3.7: Preventing the Pain of Immunizations

Health professionals play an important role in **minimizing pain and distress** for clients. Indeed, if comfort measures are not addressed, it can lead to fear and avoidance for future interventions. According to Health Canada, it is estimated that 25% of adults have a fear of needles and as many as 10% have a needle phobia. Often persons develop fears of needles in early childhood. Healthcare providers should provide the most painful vaccine last, administer simultaneous vaccines as one if possible, and instruct clients to avoid aspirin or other blood thinners before vaccines. **Table 3.5** lists specific pain management strategies by age group.

**Table 3.5**: Immunization Pain Management Strategies

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Pain Management Strategy</th>
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<tbody>
<tr>
<td>All ages</td>
<td>- Always inject without aspiration.</td>
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<td></td>
<td>- Inject vaccines that cause the most pain last.</td>
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<td></td>
<td>- Coach the parent/caregiver to remain calm (e.g. take deep breaths). Babies and children feel what their parents feel.</td>
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<td>- Offer praise. Positive reinforcement works for kids of all ages.</td>
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<td>Infants and young children (≤ 3 years)</td>
<td>- Educate parent/caregiver about pain management before and on the day of immunization.</td>
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<td>- Parents/caregivers may purchase over-the-counter topical anesthetics prior to vaccine injection. It is important to communicate the injection site to parents/caregivers and to place anesthesia patch in advance.</td>
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<tr>
<td></td>
<td>- Encourage parent/caregiver to stay with child during vaccine injection.</td>
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</tbody>
</table>
Parents can make it easier for their baby by cuddling, distracting them with singing, and breastfeeding before, during and after vaccine injection (≤ 2 years of age).

If the infant/young child is not breastfed during vaccine injection a combination of other strategies may be used, such as:

- Skin-to-skin contact during vaccine injection (≤1 month of age).
- Holding during vaccine injection.
- Administration of a sweet-tasting (sucrose or glucose) solution 1-2 mins prior to vaccine injection (≤ 2 years of age).

Toddlers

- Parents/caregivers can help their toddler by holding them in a comforting hug, distracting them with a favourite toy, blanket, song, or book, and telling them they may feel a 'poke or pinch' for a few seconds.
- Encourage parent/caregiver to stay with child during vaccine injection (≤ 10 years of age).
- Have toddler sit up during vaccine injection.

Children (3-12 years)

- Educate parent/caregiver about pain management before and on the day of immunization.
- Parents/caregivers may purchase over-the-counter topical anesthetics prior to vaccine injection. It is important to communicate the injection site to parents/caregivers and place anesthesia patch in advance.
- Clients/parents/caregivers can make it easier by bringing something distracting, taking deep breaths, and telling them they may feel a 'poke or pinch' for a few seconds.
- Encourage parent/caregiver to stay with child during vaccine injection (≤ 10 years of age).
- Have child sit up during vaccine injection.

Adolescents (12-17 years)

- Educate parent/caregiver about pain management before and on the day of immunization.
- Educate individual about pain management for vaccine injection on the day of immunization.
- Encourage the client to have something distracting like music or a mobile device.
- Have adolescent sit up during vaccine injection. If there is a risk of fainting, then consider vaccination while supine, or have adolescent lay supine after vaccination.

Adults (≥ 18)

- Educate individual about pain management for vaccine injection on the day of immunization.
• Have adult sit up during vaccine injection.

Points of Consideration

Give the most painful vaccine last. Vaccines that are known to cause the most injection site pain are pneumococcal-C-13, MMR, and HPV vaccines. These vaccines should be administered last, after other vaccines if multiple vaccines are given at one visit.

An interactive or media element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/immunizations/?p=123