The Poke Program: Evidence Based Practice Changes Reduce Procedural Pain in Children

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“Research, Remedies and Resilience”
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Objectives

• Describe the evidence related to procedural pain and the pediatric patient
• Identify 2 practices that can be incorporated into an individualized plan for a child/patient
• Describe strategies for translating evidence into changing practice
The EBP Journey of the “Poke and Procedure Plan”
(2008-2013)

• Listen to our stories—they helped guide our way.

• Select something from the evidence that we share and try it the next time you work with patients or colleagues.

• Talk with one colleague and share your knowledge.
The Problems

• Pain
  – Venipuncture and IV insertions are the 2 most common sources of pain in hospitalized.
  – Painful experience influence future health care interaction

• Anxiety
  – Children demonstrated high levels of pain and distress with needlesticks and procedures
  – Anxiety and fear exacerbates pain

• Limited preparation and skills in children, parents and staff

Needle Phobia is a reality for many!
The Evidence for the Poke Program

- Get to know the patient
- Individualize
  - Honoring choices
- Preparation
  - Best Words
- Positioning
- Distraction
- Parents as helpers and coaches
- Positive Recognition
- Drugs and Devices

Know and articulate the research and evidence.
Assemble a Team
Identify the Champions

• Multidisciplinary Team
  – Facilitator
  – Stakeholders
  – Patient/Family*
  – Unit Experts
  – Administration

• Champions
  – Leaders
  – Followers

Individually, we are one drop. Together, we are an ocean.
Ryunosuke Satoro
A Systematic Approach

- Stated the problem and goals
- Translate the evidence
- Identified the action
- Pilot
- Evaluate and modify

You don’t have to see the whole staircase just take the first step.

*Martin Luther King, Jr.*
“The Poke Program”
Practice Change Built on Vision, Values, Evidence, & Policy

- **Vision:** To decrease pain and anxiety with needlesticks and procedures
- **Patient-Family centered care**
- **Evidence Base Practice – Iowa Model**
- **Change the culture – change theory and QI**
- **Monitor and sustain**
- **Guidelines: Sucrose, Buzzy®, Procedural Comfort**

Poke-A-Dot is the messenger

- Ideas made public
  - Builds enthusiasm
  - Makes a commitment
  - Gives permission to ask

Who let the dogs out?
Collaboration

• Team Work is essential
• Everyone has a vital role
• Communicate with care
• Honor and respect one another’s role

Quality patient care is the common goal.
The Poke and Procedure Plan

- Establishes a relationship
- Patient-Centered (individualized)
- Preparation
- Distraction
- Positioning
- Parents as partners
- Positive recognition
- Drugs and Devices

A Voice and a Choice for the Child.
Poke and Procedure Plan

Electronic version

Passport version
Patient-Family Centered Care

• Dignity and Respect
• Information Sharing
• Participation
• Collaboration
• Empowerment
It’s the Small Things that become the Big Deal...

- Asking what has helped them in the past
- Asking if the patient/family prefers the curtain open or closed
- Answering the call light
- Our words
- Honoring choices leads to improved coping
Relationships and Planning

Relationships
• Relationships are the key to success
• Get to know the patient
  – Personal coping skills
  – Past experiences

Individualization
• Develop a plan
• Honor choices
  • Fosters trust
  • Develops cooperation
  • Empowers the child
Preparation and Best Words

• Poke and procedures
• Use “Best Words”
• High distress and anxiety
  • Emphasize coping skills vs. information
• Practice
  – Deep breathing/blowing bubbles
  • Positioning

“Best Word” Tips

• Speak while child is comfortable
• Keep explanations simple/brief
• Be truthful and avoid making promises
• Use soft terms:
  “warm rather than burning”
• A quiet voice helps a child to focus
• Avoid telling a child how something will feel

Common medical terms are often commonplace to staff however, not necessarily to families. Hanley & Piazza Crit Care Nurs Q, 33: 1, 2012
<table>
<thead>
<tr>
<th><strong>Standard Medical Expressions</strong></th>
<th><strong>Kids' Interpretation</strong></th>
<th><strong>Healthcare Provider's Clarifications</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>“They will put some dye into your IV to make the picture brighter”</td>
<td>“DYE?” – I’m going to die?</td>
<td>“The doctor will give you some medicine in this tube in your arm to help them see your____more clearly. “DYE” is just a word for the kind of medicine.”</td>
</tr>
<tr>
<td>“Dressing change”</td>
<td>“Why are they going to undress me?”</td>
<td>“Bandages”</td>
</tr>
<tr>
<td>“Urine”</td>
<td>“You’re in?”</td>
<td>Use children’s familiar terms (e.g., “pee”)</td>
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<tr>
<td>“Shot”</td>
<td>“When people get shot they are really hurt. Am I going to be hurt?”</td>
<td>“Injection giving medicine through a very tiny needle.”</td>
</tr>
<tr>
<td>“Stretcher”</td>
<td>“Stretch her?” “Stretch me?”</td>
<td>“Bed on wheels”</td>
</tr>
<tr>
<td>“Take a picture” (X-ray, CAT scan or MRI)</td>
<td>Children associate “taking a picture” with the familiar camera.</td>
<td>“This machine takes a picture of the inside of you.” (Describe sounds, maneuvers of machines)</td>
</tr>
<tr>
<td>“Put you to sleep” (anesthesia)</td>
<td>“A special medicine that lets you sleep during your operation.”</td>
<td></td>
</tr>
<tr>
<td>“Stool sample”</td>
<td>“Something they sit on.”</td>
<td>“Use children’s familiar terms (e.g., “doo doo,” “number two,” “poop”)”</td>
</tr>
<tr>
<td>“Draw blood”</td>
<td>“Where’s the paper?” “Where are the crayons?”</td>
<td>“Blood test”</td>
</tr>
<tr>
<td>“IV”</td>
<td>“Poison ivy?”</td>
<td>“A small tube in your____. Reinforce that the needle is removed.”</td>
</tr>
<tr>
<td>“Move you to the floor” (e.g., from PCU or ED)</td>
<td>“Put me on the floor?”</td>
<td>“You will go from the recovery area back to your hospital room on a bed on wheels.”</td>
</tr>
</tbody>
</table>

Understanding of Medical Terminology
Robert L. Quinn and Carol A. Bizzaro, 1990
Parents as Coaches

• Partner with parents
  • Acknowledge their expertise
  • Support them with their own anxiety
• Guide them to function as a coach and helper
  • Prepare and practice
  • Encourage them before, during and after
• Positive recognition of behaviors that worked

Partner with a parent to achieve better outcomes.
Comfort Positions

• Correlates with development
• Positions make it easier
• Teach parents to hold securely
• Teach how to hold

Video on positioning  http://www.youtube.com/watch?v=VOqIVIFN5Bo

Parental holding and positioning decrease distress in young children. Sparks LA et al.
Comfort Position Poster

Comfort Positions
Reducing stress & anxiety for children during medical procedures

- Back to Chest Bear Hug works well for:
  - IV
  - Blood Draw
  - Injections
  - NG Tube
  - Exam
  - Port Access

- Chest to Chest Bear Hug works well for:
  - IV
  - Blood Draw
  - Injections

- Frog Hold works well for:
  - Catheterization
  - Pelvic Exam
  - Dressing Change
  - Chest Tube Removal

- Side Support Hold works well for:
  - Lumbar Puncture
Distraction

- Take a stimulus and reframe it
- Developmental appropriate
- Stimulus---engaging
- Individualize
- Teach distraction to parents
- Distraction is used
  - Before
  - During
  - After: speed the recovery/decrease the memory

Distraction had a greater effect than EMLA on a child’s distress over time. Nurses provided more coaching with distraction than with EMLA.

*Cohen, LL Pediatrics, 122: 1999*
Distraction examples
Distraction: Healing Wall

“The mural provides a great distraction for my daughter. We enjoy entering the lab instead of fearing it”

Mom of a 2 yr old
Distraction can reduce pain by 50%.
One Voice

- One person is assigned to be the “One Voice”
- Speak in a calm and quiet manner
- Move quickly and steadily as situation allows
- Help define for the child expectations
- Direct the helpers and assign roles

Positive Recognition

• Be specific about what went well
• Prizes do not keep a behavior reinforced
• Calling out positive behaviors helps the child remember and reinforce future success
• Involve child in the plan and refine plan for next time

“Make praise effective and credible”  
Michael Brandwein

http://www.michaelbrandwein.com/ytopics/organizations/workdirectly/buildingbetterchildren.html
Sucking

- Breast feeding
- 24% Sucrose

Local Anesthetics

- **Vapocoolant spray**
  - Short duration and shallow effect

- **Topical Anesthetics**
  - LMX4 and LMX5 (20 minutes at least)
  - **J-tip** (a few seconds) Disposable needleless injectors deliver local anesthetic under high pressure.

- **Intradermal Injections**
  - Buffered Lidocaine
  - Normal Saline
Buzzy® Works!

Toddlers like to hold it

Hold in place for 20 seconds prior to injection

Works with cold and vibration

http://www.buzzy4shots.com
Stories reflect different perspectives

Parents

Patients

Staff
Strategies for Success

• Principles of change
  – Leadership and team work
  – Develop and support champions
  – Measure and report back

• Education
  – Varied and targeted
  – Follow-up to build skills and confidence

• Communication
  – Work flow and processes
  – Requiring compliance and participation
  – Recognize excellence in doing the work
  – Telling the story at every opportunity – repeat

It is not a question of how well each process works, the question is how well they all work together.

Lloyd Dobens
Champions of Change

• Representatives of various stake holders
  – Includes a child life specialist (assigned or consultant)

• Leadership skills
  – Collaboration with unit manager
  – Need to analyze the current state
  – Develop work flow
  – Evaluation

• Expertise
  – Pain Management
  – Skillful and able to articulate the practice change

A leader is one who knows the way, goes the way, and shows the way.  
John C. Maxwell
Learning new skills

• Stressful
• Do better with instruction and education
• Help from champions and team members
• Positive recognition

A round man cannot be expected to fit in a square right away. He must have time to modify his shape.

Mark Twain

Putting it together with case examples and stories.
Education Strategies

- Champion education
- Poster Boards
- Mini-inservice
- CE Programs
- On-line resources
  - Orientation
  - Websites

Revise and modify resources to meet the needs of the setting and evaluation data.
Measuring success

• Process Audits
  – How many poke plans completed?

• Family Surveys
  – Did we honor the poke plan for your child?

• Staff Survey
  – How did the poke plan help your practice?

• Press Ganey Results
  – Pain management and procedures receive improved satisfaction comments and scores.
# Data: Unit Audit

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage Nov ‘10-Feb ‘11</th>
<th>Percentage Aug ‘12-Feb ‘13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan completed</td>
<td>62%</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>216 Patients</td>
<td>245 Patients</td>
</tr>
<tr>
<td>Past experiences</td>
<td>86%</td>
<td>71%</td>
</tr>
<tr>
<td>Preferred position</td>
<td>78%</td>
<td>43%</td>
</tr>
<tr>
<td>One distraction items</td>
<td>72%</td>
<td>37%</td>
</tr>
<tr>
<td>Topical anesthetic</td>
<td>1.5%</td>
<td>1%</td>
</tr>
<tr>
<td>Sucrose for infant</td>
<td>45%</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n=68</td>
</tr>
</tbody>
</table>
### Data: Patients/Parents

<table>
<thead>
<tr>
<th>Item</th>
<th>Nov 2010-Feb 2011 n=30</th>
<th>Aug 2012-Feb 2013 n=53</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needlesticks hurt medium</td>
<td>31%</td>
<td>38%</td>
</tr>
<tr>
<td>Needlesticks hurt a lot</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>Staff made a poke plan</td>
<td>24%</td>
<td>62%</td>
</tr>
<tr>
<td>Staff use words or toys to distract</td>
<td>50%</td>
<td>43%</td>
</tr>
<tr>
<td>Given a choice of position</td>
<td>46%</td>
<td>43%</td>
</tr>
<tr>
<td>Did the Poke Plan help</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A lot</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>Medium</td>
<td>19%</td>
<td>25%</td>
</tr>
<tr>
<td>A Little</td>
<td>44%</td>
<td>13%</td>
</tr>
<tr>
<td>None</td>
<td>11%</td>
<td>17%</td>
</tr>
</tbody>
</table>
Measuring success

• Staff Survey (What are the positive effects of the Poke Plan?)
  – Child’s history and suggested interventions
  – Empowering children and parent
  – Team work and communication

• Press Ganey: Pain controlled
  • Dec 2011 = 86
  • Dec 2012 = 89.4
  • June 2013 = 90.5
Benefit of the Poke & Procedural Plan

• Individualized Care
• Teaching parents to be a coach for their child
• A Voice and a Choice for the Child
  – Teaching the child to advocate for themselves
• Lifetime coping skills
• Decreased pain and anxiety
• Increased satisfaction: child, family, staff
• Communication and Continuity

“Managing needlestick pain and anxiety is the most universal way to decrease children’s pain.”

S Leahy
Reducing pain with procedures begins with you....leading and following

Individually, we are one drop. Together, we are an ocean.

Ryunosuke Satoro
Reducing pain with procedures begins with you

• **Trial one thing** you learned today
• **Share a story** with a colleague

Questions for

Julie Piazza and Sandy Merkel
Additional References

Additional Information

- Institute of Medicine’s Roundtable on Value and Science Driven Health Care, Partnering with Patients to Drive Shared Decisions, Better Value, and Care Improvement. Meeting Summary August 2013. For more information: iom.edu/partneringwithpatients
- Buzzy website: buzzy4shots.com
- Comfort Position video: http://www.youtube.com/watch?v=VOqIVIFN5Bo
- Distraction videos
  - Part 1, professionals as distraction coaches http://www.youtube.com/watch?v=m7GG9fXSKbc
  - Part 2, how professionals can involved parents in distraction http://www.youtube.com/watch?v=lcg_BDwL9Oc
  - Part 3, video teaching parents to be distraction coaches http://www.youtube.com/watch?v=DYX4BinDEj4