

Video Review

Empowering parents in using evidence-based strategies to reduce needle pain and anxiety in children

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The video, *It Doesn't Have to Hurt*, developed by Christine Chambers, PhD is an informative video for parents outlining evidence-based strategies to reduce needle pain and anxiety in children. It is part of a larger initiative led by the Centre for Pediatric Pain Research to disseminate layperson-friendly research evidence about children's pain directly into the hands of parents who can use it. The campaign (<http://itdoesnthavetohurt.ca>), which spans a one-year time frame, focuses on social media as a mechanism for knowledge transfer. Efforts incorporate sharing and discussion of material related to children's pain through blogs, videos, Twitter parties, Facebook polls, and social media images, which are all posted and promoted by the Yummy Mummy Club, a Canadian online publisher targeted to mothers. The Canadian Institutes of Health Research provided funding for a partnership with the Yummy Mummy Club and the initial grant to fund this campaign. The *It Doesn't Have to Hurt* video itself, which can also be found on YouTube (www.youtube.com/watch?v=KgBwVSYqfps), received additional funding through a Knowledge Sharing Support Award from the Nova Scotia Health Research Foundation, with additional support from the Mayday Foundation Pain and Society Fellowship Program. To date, the video had over 188,000 views on YouTube, suggesting that this campaign has been relatively successful in getting their material noticed and watched since the initial posting in November 2013.

This video begins with a mother carrying an appealing young female toddler with large blond

curls and a white bow down a hallway. Lighthearted music is playing with an upbeat rhythm. Mother and daughter enter an exam room, and the camera shows the child playing in the room, stepping on the scale, pulling the blinds up and down in the room, and playing peek-a-boo with the camera behind a changing curtain. The doctor then arrives, folder in hand, and enters with a big smile. "You're gonna get some needles today young lady," she announces. The music immediately begins to darken, the child's face crinkles, and she begins to whine in protest, her vocalizations becoming louder and louder as the soundtrack becomes more ominous. The doctor pulls on her gloves with a big snap of latex, giving notice that a procedure is imminent. The video climaxes with a clip of the child raising her hand with palm to the camera, shouting "Stop!" She starts talking in a sing-songy, barely comprehensible voice, which is helpfully subtitled by the producers of the video. "You know mom, it doesn't really have to be this way. I know you're afraid of needles, but I don't have to be." The child then goes through several strategies that her mother could use to distract her, such as using games or getting her to take deep breaths by blowing bubbles. She also describes a "special cream", or a topical anesthetic, that mom can use "so the needle won't hurt so much". These points are then reviewed by the child in a clear, Do's and Don'ts format:

1. DO use topical anesthetics to help.
2. DO distract me with games or let's sing a song.
3. DO encourage me to take some deep breaths by blowing bubbles.
4. DON'T tell me it's going to be ok.
5. DON'T tell me it will be over soon.

These Do's and Don'ts are supported by research on pediatric needle fears, which has supported the effectiveness of topical anesthetics (Schechter et al., 2007) and distraction (Boerner et al., 2014) in alleviating pain and fear associated with needles. Reassurance, in contrast, is associated with increased child distress during needle procedures, possibly because it communicates higher parental fear about the procedure (McMurtry et al., 2010).

The video then incorporates warmhearted interactions between the mom and child. The child asks mom for the pink bubble container and then takes out the wand, blowing bubbles right into the mom's face. Mom laughs and the child giggles in delight. The camera then shows mom and daughter on her lap, facing the camera. "This has been really helpful for me," states mom. "Please share this with your friends." The camera then shows a clip of the mom bear-hugging her child, who laughs while the mom gives her a big kiss on the cheek. The video ends with a clip of a chalkboard with child-like writing reviewing the main points, which are outlined above.

The doctor's exaggerated manner adds a comical element to the video and is entertaining for parents. It also helps capture the situation from the child's point of view, demonstrating how scary a needle encounter may seem to a small child and capturing the downward spiral of anticipatory anxiety. On the other hand, the clinician's portrayal may lead parents to forget that their clinician is one of their biggest allies in this encounter. Children may benefit most when parents and clinicians partner together to make their experience as minimally distressing as possible.

One of the strengths of the video is clarity. The pacing of the video is appropriate, and the developers do not overload parents with information.

The video also seemed appropriate for a parental audience and gives parents hope that their children may also respond positively if provided with similar interventions. One criticism of the video was the missed opportunity to model the role of parental anxiety on children's distress. The child in the video did allude to parental distress by stating to mom, "I know you're afraid of needles," yet mom was not visibly anxious in the video. Illustrating how parental fear of needles contributes to child distress during needle encounters may have been extremely powerful if included, especially in light of research supporting this strong association (McMurtry et al., 2010). Finally, this video may be limiting its effectiveness by targeting mothers exclusively and also depicting one child vs. several children of varied sex, race and/or age. In fact, research supports similar effects across child and parent sex for children's responses to acute pain (Moon et al., 2008).

At the conclusion of the video there is an invitation to visit the website for the Centre for Pediatric Pain Research at www.pediatric-pain.ca, which is a very helpful website for parents as well as health professionals working in the area of pain.

In summary, this video is appropriate in helping parents better understand simple, evidence-based steps in reducing needle pain and anxiety in children. If parents feel comfortable, it may also be helpful for them to share this video with their pediatricians to help promote evidence-based practices. Overall, this video empowers parents with tools to address their children's needle fears and helps reduce feelings of anxiety, helplessness, and stress, making a typically unpleasant encounter a little more positive for everyone involved.

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