

## Knowledge translation: the role of the nurse

*Tradução do conhecimento: o papel da(o) enfermeira(o)*

*Traducción del Conocimiento: el papel de la enfermera/del enfermero*

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The “Be Sweet to Babies” (“*Seja doce com os bebês*”) program of research started with one clinical question - How can we do this better? In my case, as a neonatal intensive care nurse in a surgical Neonatal Intensive Care Unit (NICU), the question was - how can we do better pain treatment for sick babies during painful procedures? That question was asked by me more than 20 years ago.

Over the years, we have addressed this question. We have known for more than 15 years how to reduce babies’ pain. We know through hundreds of primary studies and high quality systematic reviews, that very small volumes of sweet solutions (sucrose or glucose) reduce pain during painful procedures.<sup>1</sup> We also know that breastfeeding during painful procedures, if possible, feasible and culturally acceptable,<sup>2</sup> and holding pre-term and term babies skin-skin,<sup>3</sup> reduces pain during painful procedures. Now the question to be asked is not about effectiveness of such treatments, but about implementing the evidence in practice.

As nurses, we are all responsible for using and facilitating use of best evidence in our practice. As nursing leaders, we are responsible for ensuring the context, in which our staff work, is positive, and supportive of evidence-based practice. And as nursing researchers, we are responsible for not only the ethical conduct of research but working at translating evidence into practice. For the Be Sweet to Babies team, this last point has been the challenge. Working alongside other interdisciplinary research teams, we have all strived to educate clinicians to use the evidence in practice. However, we know that education is only partly effective in changing practices, and reports around the world still show that babies are suffering unnecessarily, with no, or inconsistent, use of breastfeeding, skin-to-skin contact or sweet solutions during painful procedures.<sup>4-5</sup> Our team therefore turned to partnering with parents, as well as clinicians, students, other researchers, hospitals and organizations such as Baby Friendly Initiative, to co-produce a series of videos, demonstrating effectiveness of the three strategies in use. Here is the link to the videos in English: <<https://youtu.be/L43y0H6XEh4>> and in Portuguese:

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<<https://youtu.be/ZGLSNdYtppo>>. The aim of the videos was to support parents to advocate for their babies during painful procedures.

Evaluation of these videos with parents and healthcare providers (HCPs), showed they were acceptable, feasible to use, and potentially persuasive.<sup>6,7</sup> Yet, when we actually trialed the efficacy of video, when shown to parents of newborns prior to their newborn screening test, viewing of the videos did not result in increased use of breastfeeding or skin-to-skin contact (the strategies parents reported they preferred to use), or use of sucrose, during newborn screening.<sup>8</sup> Therefore, back to the drawing board.

Informed by the Knowledge to Action framework,<sup>9</sup> a key activity required in implementing evidence into practice is ascertaining barriers to use of evidence. We therefore surveyed nurses to ascertain barriers to supporting parents to breastfeed, hold their newborns skin-to-skin, or give sucrose during painful procedures.<sup>10</sup> Key barriers reported related to context and culture (i.e. “We’ve always done it this way”), a perceived lack of time, and concerns about ergonomics and knowledge about positioning themselves to do the bloodwork while babies were being held. To address this latter key modifiable barrier, our team partnered again with parents, students, clinicians, including an occupational health and safety physiotherapist, and co-produced another video, demonstrating best ergonomics for HCPs collecting blood samples while babies were being breastfed/held skin-skin. (<<https://www.youtube.com/watch?v=lpZNwP7bnkg&feature=youtu.be>>). The next steps in the process of continuing to strive to improve pain management in newborn infants is to evaluate whether this latest video is a useful, acceptable and effective KT tool.

Throughout this journey, the Be Sweet to Babies team has used social media to disseminate the videos in multiple languages, such as using Facebook to share the Portuguese parent-targeted video.<sup>11</sup> It is not yet known if such social media dissemination strategies are effective in actually changing practices and improving patient outcomes. But we will continue to strive to answer such questions. As nurses, we have a responsibility to continue to ask the question “How can we do this better?” and work together with patients and their families, interdisciplinary teams, and organizations to address research questions with the ultimate aim of improving patient outcomes.

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