

SAGE Technical Consultation Group on Reducing Pain and Distress at the Time of Vaccination

Proposed Recommendations

N. Turner, SAGE Member

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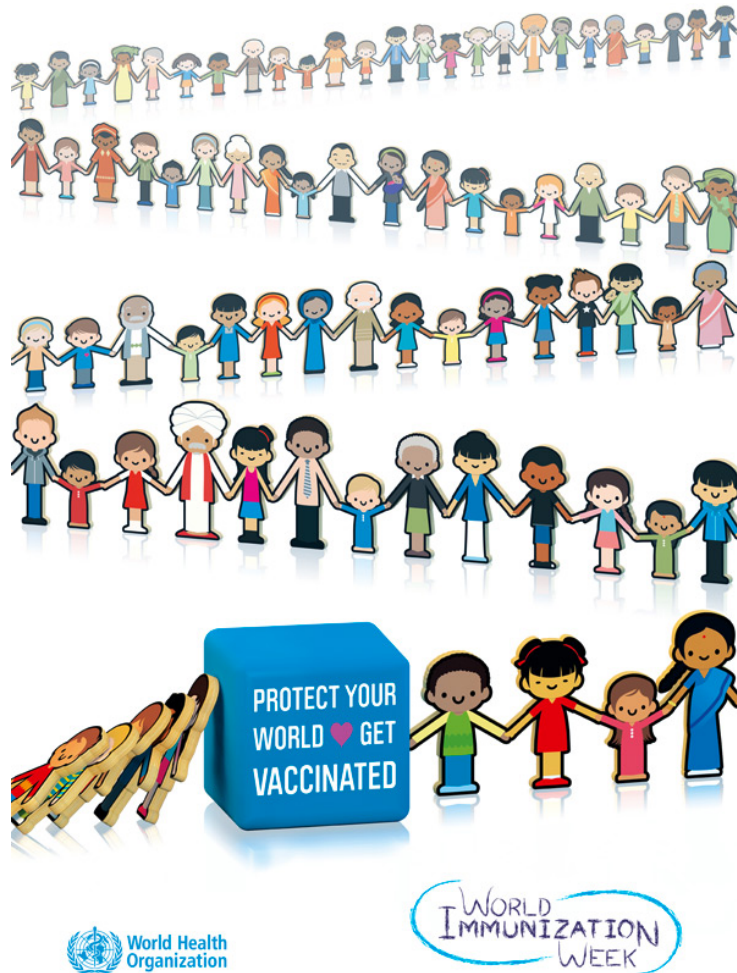


**World Health
Organization**

Conclusions

Technical Consultation Group

- Pain and distress at vaccination
 - important problem for infants, children, adolescents, adults, caregivers and providers
- Not addressing pain: may cause vaccine hesitancy negatively impact health behaviours
- Especially key to address in infants and children to minimize long term negative impact
- Effective, feasible, culturally acceptable evidence based interventions exist
- Relief of pain or distress during health-related procedures is a basic human right:
 - mitigation of pain and distress at time of vaccination should be part of good vaccination practice across the globe.



To Address Pain and Distress at Time of Vaccination Technical Consultation Group Recommendations



Globally - All ages

Recommended for national programmes

- **No aspiration**
- **Administer vaccines in order of increasing painfulness**
- **Proper positioning**
- **Use of neutral words; avoiding language that increases anxiety and/or promotes distrust**

Not recommended for national programmes as routine practice

Effective but not practical

- Topical anaesthetic

Unknown effectiveness:

- Changing the needle
- Looking at vs. away from needle
- Organizational aspects of the setting: privacy, environment

Ineffective:

- Manual tactile stimulation

Ineffective with potential harms:

- Oral analgesics
- Warming the vaccine

Infants

Recommended for national programmes	Not recommended for national programmes as routine practice
<ul style="list-style-type: none"> • Caregiver presence <p><u>Conditional recommendations:</u></p> <ul style="list-style-type: none"> • Breastfeeding • Administration of sweet solutions if breastfeeding not acceptable during the vaccination session or shortly before (including rotavirus vaccine) 	<p><u>Effective but not practical:</u></p> <ul style="list-style-type: none"> • Pacifiers and finger/thumb sucking • Simultaneous injections <p><u>Equivocal effectiveness and impractical:</u></p> <ul style="list-style-type: none"> • Distraction <p><u>Ineffective:</u></p> <ul style="list-style-type: none"> • Vapocoolants

Children

Recommended for national programmes

Not recommended for national programmes as routine practice

- **Caregiver presence**

Conditional recommendations:

- Distraction (e.g. Music)

Ineffective:

- Vapocoolants

Adolescents and Adults

(including pregnant and breastfeeding women)

Recommended for national programmes

Conditional recommendations:

- Distraction (no evidence that effective in adolescents)
e.g. Breathing interventions (cough, breath-hold)

Not recommended for national programmes as routine practice

Equivocal effectiveness and not practical:

- Vapocoolants (no evidence that effective in adolescents)

Ineffective:

- Visual distraction
- Music distraction

isotonicity)?

- To provide an objective method of rating painfulness of vaccines.
- Could pain at the time of vaccination be included as an endpoint during formulation and early trials, and captured on case report forms?
- If it was made a licensing requirement could manufacturers be required to:
 - collect this data?
 - include pain at time of vaccination in the package insert?
 - include advice on mitigation of pain at vaccination in the package insert?
- Could incentives encourage manufacturers to collaborate to develop less painful vaccines and combination vaccines?

remove content if not evidence-based.

2. Include pain mitigation recommendations with WHO immunization materials.
3. *Align pain mitigation recommendations with other departments and policies e.g. breastfeeding, pacifiers, rotavirus vaccine, aspiration, etc.*
4. Disseminate pain/fear mitigation recommendations through SAGE report and its usual dissemination channels, Immunization managers, National Immunization Technical Advisory Group (NITAG) members and partners.

modules (MLM) on interventions to reduce pain during the vaccination event.

7. Monitor and evaluate implementation success of pain mitigation measures.
8. Work with the Expert Committee on Biological Standardization (ECBS) and regulatory agencies to advocate that grading of pain experienced during the vaccination event be included in data for licensing and in the product monograph.

to Countries-1

1. Strengthen health policy by:
 - Including the mitigation of pain and distress at the time of injection as part of good vaccination practice, and
 - Recognizing pain at the time of injection as distinct from delayed pain due to reactogenicity and as one factor in selection of a vaccine.
2. Support and monitor implementation success (Interagency Coordinating Committees/NITAG).
3. Integrate recommendations into immunization programs by:
 - Providing preferred order of injection for country-specific vaccination schedules
4. Include vaccine pain mitigation in health care worker curricula.

Implementation Recommendations

Through **education of health care workers and pre-service workers, and continuing education:**

1. Ensure understanding and appreciation of pain with vaccination injection.
2. Include the following content:
 - Assessment of pain and distress during the time of vaccination; and
 - Mitigation of pain at the time of vaccination, including interventions such as
 - No aspiration,
 - Giving the most painful injection last,
 - Positioning,
 - Appropriate language and interaction, and
 - Other interventions tailored to age-specific groups such as breastfeeding during the event for infants.

Implementation Recommendations

Implementation Recommendations

Through **education of caregivers, and those receiving vaccines who are old enough to be educated (older children, adolescents, adults):**

1. Include vaccination pain mitigation:
 - during pre-natal visits,
 - with breastfeeding education, and
 - at the time of vaccination.

global perspective

- What distractions, in the ages where applicable, are effective and implementable?
 - Which distractions are appropriate in different geographical contexts and income settings?
 - How should distractions be administered?
- Is there any difference in pain on injection when using multiple injections in one limb or multiple limbs?
- What interventions to reduce pain during vaccination are effective in mass campaigns and school-based programs?
 - What environmental interventions are effective (e.g. privacy, visual cues)?