Assessment of Pain

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Basic pain assessment is a simple task; however, the assessment of pain in children and adolescents with cancer may be more complex. Matters that can complicate pain assessment in this population group may include the inability of the child to verbalize the pain, the use of proxy reports (A – 1) by parents and caregivers, the lack of training of clinicians in the use of pain assessment tools appropriate for the age and developmental level of the patient and the underestimation of the patient’s pain, especially after he or she has been given an analgesic (Romsing et al., 1996; Manne et al., 1992; Miller, 1996).

Common Causes of Pain in Pediatric Patients with Cancer

Pain may occur as a result of cancer or other factors (A – 2); not all pain that a child or adolescent expresses is due to his or her cancer. Like adults, children and adolescents with cancer may have pain that is due to the following.

- Procedures such as venipuncture, bone marrow aspiration, biopsy and lumbar puncture
- Causes related to cancer, e.g., tumor enlargement, ischemia, metastasis, oncologic emergencies
- Other causes unrelated to cancer, e.g., accidental trauma.

Cancer pain in children and adolescents and its intensity depend upon the type of cancer, the extent (or stage of the disease) and the patient’s tolerance to pain. Persistent cancer pain may be due to enlargement of the tumor and the pressure of the tumor on the body organs, nerves or bones. Other causes of pain related to cancer are:

- Ischemia caused by poor circulation secondary to thrombosis
- Obstruction of an organ by a large tumor
- Metastasis, especially to the bones, epidural region and brain
- Side effects of cancer treatment such as mucositis
- Muscle stiffness due to inactivity, psychological distress or depression
- Infection
- Pathologic fractures secondary to bone metastasis or treatment-related osteoporosis
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Pain should be assessed at regular intervals. In the United States, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) mandates that pain be assessed with the vital signs (hence, the new term for pain is the “fifth vital sign”). Failure to assess pain is a crucial factor leading to its undertreatment. Pain assessment should occur at the following times:

- At regular intervals after the initiation of pain treatment,
- At each new report of pain,
- After pharmacologic or nonpharmacologic intervention for pain, at an appropriate interval (e.g., 15-30 minutes after parenteral administration of an analgesic; within 1 hour after oral administration of an analgesic).

Follow-up assessment is crucial and all pain assessments should be documented in the patient’s medical record.

Components of Pediatric Pain Assessments

In children and adolescents with cancer, pain should be assessed with the same seriousness as other vital signs. Assessment involves the clinician and the patient and should describe the pain according to:

- Location (Where is the pain? Does the pain radiate? Is there referred pain?)
- Intensity or severity (Use analog scale to quantify)
- Factors that increase or relieve pain (positioning, movement)
- Goals for pain control (The patient’s preferred assessment tool and goals for pain control should be documented.)
- Description of the pain (i.e., sharp, pulsing, dull)
- Duration (how long does the pain last; constant or comes and goes)

Because pain has sensory and emotional components, assessment strategies that will provide qualitative and quantitative information about pain should be used. One approach to pain assessment in children and adolescents is QUESTT (Baker and Wong, 1997). QUESTT is an acronym for:

- Question the child.
- Use a pain rating scale.
- Evaluate the patient’s behavior and physiologic changes.
- Secure the parent’s involvement.
- Take the cause of pain into account.
- Take action and evaluate the results.

Self-reporting is the most crucial component of pain assessment, and the patient should be encouraged to describe their pain. Children’s verbal statements of pain are the most reliable indicator of the presence of pain. Methods of obtaining self-reports should be easy to administer and should be implemented by giving simple instructions to the child or adolescent. These methods should include the use of verbal and nonverbal (e.g., pointing) responses. However, depending upon the age and, in some cases, the cultural affiliation of the child, language familiar to the child may need to be used. The nurse needs to be familiar with the words that the child uses to report pain (e.g., hurt, “owie” or “boo-boo”).
Another strategy for pain assessment is to use a child’s favorite toy (or doll or stuffed animal) and ask the child how the toy (use the child’s name for the toy) is feeling. In addition, when asking a child about pain, the nurse should be mindful that he or she may deny having pain because he or she fears that medications or injections will then be given. Sometimes a child may feel more comfortable telling parents than the nurse about the pain. In many countries, children associate the nurse (especially if he or she wears a white uniform) with painful injections and may not readily trust the nurse.

The nurse should ask the child or adolescent about the quality of the pain—whether the pain is somatic, visceral or neuropathic (A – 4). Words that are familiar to the child such as “tummy” should be used in the questioning. Simple words to describe the pain such as burning, sore or stinging may be useful in questioning an older child or adolescent about pain.

The child or adolescent should be asked about the location of the pain. Specifically, the child should be told to point to the site of the pain. Other strategies that may be used to locate the pain include giving a child a picture of a person and telling the child to color the painful area. In addition, intensity may be assessed through the use of color; for example, red can be used to indicate severe or intense pain; yellow, moderate pain; blue, mild pain. A doll or the child’s favorite stuffed toy can also be used by the child to indicate the site of pain.

A comprehensive pain assessment includes the appraisal of the intensity of the pain. Although several studies (Beyer, 1984; Lander, 1991; Art et al., 1994; Bournaki, 1997) have shown that young children tend to rate the intensity of their pain higher than older children, results from other studies seem to contradict this finding. Therefore, the nurse should carefully consider not only the pain self-reports but also other indicators of pain intensity.

A comprehensive pain assessment includes a history of the patient’s experiences with pain. A pain experience inventory (the patient’s pain history) (A – 5) consists of questions that elicit the parents’ and patient’s experiences with pain. This inventory provides the nurse with information about their responses to pain and the ways in which they normally cope with or relieve pain; this information helps the nurse to choose the appropriate plan of action for reduction or relief of the patient’s pain.

The nurse needs to understand the etiology of the pain. Pain is a symptom rather than a diagnosis. Reviewing pertinent diagnostic and laboratory procedures to identify the potential source(s) of pain is crucial to efficient treatment of pain. The clinician should also take into account the meaning of the pain etiology to the child or adolescent and family. Compared with procedure-related pain, pain caused by bone metastasis or cancer relapse may be associated with increased psychosocial distress.

Psychosocioeconomic issues associated with pain, especially with chronic pain, should also be assessed. Often, children will not respond to questions verbally, especially if they are anxious or depressed or are experiencing severe pain.

Despite the obstacle of nonverbal responses, the nurse should ask the following questions.

1. How is the pain affecting the family as a unit?
2. Does the patient’s pain create sibling difficulties or feelings of not getting enough of the parents’ attention?
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3. Do the parents have to adjust their work schedule to care for the child or adolescent in pain? If they do, how do these adjustments affect their ability to earn a sufficient income?
4. How does the pain affect the patient and the family as a social unit?
5. Does the presence of pain cause the child or adolescent to be isolated from peers, and does it restrict the child’s play?
6. How does the pain affect relationships and roles not only within the family system but also between the family and the community?

Finally, the nurse needs to assess the expectations of the patient and family about pain management and of the health care team. Expectations need to be clarified and communicated to the pain team as they may dictate the pain management strategies and measures to be taken.

Use of Pain Rating Scales

Because pain is highly subjective, quantifying pain is necessary. Efforts have been made to develop and validate scales appropriate for measuring pain in persons of various ages and different cultures.

Rating Scales Applicable to Older Children

**Visual Analog Scale (VAS)** – The scale consists of either a horizontal or a vertical 10-cm line with the word anchors “No pain” and “Pain as bad as it could be” on opposite ends.

```
0 __________________________________________ 10
No Pain                                         Pain as bad as it could be
```

**Graphic Rating Scale (GRS)** – Very similar to the VAS, the GRS has measurement lines with words or numbers between the extreme ends of the scale.

![Word graphic rating scale from Tesler, Savedra, Holzemer and Wilkie (1991).](image)

**Numerical Rating Scale (NRS) (0 – 6)** – This scale is often verbally administered with a range of 0 to 5 or 0 to 10. In some cases, the NRS is a visually presented scale with words and numbers along a vertical (or horizontal) line.

```
0 1 2 3 4 5 6 7 8 9 10
No Pain                                         Worst Pain
```
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Rating Scales Applicable to Younger Children

*FACES Rating Scale* – This scale was developed primarily for use with young children (ages 3 years and older).

Variations of the FACES Rating Scale include the following.

*Oucher Scale* ([www.oucher.org](http://www.oucher.org)) (A – 7) – This scale is a vertical photographic scale containing 6 pictures of a child whose expressions suggest various intensities of pain. There is a version that contains a vertical numerical scale of 10 to 100 and is appropriate for children who can count. Also, versions with pictures of Caucasian, Hispanic and African American children are available.

*Wong-Baker Scale* – This scale usually consists of 6 faces whose expressions range from a smiling or happy face that represents no pain to a very sad, crying face that indicates severe pain. The Wong-Baker scale can also include a numeric pain rating scale (0 = happy face/no pain; 5 = very sad, crying face). The child may be asked to choose the face that best describes how he or she is feeling.

*Color Scale* – With this type of scale, markers or crayons are used by the child to select a color that he or she feels indicate the “worst hurt,” another color to indicate “a little less hurt” and a third color to indicate “no hurt.” On the basis of the colors selected, the patient is then asked to indicate the intensity of pain that is being experienced.

*The Poker Chips Scale* (A – 8) involves the use of 4 red poker chips; with these chips, the child is asked to to pick the number of poker chips that best indicate the intensity of pain (4 chips indicate the most intense pain).

Rating Scales Applicable to Infants and Preverbal Children

To assess pain in infants and preverbal children, the nurse should always ask the mother or another caregiver how he or she knows when the child is in pain. Children often have a different cry for different needs, and mothers and other caregivers often know, on the basis of this

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vocalization or crying, what the particular need is. In addition, behavior-based assessment tools can be used to accurately assess pain in preverbal or nonverbal children.

**Face, Leg, Activity, Cry, Consolability (FLACC) Scale (A – 9)** – A practical scale that is easy to use, the FLACC scale quantifies the pain of preverbal children. Originally developed for the assessment of operative pain, the scale is used in observing vocalization, verbalization, facial expression, motor response, body posture, activity and/or appearance.

**Riley Infant Pain Scale Assessment Tool (RIPS) (A – 10)** – Using the RIPS scale, the observer can arrange behaviors into groups in 4 columns, and the values in each column range from 0 (no pain) to 3 (severe pain). The observer selects the column that most accurately corresponds to the infant’s overall behaviors.

**Objective Indicators of Pain**

Objective indicators of pain include physiologic or biologic measures and behavioral responses (A – 11) to pain. Physiologic and behavioral measures should be used only as adjuncts to self-reporting. Physiologic or biologic indicators include skin flushing, diaphoresis, elevated blood pressure, tachycardia, tachypnea, decreased oxygen saturation, restlessness and dilation of the pupils. Facial expressions (A – 12) can also indicate the presence of pain. The clinician must note that the occurrence of these symptoms varies from patient to patient.

Expressions of pain will differ in relation to the developmental level (A – 13) of the patient. In addition, cultural background may play a role in patients’ reports and responses to pain. In cultures that expect people to be stoic, children and adolescents may not exhibit overt pain behaviors and may underrate their pain. Unfortunately, there is a paucity of information that formally describes and compares pain experiences and response patterns among children and adolescents of different cultures. Clinicians should be willing to listen and elicit these types of information and accommodate cultural practices in the management of pain.
Helpful Web Sites

World Health Organization – IASP
Cancer Pain Release
http://www.whocancerpain.wisc.edu/eng/12_1/IASP_guidelines.html

The National Cancer Comprehensive Network (NCCN), Jenkintown, PA

Texas Children and Cancer Center, Texas Children’s Hospital, Houston, TX
http://www.childcancerpain.org/frameset.cfm?content=barr01

American Medical Association, Chicago, IL
http://www.ama-cmeonline.com/pain_mgmt/module06/03pain/03_01.htm#

Promoting Excellence: Detailed Pain Assessment
http://www.mywhatever.com/cifwriter/content/41/pe4831.html

The Hospital for Sick Children, Toronto, Ontario
AboutKidsHealth - Pain Assessment
http://www.aboutkidshealth.ca/clinicalAreas.asp?pageContent=PN-nh2

Pain Research Center at the University of Utah, Salt Lake City, Utah
Assessment of Pain in Children with cancer
http://www.painresearch.utah.edu/cancerpain/ch14.html

Related www.Cure4Kids.org Seminars

Seminar #48 How Much Does It Hurt? Current Approaches to Pain Measurement in Children
Gordon A. Finley, MD
http://www.cure4kids.org/seminar/48

Seminar #86 Pain Assessment and Management in the Pediatric Oncology Patient
Linda Oakes, RN, MSN, CCNS
http://www.cure4kids.org/seminar/86

Seminar #288 Drug Abuse, Addiction, & Misuse in the Child/Adolescent: What’s the Difference
Mark Popenhagen, PsyD
http://www.cure4kids.org/seminar/288
References


APPENDIX

A – 1 Proxy Reports

If a child is unable or unwilling to provide pain ratings, parents or health care professionals can rate the patient’s pain for him or her; however, proxy ratings or reports are not exact. Studies have shown that although proxy reports are helpful in pain assessment, there are occasions where reports are incongruent. Below are two of the many published works on proxy reports.


A – 2 Causes of Pain in Children and Adolescents with Cancer

<table>
<thead>
<tr>
<th>Caused by Disease</th>
<th>Caused by Cancer Treatments</th>
<th>Caused by Procedures</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement of tumor in Bone</td>
<td>Postoperative pain</td>
<td>Finger stick</td>
<td>Trauma</td>
</tr>
<tr>
<td>Soft tissue</td>
<td>Radiation-induced dermatitis</td>
<td>Venipuncture</td>
<td>Usual childhood pains</td>
</tr>
<tr>
<td>Viscera</td>
<td>Gastritis due to repeated vomiting</td>
<td>Lumbar puncture</td>
<td></td>
</tr>
<tr>
<td>Central nervous system</td>
<td>Headache after lumbar puncture</td>
<td>Injections</td>
<td></td>
</tr>
<tr>
<td>Peripheral nervous system</td>
<td>Corticosteroid-induced changes in bone</td>
<td>Bone marrow biopsy and aspiration</td>
<td></td>
</tr>
<tr>
<td>Spinal cord compression</td>
<td>Neuropathy – phantom pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug-induced pain</td>
<td>Drug-induced pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infection</td>
<td>Musosal damage (mucositis)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cancer Pain Release
http://www.whocancerpain.wisc.edu/eng/12_1/IASP_guidelines.html
A – 3 Words Commonly Used by Children to Describe Pain

To characterize the pain of a child, the nurse should begin by asking the mother or another caregiver what words the child often uses to describe pain. Examples that children sometimes use to discuss pain are as follows.

- Hurt
- Owie
- Boo boo
- Ouchie

The following are the types of questions that contain familiar words for pain and that a nurse might ask a child during pain assessment.

- “Do you have any hurt?”
- “Is there an ‘owie’ or ‘boo boo’ in your tummy?”
- “How much ouchie have you got in your tummy?”

A – 4 Somatic, Visceral and Neuropathic Pain

**Somatic pain** is caused by the activation of pain receptors in cutaneous or deep tissues. Usually deep somatic pain is described as dull, aching and localized. Cutaneous pain is usually sharper, burning or pricking. In children and adolescents with cancer, deep somatic pain may be due to bone metastasis, whereas cutaneous pain may be due to a surgical incision or infiltration of tissue by intravenous fluids.

A child may report that the pain causes him or her to feel as though “I am in an oven,” “I hurt all over,” “I just hurt” or “a cat has bitten me.”

**Visceral pain** is caused by pain receptor activation that results from infiltration, compression or extension of the chest, abdominal or pelvic cavities. Usually, visceral pain is diffuse (not well localized) and described as pressure or squeezing that occurs deep within the body. Children and adolescents with neuroblstoma, Hodgkin lymphoma, or germ cell tumors may experience visceral pain.

Children may report that visceral pain feels as though “a monster is sitting on my belly.”

**Neuropathic** pain is the result of an injury to the nervous system that is due to a spinal tumor or metastasis compressing the nerves or the spinal cord or to damage to the nervous system caused by surgery, radiation or chemotherapy (cisplatin, vincristine, cytarabine). Often described as burning or tingling, neuropathic pain can be debilitating.
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Children may describe neuropathic pain as “many nails that are hurting me,” “a tingling hurt” or “pins and needles.”

A – 5 Pain Experience Inventory

<table>
<thead>
<tr>
<th>Questions for the Parents</th>
<th>Questions for the Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Describe any pain your child has had.</td>
<td>1. Tell me what pain is.</td>
</tr>
<tr>
<td>2. How does your child usually react to pain?</td>
<td>2. Tell me about the hurt that you have had.</td>
</tr>
<tr>
<td>3. Does your child tell you or others when he or she hurts?</td>
<td>3. What do you do when you hurt?</td>
</tr>
<tr>
<td>4. How do you know when your child is in pain?</td>
<td>4. Do you tell others when you hurt?</td>
</tr>
<tr>
<td>5. What do you do to ease your child’s discomfort when he or she is hurting?</td>
<td>5. What do you want others to do for you when you hurt?</td>
</tr>
<tr>
<td>6. What does your child do to get relief from pain?</td>
<td>6. What don’t you want others to do when you hurt?</td>
</tr>
<tr>
<td>7. What actions work best to decrease or take away your child’s pain?</td>
<td>7. What works best to take away your pain?</td>
</tr>
<tr>
<td>8. Is there anything special that you would like me to know about your child and pain? If there is, please tell me about it.</td>
<td>8. Is there anything special that you want me to know about you when you hurt? If there is, please tell me about it.</td>
</tr>
</tbody>
</table>

From: Hester N; Barcus C. Assessment and management of pain in children. Pediatric Nursing Update, 1986
A – 6 How to Use the NRS

TABLE 1
Using the Numeric Rating Scale effectively

| Allow sufficient time to obtain the patient's self rating. |
| Teach the patient how to use the scale. |
| Explain the use of the scale at each administration. |
| Use the same pain rating scale each time pain is evaluated. |
| Have the patient provide a single, global estimate of pain intensity. |

A – 7 The Oucher Scale (This type of scale with pictures of Caucasian and Hispanic children is also available.)

The Caucasian version of the Oucher Scale was developed and copyrighted by Judith Beyer, PhD, RN. The African American verse was developed and copyrighted by Mary J Denyes and Antonia M. Villaruel. The Hispanic version was developed and copyrighted by Antonia M Villaruel and Mary J Denyes. (www.oucher.org).
A – 8 The Poker Chips Scale

A method using poker chips to assess a child’s pain has been developed. Instructions for its use are the following:

- Align 4 red poker chips horizontally in front of the child on a bedside table, a clipboard or other firm surface.
- Tell the child, “These are pieces of hurt.” Beginning at the chip nearest the child’s left side and ending at the one nearest the right side, point to the chips and say, “This (the first chip) is a little bit of hurt, and this (the fourth chip) is the most hurt you could ever have.” For a young child or for any child who does not comprehend the instructions, clarify by saying, “That means this (the first chip) is just a little hurt; this (the second chip) is a little more hurt; this (the third chip) is more hurt; and this (the fourth chip) is the most hurt you could ever have.”
- Ask the child, “How many pieces of hurt do you have right now?” A child without pain will say he or she doesn’t have any.
- Clarify the child’s answer by words such as “Oh, you have a little hurt? Tell me about the hurt.” (Use the pain interview tool.)
- Record the number of chips selected on the bedside flow sheet.

A – 9 FLACC Scale

<table>
<thead>
<tr>
<th>Category</th>
<th>Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Face</td>
<td>No particular expression or smile</td>
</tr>
<tr>
<td></td>
<td>Occasional grimace or frown, withdrawn,</td>
</tr>
<tr>
<td></td>
<td>disinterested</td>
</tr>
<tr>
<td></td>
<td>Frequent to constant quivering chin, clenched</td>
</tr>
<tr>
<td></td>
<td>jaw</td>
</tr>
<tr>
<td>Legs</td>
<td>Normal position or relaxed</td>
</tr>
<tr>
<td></td>
<td>Uneasy, restless, tense</td>
</tr>
<tr>
<td></td>
<td>Kicking or legs drawn up</td>
</tr>
<tr>
<td>Activity</td>
<td>Lying quietly, normal position, moves easily</td>
</tr>
<tr>
<td></td>
<td>Squirming, shifting back and forth, tense</td>
</tr>
<tr>
<td></td>
<td>Arched, rigid or jerking</td>
</tr>
<tr>
<td>Cry</td>
<td>No cry (awake or asleep)</td>
</tr>
<tr>
<td></td>
<td>Moans or whimpers; occasional complaint</td>
</tr>
<tr>
<td></td>
<td>Crying steadily, screams or sobs, frequent</td>
</tr>
<tr>
<td></td>
<td>complaints</td>
</tr>
<tr>
<td>Consolability</td>
<td>Content, relaxed</td>
</tr>
<tr>
<td></td>
<td>Reassured by occasional touching, hugging</td>
</tr>
<tr>
<td></td>
<td>being talked to, distractible</td>
</tr>
<tr>
<td></td>
<td>Difficult to console or comfort</td>
</tr>
</tbody>
</table>

Each of the 5 categories—face (F), legs (L), activity (A), cry (C), consolability (C)—is scored from 0 to 2; the total score ranges from 0 to 10.

### A – 10 Riley Infant Pain Scale Assessment Tool

<table>
<thead>
<tr>
<th>Behavior</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facial</strong></td>
<td>Neutral expression or smiling</td>
<td>Frowning or grimacing</td>
<td>Clenched teeth</td>
<td>Full-cry expression</td>
</tr>
<tr>
<td><strong>Body Movement</strong></td>
<td>Calm, relaxed</td>
<td>Restless or fidgeting</td>
<td>Moderate agitation or moderate mobility</td>
<td>Thrashing, flailing, incessant agitation or strong voluntary immobility</td>
</tr>
<tr>
<td><strong>Sleep</strong></td>
<td>Sleeping quietly with easy respiration</td>
<td>Restless while asleep</td>
<td>Intermittent sleeping (sleep/awake)</td>
<td>Unable to sleep or sleeping for prolonged periods of time interrupted by jerky movements</td>
</tr>
<tr>
<td><strong>Verbal/vocal</strong></td>
<td>No cry</td>
<td>Whimpering, complaining</td>
<td>Pain-associated crying</td>
<td>Screaming, high-pitched cry</td>
</tr>
<tr>
<td><strong>Consolability</strong></td>
<td>Neutral</td>
<td>Easy to console</td>
<td>Not easy to console</td>
<td>Inconsolable</td>
</tr>
<tr>
<td><strong>Response to Movement/Touch</strong></td>
<td>Moves easily</td>
<td>Wincing when touched or moved</td>
<td>Cries out when moved or touched</td>
<td>High-pitched cry or scream when touched or moved</td>
</tr>
</tbody>
</table>

## A – 11 Behavioral and Verbal Responses of Children and Adolescents to Pain

<table>
<thead>
<tr>
<th>Age</th>
<th>Behavioral Response</th>
<th>Verbal Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants (birth to 6 months)</td>
<td>Generalized body movement, facial grimacing, chin quivering, poor feeding</td>
<td>Crying</td>
</tr>
<tr>
<td>Infants (6 – 12 months)</td>
<td>Disturbed sleep, irritability, reflex withdrawal to stimulus</td>
<td>Crying</td>
</tr>
<tr>
<td>Toddlers (1 – 3 years)</td>
<td>Disturbed sleep, aggressive behaviors, localized withdrawal</td>
<td>Crying, screaming, unable to describe pain intensity</td>
</tr>
<tr>
<td>Preschoolers (3 – 6 years)</td>
<td>Low frustration levels, active physical resistance, strikes out when hurt</td>
<td>Able to identify location, intensity and characteristics</td>
</tr>
<tr>
<td>School-aged (7 – 9 years)</td>
<td>Resists passively, holds body rigidly, emotional withdrawal, plea bargains for relief of pain</td>
<td>Able to identify location, intensity, and characteristics</td>
</tr>
<tr>
<td>School-aged (10 – 12 years)</td>
<td>May regress with stress and anxiety, pretend not to hurt to project bravery, perform poorly in school</td>
<td>Able to describe location, intensity, and characteristics in detail; can experience psychic pain</td>
</tr>
<tr>
<td>Adolescents (13 – 18 years)</td>
<td>Controls behavior to be socially acceptable; may perform poorly in school; irritable, unable to concentrate</td>
<td>Detailed, able to give a more complete description of pain and its meaning</td>
</tr>
</tbody>
</table>

Adapted from Ball and Binder, 1999  
Persis Mary Hamilton, RN, CNS, MS, EdD  
Wild Iris Medical Education, Comptche, CA  
A - 12  Facial Expressions That Often Indicate Pain

![Facial Expressions That Often Indicate Pain](image)

**Figure 14.1** Facial expression of pain.
### A - 13 Developmental Differences in Pain Expression

<table>
<thead>
<tr>
<th>Developmental Group</th>
<th>Pain Expressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants may</td>
<td>Exhibit body rigidity or thrashing, may include arching. Exhibit facial expression of pain (brows lowered and drawn together, tightly closed with mouth open and squarish). Cry intensely, loudly, inconsolably. Draw knees to chest (assume fetal position). Exhibit hypersensitivity and irritability. Have poor oral intake, may refuse feedings. Be unable to sleep.</td>
</tr>
<tr>
<td>Toddlers may</td>
<td>Be verbally aggressive, cry intensely. Exhibit regressive behavior and withdraw. Exhibit physical resistance by pushing away painful stimulus, such as a needle, after it is applied. Guard the painful area of the body. Be unable to sleep.</td>
</tr>
<tr>
<td>Preschoolers or young children may</td>
<td>Verbalize the intensity of pain. See pain as punishment. Exhibit thrashing of arms and legs. Attempt to push the stimulus away before it is applied. Be uncooperative. Cling to a parent or another caregiver. Request emotional support such as hugs or kisses. Understand and use secondary gains from pain. Be unable to sleep.</td>
</tr>
<tr>
<td>School-aged children may</td>
<td>Exhibit all responses to pain displayed by preschoolers and young children. Verbalize pain. Use objective measures or rating scales to indicate intensity or type of pain. Be influenced by cultural beliefs. Experience nightmares because of pain. Exhibit stalling behaviors – “I am not ready.” Have muscular rigidity such as clenched fist, teeth gritting, contracted limbs, body stiffness, closed eyes, or wrinkle forehead.</td>
</tr>
<tr>
<td>Adolescents may</td>
<td>Indicate the location of pain and describe the quality and intensity of the pain. Deny pain in the presence of peers. Demonstrate changes in appetite and sleep patterns. Be influenced by cultural beliefs. Exhibit muscle tension and body control. Display aggressive behaviors in the presence of family.</td>
</tr>
</tbody>
</table>

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http://www.childcancerpain.org/
Acknowledgments

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