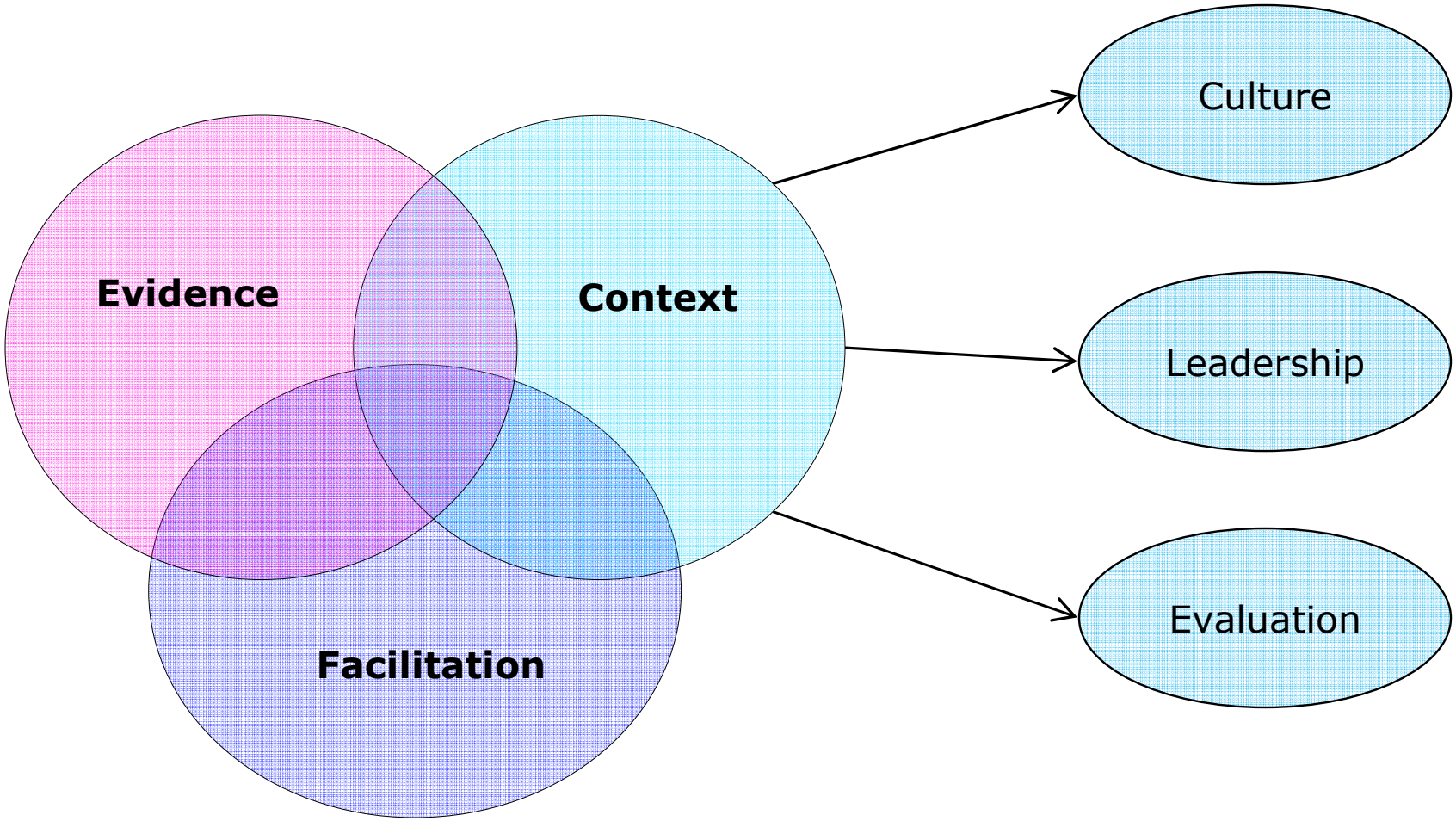
Kitson et al., 1998

Construct: CONTEXT

- Context refers to the environment or setting in which an evidence-based practice change occurs.
- Context is comprised of
  - Unit culture
  - Leadership
  - Evaluation systems

Kitson et al., 1998; McCormack et al., 2002; Rycroft-Malone, 2004

CONTEXT



Kitson, et al., 1998; Rycroft-Malone et al,2002

How the Work Context Influences use of Evidence

POLL QUESTION

How would you rate your organizational context?

High Moderate Poor Low N/A

POLL QUESTION

In my work context, there are regular FORMAL opportunities to learn about and discuss patient care with colleagues.

Never Occasionally Often Always

Culture

- Culture refers to "a way of thinking about or viewing an organization, comprising of basic assumptions, values, artifacts and creations" (McCormack et al, 2002, p.97).
- Culture is considered high/strong on the continuum:
  - When there is a high regard for individuals
  - Supportive learning environment
  - Available resources and supportive individuals
  - Change initiative is in line with the organization's strategic plans/goals

Rycroft-Malone, 2004; Estabrooks et al., 2004

Leadership

- Effective leadership involves the use of transformational leaders who assume a decentralized role.
- They influence, enable and empower individuals to share a common vision through:
  - The development of clear roles
  - The promotion of effective teamwork
  - Decision making

McCormack et al., 2002

Evaluation

- Evaluation and feedback using methods such as performance audits enable health professionals to be more receptive to implementing pain practice changes

McCormack et al., 2002

What does a supportive ORGANIZATIONAL CONTEXT look like?

1. Value-oriented learning CULTURE receptive to change
2. Transformational LEADERSHIP that supports teamwork and staff involvement in decision-making
3. EVALUATION of various levels of performance with effective feedback mechanisms

McCormack et al., 2002

POLL QUESTIONS

How would you rate your organizational context?

Poor Low Moderate High Not Applicable

Conclusion

- Evidence is only one aspect to consider in the management of pain in hospitalized infants and children
- The impact of both context and facilitation is an important factor that influences the translation and use of research evidence into practice

Disclaimer

Variations exist between institutions in the use of pain management strategies. To find out more about individual policies, please refer to your institutional guidelines.

Reminder

- The final webinar of the 2010 series, *Pain Matters in Children and Adolescents* will be presented on Tuesday, September 21st, 2010 at 12 – 1:30 pm EST. Mark your calendars!
- The podcast for our first webinar, From *Pokes to Post-op: An Overview of Pain Prevention and Management in Hospitalized Children,* which was presented by Drs Bonnie Stevens and Fiona Campbell, will be available for download soon. Please check the CAPHC website.

Acknowledgements

Denise Harrison and Janet Yamada would like to acknowledge the support of the CIHR Team in Children's Pain, Translating Research on Pain in Children (TROPIC) and CIHR Knowledge Synthesis Grants, and the PICH Strategic Training Initiative in Health Research.

Janet Yamada would also like to acknowledge the Canadian Nurses Foundation for their support.

Christine Chambers would like to acknowledge the support of the CIHR Team in Children's Pain and the Canada Research Chairs Program. Her research is funded by CIHR and the Nova Scotia Health Research Foundation.

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Acknowledgements