

Evidence-based strategies to ensure human milk & breastfeeding in critically ill infants

Prof Diane L. Spatz

University of Pennsylvania School of Nursing & the Children's Hospital of Philadelphia (CHOP)

Human milk is the preferred form of nutrition for all infants especially those who are born critically ill. In the U.S., despite the fact that 79.2 % of women try breastfeeding one time, the exclusive breastfeeding rate at 6 months is only 18.8 %. Critically ill infants are at even higher risk for not receiving human milk and research demonstrated that these infants could benefit most.

Recent research in the U.S., demonstrated that only 49 % of Neonatal Intensive Care Units (NICUs) employed lactation consultants and only 14 % of nurses reported providing breastfeeding support to the mother of the NICU infant on their prior shift. Additionally, data from the Vermont Oxford Network (VON) NICUs demonstrate that only 44.1 % of infants are being discharged home on human milk.

The Spatz (2004) Ten Step model has been in place at CHOP for over 10 years and has been implemented in other NICUs worldwide. The lactation programme at CHOP is led by a PhD prepared nurse researcher with staff of: a PhD prepared nurse clinical supervisor, four IBCLCs, over 600 trained Breastfeeding Resource Nurses (BRNs), five student interns, a nurse-led support group for mothers of hospitalised infants, and a state of the art Human Milk Management Center. This comprehensive and replicable model of care demonstrates human milk & breastfeeding outcomes that statistically significantly exceed all national data in the United States. Close to 100 % of our mothers initiate pumping for their critically ill infants & over 80 % of infants are discharged on human milk.

This presentation will provide the participant with the knowledge and skills to implement evidence based strategies of care in the NICU. Data from our recent research on the BRN programme will be presented with recommendations for replication. Our prenatal lactation consultation with a focus on helping families to make an informed feeding decision, as well as our continuous quality improvement project on pumping initiation will provide the participants with concrete transferable knowledge. Implementation strategies and outcomes of a Human Milk Management Center will be discussed. Research on human milk oral care as a strong facilitator for mothers to keep pumping and building their milk supply as well as outcome data of the importance of human milk at discharge (not direct breastfeeding per se) being important for mothers. Finally, post-discharge breastfeeding outcomes of our most vulnerable infants will be shared demonstrating that if families receive evidence based breastfeeding support & care and are cared for in a predominantly strong human milk culture, mothers will not only start breastfeeding but keep breastfeeding/providing milk for their infants for long periods post-discharge.

References

- Berry, H., Froh, E.B. & Spatz (in press). Implementation of a human skim milk programme. *The Journal of Perinatology*
- Edwards, T. E. & Spatz, D. L. (2010). An innovative model for achieving breastfeeding success in infants with complex surgical anomalies. *The Journal of Perinatal and Neonatal Nursing*, 24(3), 254-255. doi:10.1097/JPN.0b013e3181e8d517
- Froh, E.B, Deatrick, J. Curley, M.Q. & Spatz D. L. (in press). Human milk oral care: making meaning of pumping for mothers of infants with congenital diaphragmatic hernia. *The Journal of Obstetric Gynecologic and Neonatal Nursing*.
- Froh, E.B, Flynn-Roth, R., Barton, S. & Spatz, D.L. (in press).The Voices of Breastfeeding Resource Nurses. *The Journal of Obstetrical Gynecologic and Neonatal Nursing*.
- Froh, E. B. & Spatz, D. L. (2014). An Ethical Case for the Provision of Human Milk in the NICU. *Advances in Neonatal Care*, 14(4), 269-273. doi:10.1097/ANC.000000000000109.
- Fugate, K., Hernandez, I. Ashmeade, T. & Spatz, D.L. (in press). Improving Human Milk & Breastfeeding practices in the NICU. *The Journal of Obstetrical Gynecologic and Neonatal Nursing*.
- Hallowell, S. G., Spatz, D. L., Hanlon, A. L., Rogowski, J. A. & Lake, E. T. (2014). Characteristics of the NICU Work Environment Associated with Breastfeeding Support. *Advances in Neonatal Care*, 14(4), 290-300. doi: 10.1097/ANC.000000000000102

