Making Needlesticks and Procedures Less Painful for Children

Sandra Merkel, MS, RN-BC
Clinical Nurse Specialist - Pediatric Acute Pain Service
Adjunct Faculty-School of Nursing
C.S. Mott Children’s Hospital
University of Michigan Health System
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They Helped Make It Possible

• Cathy Desmet
• Julie Piazza
• Shannon Scott-Miller
• Susan Quinn
• Mary Watson
• Diane Setlock RN
• Harry Neusius
• Susan Friebe RN
• Marsha Lefevre RN

• Unit Nursing Staff
• Phlebotomy
• Child Life Staff
• Vascular Access Team
• Meghan Young
• Physicians
• Kelly Parent- Parent Rep
• Margay Britton
• Deb Wagner, PharmD

Thanks and acknowledgement for assistance and support

Objectives

• Identify key evidence reported in the literature related to needlestick pain and anxiety and apply it to an individualized “Poke and Procedure Plan”
• Describe how a multidisciplinary team and unit champions can make changes
• Discuss strategies for evaluating and sustaining change
The Evidence for the Poke and Procedure Plan

- 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.

Individualize

- Get to know the patient
  - Personal coping skills and style
- Develop a plan
- Honor Choices
  - Fosters trust
  - Develops cooperation
  - Empowers the child

A Poke and Procedure Plan gives a voice to the child.

Preparation and Information

- Poke and procedure preparation
- Use “Best Words”
- High distress and anxiety
  - Emphasize coping skills vs. information
- Practice skills and processes
  - Deep breathing/blowing bubbles
  - Positioning

Needle Phobia is a reality for many!
Comfort Positions Help

- Position correlates with developmental milestones
- Comfort positions make it easier for all
- Teach parents to hold securely through procedures
- Teaching others how to hold
- Articulate the research on comfort positions
- Sell the idea of parents as partners
- Video on positioning
  http://www.youtube.com/watch?v=VOqiVIFN58o

Parental holding and positioning decreases distress.

Comfort Position Poster

Child and Family Life-C.S. Mott Children’s Hospital

Distraction is a powerful tool

Take a stimulus and reframe the experience

Distraction can reduce pain by 50%.
Distraction is a powerful tool

- Comfort Kit utilization
- Individualized coping kits

Distraction can be as simple as counting 1...2...3

Distraction is a powerful tool

- Distraction is used
  - Before
  - During
  - After: speed the recovery/decrease the memory
- Teaching distraction to others
  - Parents
  - Clinicians (MAs, Phlebotomist, Nurses, Physicians)

Encourage a continuum of distraction.

Parents as Partners

- Acknowledge their expertise
- Need to be supported through their own anxiety
- Help parents to learn best words
- Guide them to function as a coach and helper
- Encourage them before, during and after
  - Positive recognition of behaviors that worked
  - Eye contact and affirmative body language

Partner with a parent to achieve better outcomes.
Positive Recognition

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

“I liked the way you held still like a statue during your poke.”

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 the expectations
• Direct the helpers and assign roles

Drugs and Devices

• 24% sucrose (infants 6 mos and younger)
  • Drops on anterior tongue with use of a pacifier
• Vapocoolant spray
  • Short duration and shallow effect
• Topical Anesthetics
  • LMX4 and LMX5 (20 minutes at least)
  • J-tip (few seconds)
Drugs and Devices

- Intradermal Injections
  - Buffered Lidocaine
  - Normal Saline
- Buzzy® (buzzy4shots.com)
  - Vibration and cold

The Poke Plan

- Past experiences
  – What worked before
- Preferences
- Parent participation
- Position
- Distraction
- Comfort items

A Poke Plan gives a voice and choice to the child

Explorers and Trail Blazers

- The Journey
- Values and Principles
- Leaders
- Skills and Communication
- Innovation
- Team work

Managing needlestick pain and anxiety is the most universal way to decrease children’s pain.
Assemble a Team

Champion/leader*
- Facilitator
- Stakeholders
- Departments
- Patient/Family
- Administration
- Note taker

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

Changing Practice

- Triggers for changing practice
  - Clinical problem: pain and anxiety with needlesticks
  - Organizational Problems: decreased patient satisfaction
    - Comments in Press Ganey data
    - Patient Family Centered Care Council
    - Staff distress

Patient-Family Centered Care

- Dignity and Respect
- Information Sharing
- Participation
- Collaboration
- Empowerment

The "Poke" Program supports the principles of Patient-Family Centered Care
A Systematic Approach for Success

- Assemble and critique relevant literature
  - Synthesis tables
- Translate the evidence
  - Select outcomes
  - Guidelines, policies, processes
- Pilot
- Evaluate and modify
- Institute the change and monitor

You don’t have to see the whole staircase just take the first step
-Martin Luther King, Jr.

Change is a social process

- Sell the advantage
- Trial the innovation
- Observe it working
- Communicate: Ideas made public change practice
- Unit/department leaders
  - Social network: norms and roles
  - Opinion leaders
  - Clinical leaders
  - Power leaders

Be the change you want to see in the world. Mohandas Gandhi

Moving Forward

- Common vision
  - Committed to the goal
- Analyze the current state
  - Force Field Analysis
    - Resources
    - Barriers
    - Opportunities
    - Strategies
- Evaluate the process

Nothing will work unless you do. Maya Angelou
<table>
<thead>
<tr>
<th>Force</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor communication among team members</td>
<td>Develop process for improving communication. First work on issues of agreement</td>
</tr>
<tr>
<td>Unrecognized need—does not believe a change is needed or beneficial</td>
<td>Use patient comments to provide real-life anecdotes. Use Patient/Family Centered care principles to support changes</td>
</tr>
<tr>
<td>Lack of easy access to topical anesthetics</td>
<td>Develop policy or standing order that facilitates easy access</td>
</tr>
<tr>
<td>24% Sucrose Policy in place</td>
<td>Increase knowledge and awareness of policy</td>
</tr>
<tr>
<td>Child Life staff available to all units and clinics</td>
<td>Encourage active participation and leadership for change</td>
</tr>
</tbody>
</table>

**Champions of Change**

- Involvement from the beginning
  - Needlestick committee and first pilot
  - Each unit has a group of champions
- Responsibilities of a Champion
  - Develop work flow
  - Communication and Education
  - Evaluation
- Consistency and follow through

*A leader is one who knows the way, goes the way, and shows the way.*

*John C. Maxwell*

**Education Strategies**

- Methods
  - Animoto
  - Hands on
  - Poster Boards
- Blitz
  - 500+
Learning new skills

- Stressful
- Do better with instruction and education
- Seek help from 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

Building on our knowledge and experience

Unit Roll Out

- Work Flow
  - Stakeholders and team members
  - Between departments
  - Child Life
  - Phlebotomy - Vascular access
- Communication
- Follow-up
  - Evaluate and keep the key elements
- Team work and collaboration

Most people spend more time and energy going around the problems than in trying to solve them.

Henry Ford

Roll Out to Radiology

Designing a Work Flow

Revise and modify resources to meet the needs of the setting.
Poke-A-Dot the Comfort Dog

Button

Poster

Rolling it out!

Who let the dogs out?

Ambulatory Care

- Collective wisdom
- Challenges
  - Power
  - Work flow
  - Patient flow
Diffusion of Innovation

Characteristics that effect the rate of change
• Relative advantage: better than current practice
• Compatibility: values, practice area, work flow
• Complexity: simple format and easy to remember
• Trialability: easy to use, educate, incorporate
• Observability: see or hear the results

What are the characteristics of the Poke Plan that helped translate it into practice?

Road Blocks and Barriers
• Resistance
• Perceived loss of control
• Changes in work patterns and relationships
• Lack of accountability
• Unrecognized need
• Perceived lack of time
• No motivation to change

By recognizing barriers you can turn them into bridges that lead to more opportunities. John Walker

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
• Monitor and sustain
• No policy written... but ASPMN position statement will help lead the way
Strategies for Success

• Leadership and team work
  – Develop and support champions
  – Recognize and support enthusiasm and passion
  – Patience with the change

• Education
  – Varied and targeted
  – Follow-up needed

• Communication
  – Telling the story at every opportunity—repeat
  – Requiring compliance and participation

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

Measuring success

• Staff Survey
• Establish a plan for data collection
  – Compare baseline processes and outcomes with post implementation

• Unit audit
  – 1 day/per month- all patients on the unit

• Patient/parent survey
  – 1 day per month—given to all parent/patients

Process Audit

Poke/Procedure unit audit [v. #2]  Date:  Unit:

Patient # ______ [room and bed number]  Subject number:

How old is the patient?  1–6 mos  7–12mos  1–3yrs  6–8yrs  7–12y  13–18y  adult

Did the patient have a poke plan on the door?  Yes  No  Refused by pt
Did the poke plan have past experiences assessed?  Yes  No
Did the poke plan have preferred positions identified?  Yes  No
Did the poke plan have at least one distraction technique?  Yes  No
Did the poke plan include a topical anesthetic?  Yes  No

([written in the notes section])

Was Child Life signature present?  Yes  No
Was sucrose checked marked for infants 6 months or younger?  Yes  No  NA

Comment:
Data: Unit Audit (Nov, Dec, Jan, Feb)

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan completed (216 patient/133 were posted)</td>
<td>62%</td>
</tr>
<tr>
<td>Past experiences</td>
<td>86%</td>
</tr>
<tr>
<td>Preferred position</td>
<td>78%</td>
</tr>
<tr>
<td>One distraction items</td>
<td>72%</td>
</tr>
<tr>
<td>Topical anesthetic</td>
<td>1.5%</td>
</tr>
<tr>
<td>Sucrose for infant</td>
<td>45%</td>
</tr>
</tbody>
</table>

Data: Unit Audit

<table>
<thead>
<tr>
<th>December N-% with plan</th>
<th>January N-% with plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5W</td>
<td>15 – 60%</td>
</tr>
<tr>
<td></td>
<td>19 – 58%</td>
</tr>
<tr>
<td>5E</td>
<td>21 – 62%</td>
</tr>
<tr>
<td></td>
<td>11 – 64%</td>
</tr>
<tr>
<td>6 M</td>
<td>19 – 51%</td>
</tr>
<tr>
<td></td>
<td>38 – 74%</td>
</tr>
<tr>
<td>Total</td>
<td>73 – 56%</td>
</tr>
<tr>
<td></td>
<td>68 – 68%</td>
</tr>
</tbody>
</table>

Data: Patients/Parents - 30 surveys (77%)

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needlesticks hurt a lot</td>
<td>24%</td>
</tr>
<tr>
<td>Staff made a poke plan</td>
<td>69%</td>
</tr>
<tr>
<td>Always given a choice of position</td>
<td>46%</td>
</tr>
<tr>
<td>Always used distraction</td>
<td>50%</td>
</tr>
</tbody>
</table>

Does the Poke Plan help?  
A lot: 26%  
Medium: 19%  
A little: 44%  
None: 11%
Sustaining Change

- Performance standards
- Monitoring
- Competency
  - Orientation for all: staff, parents, patients
  - Skill development
  - Mentoring and coaching

“What are the obstacles for you to achieve the goals?”

Communication

- Crucial Conversations
  - Peer to Peer
  - Department to Department
  - Advocating for Patients and Program
- Accepting responsibility rather than “finger pointing”

“Coming together is a beginning. Keeping together is progress. Working together is success.” — Henry Ford

Helping others and sharing success

- Celebrating success – Spotted Dog Winery
- Sharing with others
  - National Conferences
  - Internal QI programs
  - Leadership Tour
  - Michigan Immunization RNS
- Ambulatory Care
  - Exponential Growth

Who let the dogs out?
Poke Program is on our website

http://www.med.umich.edu/mott/pvguide/support_needlesticks.html

Questions for....

• Sandra Merkel, MS, RN-BC sandym@umich.edu

References