Educating Expectant Mothers on Mother-Infant Bonding Post-Delivery

Cassie Eicher, Emily Herman, Audrey Klus, Cassie Potter

Introduction

- According to Kwah et al. (2018), "Parents report that they would like more information and support with non-clinical issues like breastfeeding, breast milk expression and kangaroo care" (p. 94).
- Research evidence suggests that mothers and their newborns who engage in kangaroo care during the first 60 minutes after birth (also known as The Golden Hour) both experience improved psychologic and physiologic outcomes and increased breastfeeding rates.
- The purpose of our education project was to inform expectant mothers about the importance of mother-infant bonding through a bonding practice called kangaroo care during the Golden Hour.

PICO:

Among mother-infant couplets, how does kangaroo care during the golden hour, compared to a lack of kangaroo care during the golden hour, affect mother-infant bonding?

Literature Search

Databases: ScienceDirect, MEDLINE, CINAHL and PubMed

Keywords:

Bonding, Golden Hour, Maternity, Newborn, Delivery,
 Latching, Breast Feeding, Kangaroo Care, and Skin to Skin
 Contact

Search Parameters:

- Peer-reviewed articles
- Published within the last 7 years (March 2013 March 2020)

Kangaroo Care During The Golden Hour



What is Kangaroo Care?

Skin to skin contact between mother and infant & attempted breast and/or bottle feeding as soon as possible post delivery

What is the Golden Hour?
The time immediately following delivery of a stable baby up to 2 hours of life

Benefits

- **❖** Improved bonding
- Promotes breastfeedingTemperature control
- Regulates infant blood glucose

Breastfeeding

- Attempted breast and/or bottle feeding during the Golden Hour
- Promotes milk production and feeding frequency

Can my partner participate in Kangaroo Care?

Yes; anyone who wants to bond with the infant can participate

Current Evidence

- Positive correlation between kangaroo care during the Golden Hour and improved breastfeeding and bonding.
 - Kangaroo care plays a significant role in neonate survival and neurodevelopment, along with quality mother-infant bonding (Athanasopoulou, 2014)
 - Placing a newborn skin-to-skin immediately after birth stimulates oxytocin pathways in both the mother and neonate
 - Kangaroo care after birth of a healthy, full term newborn indicated greater breastfeeding initiation and exclusivity, and more rapid maternal-infant interaction
 - Infants who received more kangaroo care after birth would breastfeed more effectively
- Increase in breastfeeding and bonding when kangaroo care was performed as soon as possible post Cesarean section delivery
 - Kangaroo care may be more difficult to initiate in a cesarean delivery, but the importance cannot be overvalued
- According to study performed by Brady et al. (2014),
 "...we successfully implemented skin-to-skin contact for all eligible mother/infant couplets after cesarean birth.
 Exclusive breastfeeding rates for these women increased as a result" (p. 488).
- Improved physiologic outcomes of the newborn when kangaroo care was performed in the first hour of life
 - Kangaroo care can improve respiratory rates
 - "The respiration rate after kangaroo care significantly differed between the groups. The respiration rate of the preterm babies in the experimental group was significantly stabilized compared with the control group" (Cho, 2016).
- Kangaroo care also increased temperature control and reduced the risk of hypoglycemia

References

- Athanasopoulou, E., & Fox, J. R. E. (2014). Effects of kangaroo mother care on maternal mood and interaction patterns between parents and their preterm, low birth weight infants: A systematic review. *Infant Mental Health Journal*, *35*(3), 245-262. doi:10.1002/imhj.21444
- Brady, K., Bulpitt, D., & Chiarelli, C. (2014). An Interprofessional Quality Improvement Project to Implement Maternal/Infant Skin-to-Skin Contact During Cesarean Delivery. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 43(4), 488–496. doi: 10.1111/1552-6909.12469
- Kwah, K., Whiteman, B., Grunfeld, E., Niccolls, C., & Wood, E. (2018). Evaluation of an intervention to increase clinician knowledge and confidence to support breastfeeding, kangaroo care and positive touch within neonatal units. *Journal of Neonatal Nursing*, 24(2), 94–99. doi:10.1016/j.jnn.2017.10.003
- Cho, H., Cho, E., Kim, S., Kim, E. H., Kwon, M. S., Jun, E. M., & Lee, S. (2016). The effects of kangaroo care in the neonatal intensive care unit on the physiological functions of preterm infants, Maternal–Infant attachment, and maternal stress. *Journal of Pediatric Nursing*, 31(4), 430-438. doi:10.1016/j.pedn.2016.02.007

Education Plan & Implementation

- Our project would be most beneficial for new mothers and fathers, so we decided to present the Understanding Newborn Skills Class
- Based off our audience, we developed our presentation in a PowerPoint. We ensured the limited use of medical terminology or overwhelming information.
- Our PowerPoint covered the most important information for new parents to understand that pertained to our project.
- The slides included:
 - what kangaroo care is
 - how to implement kangaroo care
 - what to expect
 - who can participate
- breastfeeding benefits
- Kangaroo care after C-Section
- We created a handout shown below that we provided for the audience so they would have the ability to follow along and take notes (handout can be seen on lower left-hand corner)
- We then created a post-survey for them to fill out and evaluate the effectiveness of our presentation (post-survey seen below)

Lessons Learned

- In order to improve our project, we could have presented to a larger group of new and expecting parents for a larger sample size.
- This would have given us more data to assess our effectiveness as presenters.
- More research needs to be done on benefits for the mother of a newborn who engages in kangaroo care with her baby.
- Finally, the opportunities to learn about kangaroo care and the benefits need to be more widely available to new parents.

Feedback

Post-survey results show that our participants were more likely to engage in kangaroo care after our presentation. Our project goal was met.

Post-survey Questions	Average responses based on a 1-5 scale
How likely are you to engage in Kangaroo Care after this presentation?	5
How informed do you feel you are about Kangaroo Care during the Golden Hour?	5
How comfortable are you performing Kangaroo care?	5
How confident would you be explaining the benefits Kangaroo care, to a new mom?	5
How professional were the presenters?	4.8
Do you feel as if you have more knowledge than you did before the presentation?	4.8