A TOOLKIT TO PREVENT AND MINIMIZE PAIN IN INFANTS

FLIPCHART FOR FAMILIES

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What Causes Pain In Babies?

Around the world, including Sub Saharan Africa, almost every baby undergoes painful procedures within the first few hours after they are born. These might include a heel prick or a needle with medicine to ensure they are healthy.

However, babies who are born preterm, may have from 4-12 painful procedures in one day and very sick babies can have even more.

**Acute pain can arise from:**
- medical procedures
- postoperative pain
- injuries
- acute exacerbations of disease-related pain

**Common sources of recurrent pain in childhood include:**
- headache
- chest pain
- abdominal pain
- musculoskeletal pain
- Recurrent pains occur in 5-10% of children and adolescents in school-based populations

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Why Is It Important To Prevent Pain?

Babies suffer

- Infants including premature babies experience pain
- The pain infants suffer from is both physical and psychological
- Pain can be greater in infants because their immature nervous system may be less effective at modulating painful stimuli

Repeated pain has long term consequences

- Untreated pain in early life affects brain development, is associated with health care avoidance and negatively influences functioning including:
  - Feeding
  - Sleeping
  - Elimination
  - Interacting with parents
Why Is It Important?

BABIES SUFFER

REPEATED PAIN HAS LONG TERM CONSEQUENCES

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How Do I Know My Baby Is In Pain?

Infants who undergo a painful event have Behavioural Responses to Pain

<table>
<thead>
<tr>
<th>The 4 most common facial expressions of pain in newborns include:</th>
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<tr>
<td>1. Eye squeeze</td>
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<tr>
<td>2. Brow bulge</td>
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<tr>
<td>3. Nasolabial furrow*</td>
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<tr>
<td>4. Stretched open mouth</td>
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</tbody>
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Infants cry for reasons such as hunger but the cries of pain are usually distinctive. The typical pain cry is high-pitched, tense, harsh, sharp, short and loud.

Gestational age can also influence the behavioural response.

*A line or wrinkle which begins adjacent to the nostril winds and runs down and outwards beyond the lip corners. (Lee and Stevens, 2013)

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“How Do I Know My Baby Is In Pain?”

The 4 most common facial expressions of pain in newborns include:

1. Eye squeeze
2. Brow bulge
3. Nasolabial furrow
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Pain Management Strategies

1. **Breastfeeding**
   
   Breastfeeding during a painful procedure is one of the most effective and recommended pain management strategies. Research shows that closeness to the mother, sucking on the breast, and the sweet taste of breast milk all help decrease a baby’s pain and distress.

2. **Bundling/Facilitated Tucking**
   
   Bundling is simply tucking the infant's arms and legs into a blanket. Facilitated tucking is using your hands to provide containment and a supportive boundary for the baby during the procedure. Both methods help reduce procedural pain. They decrease infant pain and keep their heart rate lower in response to pain. Both Bundling and Facilitated Tucking help babies feel more secure, soothed and less distressed.

3. **Skin to Skin Contact/Kangaroo Mother Care**
   
   Holding an infant dressed in only a diaper against your bare chest is known as Kangaroo Mother Care or Skin to Skin Contact. Kangaroo Mother Care promotes quiet sleep in babies that is thought to help reduce pain. It also can promote parental attachment and involvement in their infant’s care and support the infant’s development.

4. **Sucrose and Other Sweet Solutions (e.g. Glucose or Dextrose)**
   
   Evidence shows that the use of Sucrose or other sweet solutions (e.g. Glucose or Dextrose) has a soothing effect. It reduces physiological and behavioral signs of stress for babies in pain. A few drops placed on the baby’s tongue 2 minutes prior to the procedure decreases pain during and after the procedure.
Pain Management Strategies

1. Breastfeeding

2. Bundling/Facilitated Tucking

3. Skin to Skin Contact/Kangaroo Mother care

4. Sucrose or Other Sweet Solutions (e.g. Glucose or Dextrose)

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When you are with your baby during a painful procedure think about the following:

- Infants including premature babies experience pain
- Pain has both short term and long term consequences
- There are effective evidence based pain management strategies including breastfeeding your baby a few minutes before the vaccine injection OR feeding your baby Sucrose or other sweet solutions (e.g. Glucose or Dextrose) right before the vaccine injection

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**Pain Management for Infants**

**Why use bundling?**
Bundling decreases pain during painful procedures

**Why use Skin to Skin Contact?**
Skin to Skin Contact decreases pain during painful procedures

**Why breastfeed?**
Breastfeeding decreases pain during painful procedures

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Acknowledgements

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