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Title: A cluster randomized controlled trial in Ontario hospitals providing maternal/newborn care to determine effectiveness of a parent-targeted educational video for improving newborn pain treatment.

Lay Summary:

All newborn babies require blood tests for newborn screening and preterm and sick babies require many other blood tests and procedures during their hospitalization. These procedures cause pain and distress and repeated painful procedures put preterm and sick babies at increased risk of long-term developmental delays.

The good news is that research has shown there are simple, effective, and free or very inexpensive ways to reduce pain in newborn babies. Breastfeeding (BF) or holding babies skinto-skin (SSC), before and during blood tests, or giving babies just a few drops of sugar water (sucrose), effectively reduce pain as shown by less crying and less struggling. Canadian and international guidelines recommend using these three strategies. The choice of which to use depends on if the mother is breastfeeding and available during the procedure, the health of the baby, and availability of a family member to hold the baby SSC. However, despite the evidence and recommendations, research in Ontario, throughout Canada and many parts of the world shows that many babies still have no pain treatment for painful procedures.

To date, education aimed at improving pain care for babies has primarily targeted health care providers (HCPs). Yet use of effective pain treatment for babies has remained poor and babies in many settings continue to suffer unnecessarily during single or repeated painful procedures. To address this problem, our research team partnered with parents of babies and young children, HCPs, including nurses, midwives and physicians, researchers in Ontario and throughout Canada, and key organizations such as BORN Ontario, and the Baby Friendly Hospital Initiative (BFHI), to produce a brief video ([BSweet2Babies](#)) showing how parents can help their babies during blood tests. The video shows three babies having their blood tests while being i) BF, ii) held in SSC with the mother, and iii) receiving sucrose (see appendix for screen shots) . The calming effects of these strategies are powerfully portrayed. Voice-over in user-friendly language explains how parents can help their babies by partnering with nurses and doctors to use these strategies.

The video was posted onto YouTube in 2014, for wide-spread knowledge dissemination. However YouTube is a passive means of disseminating knowledge and the impact on clinically important outcomes is unknown. Our study will evaluate whether the video, if made easily available and promoted in maternal/newborn units that care for mothers and babies in Ontario, increases use of recommended pain treatment strategies during newborn screening.