

## **Pediatric Pain Assessment Scales**

## Pediatric Fast Fact and Concept #2

**Background for** *FF* #117 Neonates and infants do experience pain. In fact, research has shown that neonates may experience as much pain as older children and can have long-term consequences from exposure to repeated painful stimuli. Untreated pain leads to increased sensitivity to subsequent stimuli. Assessing pain in neonates and young children requires use of age-appropriate scales. There is no empirical evidence demonstrating the superiority of one assessment tool, but research suggests that the same scale(s) should be used within an institution.

**Behavioral Observational Scales:** The primary method of pain assessment for infants, children less than 3 years old, and patients with developmental and/or cognitive differences. Validated tools include:

- <u>CRIES</u>: Assesses Crying, Oxygen requirement, Increased vital signs, facial Expression, Sleep. An observer provides a score of 0-2 for each parameter based on changes from baseline. For example, a grimace, the facial expression most often associated with pain, gains a score of 1 but if associated with a grunt will be scored a 2. The scale is useful for neonatal postoperative pain.
- <u>NIPS</u>: Neonatal/Infants Pain Scale has been used mostly in infants less than 1 yr of age. Facial expression, cry, breathing pattern, arms, legs, and state of arousal are observed for 1-minute intervals before, during, and after a procedure and a numeric score is assigned to each. A score >3 indicates pain. An example is available at: <a href="https://patient.uwhealth.org/healthfacts/7711">https://patient.uwhealth.org/healthfacts/7711</a>.
- <u>FLACC</u>: Face, Legs, Activity, Crying, Consolability scale has been validated from 2 mo to 7 years. FLACC uses 0-10 scoring. An example is available at: <u>https://patient.uwhealth.org/healthfacts/7712</u>.
- <u>CHEOPS</u>: Children's Hospital of Eastern Ontario Scale. Intended for children 1-7 years old and is a scale for evaluating postoperative pain in young children. It can be used to monitor the effectiveness of interventions for reducing pain and discomfort. Assesses cry, facial expression, verbalization, torso movement if child touches affected site, and position of legs. A score >/= 4 signifies pain. An example is available at: <u>https://www.physio-pedia.com/Children%27s Hospital of Eastern Ontario Pain Scale</u>

Self-report: Children 3 years of age and older can rank their pain using one of several validated scales including:

- <u>Wong-Baker Faces scale:</u> 6 cartoon faces showing increasing degrees of distress. Face 0 signifies "no hurt" and face 5 the "worst hurt you can imagine." The child chooses the face that best describes pain at the time of assessment. An example is available at: <u>http://www1.us.elsevierhealth.com/FACES/</u>.
- <u>Bieri-Modified:</u> 6 cartoon faces starting from a neutral state and progressing to tears/crying. Scored 0-10 by the child. Used for children >3 years.
- <u>Visual analogue scale</u>: Uses a 10 cm line with one end marked as no pain and the opposite end marked as the worst pain. The child is asked to make a mark on that line that is then measured in cm from the no pain end.

## **Parent or Caregiver Report**:

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• <u>INRS</u>: Individualized Numeric Rating Scale. This is a validated pain assessment tool for nonverbal children with intellectual disability. Essentially, it is an adaptation of the numeric rating scale that incorporates the parents' and/or caregiver's descriptions of the child's past and current responses to pain. Once described, the responses are then stratified on a scale from 0 to 10.

## References

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