

UTILIZING BREASTFEEDING TO MITIGATE PAIN DURING ROUTINE INFANT VACCINATION

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BACKGROUND



Szabo, L. (2014, April 24). CDC: Vaccines save hundreds of thousands of lives. Retrieved from <https://www.usatoday.com/story/news/nation/2014/04/24/cdc-vaccine-benefits/8094789>

- Routine vaccination is an effective public health intervention and a common practice in pediatric offices.
- Vaccines given to infants and young children save lives.
- Vaccine injections are the most common source of iatrogenic pain in childhood.

RELEVANCE TO PRACTICE



SIGNIFICANCE

- It is estimated up to 25% of adults have a fear of needles, with most fears developing in childhood
- 10% of the population avoids vaccination and other needle procedures because of needle fears

PROBLEM

- No systematic process for vaccine administration
- All infants were placed on the exam table for vaccine administration
- Breastfeeding not offered as a pain relieving strategy

Taddio, A., Appleton, M., Bortolussi, R., Chambers, C., Dubey, V., Halperin, S., . . . Shah, V. (2010). Reducing the pain of childhood vaccination: an evidence-based clinical practice guideline. *Canadian Medical Association Journal*, 182(18). doi: 10.1503/cmaj.101720

CHANGING CLINICAL PRACTICE

PURPOSE

- Introduce a systematic process
- Reduce infant pain during routine vaccination
- Incorporate evidence based practice into care
- Introduce breastfeeding as a pain reducing strategy
- Introduce lap holding for non-breastfeeding mothers
- Get the infant off of the exam table

METHODS

- Creation of a clinical practice guideline
- Quality Improvement using Plan-Do-Study-Act cycle
- Process design to streamline vaccine administration
- Bandura Self Efficacy Theory
- Kotter's Change Theory

GOAL

As a pain relieving strategy 25% of breastfeeding mothers will breastfeed their infant, age six months or younger, during routine vaccination at the Center for Advanced Pediatrics office setting by December 18, 2018.



IMPLEMENTATION

- **Planning**
- **Education**
- **Modification EHR**
- **Creation of Clinical Practice Guideline**

RESULTS



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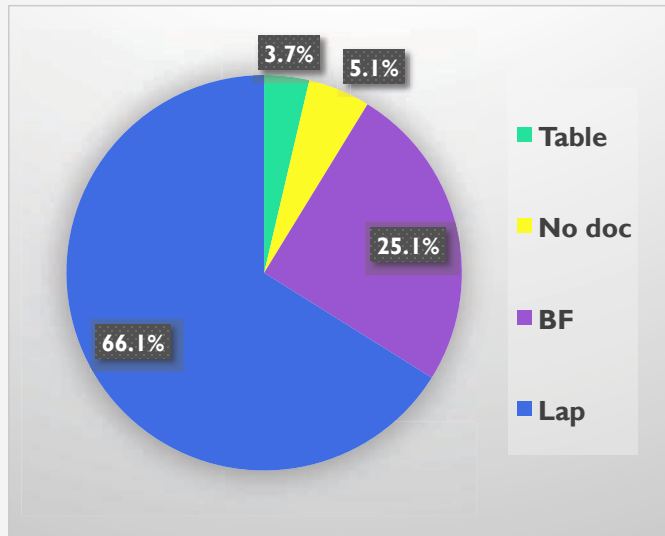


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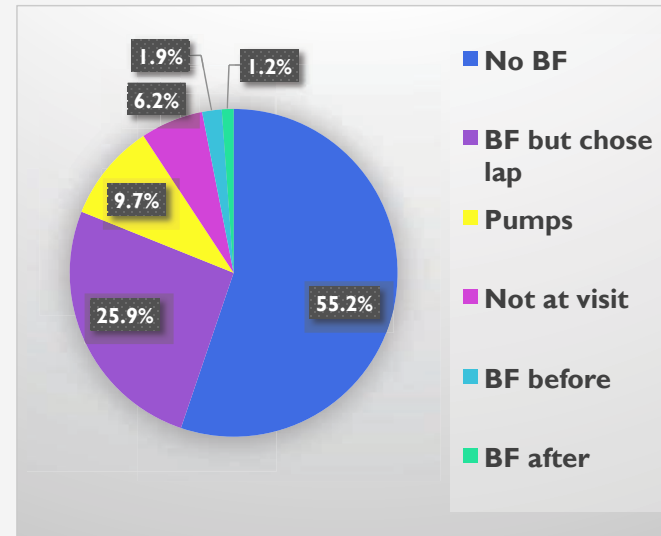


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INFANT POSITIONING DURING VACCINATION



REASONS FOR LAP PLACEMENT





IMPLICATIONS FOR PRACTICE

- Improve patient outcomes
- Reinforce importance of collaboration
- Contribute to evidence
- Next iteration PDSA
- Guide, mentor, and support other nurses

KEY REFERENCES

First, do no harm. (n.d.). Retrieved from [https://medical-dictionary.thefreedictionary.com/First, do no harm](https://medical-dictionary.thefreedictionary.com/First,+do+no+harm).

Hamilton JG. Needle phobia: a neglected diagnosis. *J Fam Pract* 1995;41:169-75.

Szabo, L. (2014, April 24). CDC: Vaccines save hundreds of thousands of lives. Retrieved September 23, 2017, from <https://www.usatoday.com/story/news/nation/2014/04/24/cdc-vaccine-benefits/8094789>

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Taddio, A., Ilersich, A. L., Ipp, M., Kikuta, A., & Shah, V. (2009). Physical interventions and injection techniques for reducing injection pain during routine childhood immunizations: Systematic review of randomized controlled trials and quasi-randomized controlled trials. *Clinical Therapeutics*, 31, S48-S76. doi:10.1016/j.clinthera.2009.07.024