REDUCING PAIN AND TRAUMA ASSOCIATED WITH CHILDHOOD AND ADOLESCENT IMMUNIZATIONS

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DISCLOSURE

• Robert Mangold and Lisa Moritz DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as real or apparent conflict of interest in the context of the subject of this presentation.

• We DO NOT anticipate discussing the unapproved/investigative use of a commercial product/device during this presentation.

• We DO NOT have a financial relationship with any companies whose products are addressed in this presentation.

OBJECTIVES

• Participants will be able to define needle fear and discuss the negative long-term impacts.

• Participants will recognize the importance of minimizing fear, pain, and trauma during immunizations.

• Participants will be able to identify at least three different methods to reduce needle fear and trauma during immunizations.
NEEDLE FEAR

- Fear of needles, known in medical literature as needle phobia, is the extreme fear of medical procedures involving injections or hypodermic needles.
- Needle fear has more than tripled over the past 30 years.
- Needle fear is not associated with infant vaccinations, as long term memory develops after 21 months of age.
- The more same-day preschool injections between 4 and 6 years of age, the more likely a child is to fear needles later in life.
- Fear can last a child’s lifetime, affecting health care decisions and health care seeking behaviors.
**NEEDLE SIZE**

- Needle size should be based off of patients age during childhood and weight/sex as adults.
- Injection sites should be selected by age.

<table>
<thead>
<tr>
<th>Needle Size</th>
<th>Injection Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant (0-12 months)</td>
<td>24-gauge or 27-gauge needles</td>
</tr>
<tr>
<td>Children (1-17 years)</td>
<td>25-gauge or 27-gauge needles</td>
</tr>
<tr>
<td>Adults (18 years and older)</td>
<td>25-gauge or 27-gauge needles</td>
</tr>
</tbody>
</table>

**SAVING THE WORST FOR LAST....**

- Give rotavirus 1st
- Vaccines perceived to be more painful:
  - MMR
  - PCV13
  - HPV

**ADMINISTERING INJECTIONS SIMULTANEOUSLY**

- Insufficient evidence to support this theory
PARENTAL INVOLVEMENT

Parental involvement in positioning and distraction is linked to decreased fear in children undergoing venipunctures.

“Established relationship between a parent and child enabled parents to successfully position the patient and maximally divert their thoughts from the procedure to the distraction.”

THERAPEUTIC HOLD

Different holds are needed depending on the age and size of the child. The image shows examples that parents can support their child and make the vaccination process less dreadful than most fear. Followed by:

For Infants: Children who are getting a vaccine on arm, place the child:
1. Face the mother or father with their arm extended.
2. Place one hand on the upper arm and hold the infant’s arm. Use your other hand to support the child’s head and arm.
3. Provide the child with distraction.

For Toddlers: Children who are getting a vaccine on arm, place the child:
1. Face the mother or father with their arm extended.
2. Place one hand on the upper arm and hold the infant’s arm. Use your other hand to support the child’s head and arm.
3. Provide the child with distraction.
POSITIONING

- Infants <12 months—held by caregivers; skin-to-skin preferred
- 12 months-2 years—held by caregivers
- 3 years-11 years—seated, may be held by caregiver
- >12 years-adults—seated or lying down

JUST A SPOON FULL OF SUGAR

- Sweet-tasting solutions in infants up to 12 months of age
  - Rotavirus vaccine
  - Pacifier dipped in sucrose
  - Sucrose
- Smarties candy

https://www.youtube.com/watch?v=NtC1839udeA
SHOTBLOCKER

ShotBlocker® is a simple, plastic disk that features a number of short, blunt skin contact points on its underside with a centrally located opening where both intramuscular and subcutaneous injections can be administered. ShotBlocker® safely and with no side effects blocks the pain of injections without the use of chemical refrigerant sprays or drug-based creams.
BUZZY PRODUCTS

Just like cool running water soothes a burn, Buzzy uses a patented combination of cold and vibration to replace pain with temperature and movement.

TOPICAL ANESTHETIC PRODUCTS

FUN BANDAIDS
• Children should be upright, rather than supine during immunization administration.
• Parental presence during immunization
• Minimizing fear, pain, and trauma during immunization administration through distraction, reassurance, and nursing interventions should be a priority to the immunization provider
• Trauma perceived by the child during the 4-6 year immunization appointment can have a negative affect on health seeking behaviors into adulthood

WHERE TO ORDER:
• Shot Blocker
  bionix.com or mooremedical.com
• Buzzy
  buzzyhelps.com
• Pain Ease
  gebauer.com or mooremedical.com
• Sweet Ease
  philips.com
• Bandages
  archiemcfee.com or kidslovestickers.com or smilemakers.com
• Miscellaneous Items
  orientaltrading.com
OTHER RESOURCES

“Reduce the Pain of Vaccination in Babies” – health professionals from The Hospital for Sick Children
https://www.youtube.com/watch?v=90oaL2agI6Q

“Sid the Science Kid – Getting a Shot: You can do it!”
https://www.youtube.com/watch?v=4tpmiGFxRg4

“Afar the Shots” handout for parents
http://immunize.org/wag/d/p4015.pdf

REFERENCES:


THANK YOU!!!!!

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