

# Do You ROO? A Quality Improvement and Practice Change Project to Implement Kangaroo Care in the Postpartum Period

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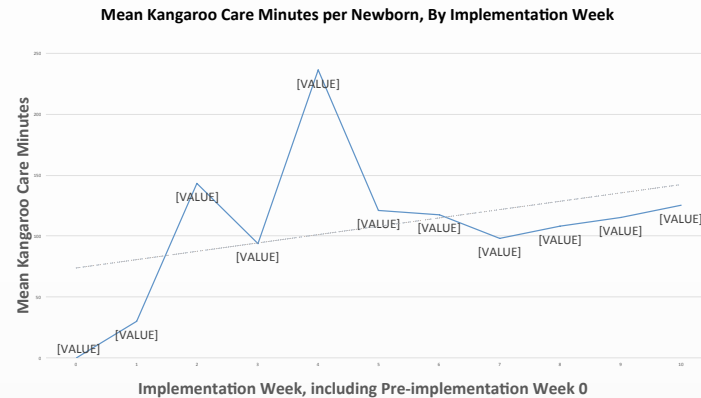
## Practice Problem

- Kangaroo Care not utilized during the inpatient postpartum period
- Kangaroo Care is standard at birth and in the Neonatal Intensive Care Unit
- Education, documentation of KC not standard during postpartum period
- Kangaroo Care may increase mother's self-efficacy in care of newborn
- Maternal lack of self-efficacy creates strain on nurse and on self
- Lack of KC, separation of couplet may affect couplet's ability to bond
- Poor positioning, possibly related to lack of knowledge, increases risk of Sudden Unexpected Postnatal Collapse (SUPC)

## Project Description

- Develop documentation piece with nursing informatics with goal of implementing prior to annual nursing competencies
- Utilized standardized KC education provided by Ohio Department of Health for annual nursing competencies
- Near-daily monitoring of KC documentation
- Frequent reminders to document use of KC
- Continual contact with nursing informatics for data reporting, improvement of documentation based on feedback from bedside nursing staff

## Results



Week	Total number of KC min	Average KC Minutes per Newborn	Total Number of Newborns	Newborns with KC	Newborns with no KC
Pre-Implement	0	0	69	0	69
1	2215	29.93	74	27	47
2	9297	143.03	65	63	2
3	7308	93.69	78	61	17
4	17719	236.25	75	67	8
5	8698	120.81	72	57	15
6	9302	117.75	79	68	11
7	8850	98.33	90	70	20
8	6481	108.02	60	49	11
9	8865	115.13	77	67	10
10	9895	125.25	79	54	15
<b>Total:</b>	<b>88630</b>	<b>108.0172727</b>	<b>818</b>	<b>583</b>	<b>225</b>
Pre-Implementation	0	0	69	0	69
Post-Implementation	88630	118.331108	749	583	156

## Conclusions

- Statistically and clinically significant increase in use of KC
- Process of change required in-depth interdisciplinary support
- Nurses identified barriers to using Kangaroo care, some personal and some safety-related
- Perceived nursing workload may affect implementation
- Education of nurses not enough to implement change- must continually monitor change process, reinforce reasoning behind need for change process
- Change itself takes time- changing current practice may take longer than expected

## Nursing and Healthcare Implications

- Identification of stakeholders and internal processes necessary for success
- Well-planned change can still experience unexpected barriers
- Nurses perception of process important as lack thereof can derail implementation
- Increasing documentation requirements increases time nurses spend on documentation
- Adjustments to staffing matrices may assist with increasing documentation requirements
- More research needed on use of KC during the postpartum period

## References

Aghdas, K., Talat, K., & Sepideh, B. (2013). Effects of immediate and continuous mother-infant skin-to-skin contact on breastfeeding self-efficacy of primiparous women: A randomized control trial. *Women and Birth*, 27, 37-40. doi: 10.1016/j.womb.2013.09.004

Bigelow, A., Power, M., MacLellan-Peters, J., Alex, M., & McDonald, C. (2012). Effect of mother/infant skin-to-skin contact on postpartum depressive symptoms and maternal physiological stress. *JOGNN*, 41(3), 369-382. doi: 10.1111/j.1552-6909.2012.01350.x

Colson, S. (2014). Does the mother's posture have a protective role to play during skin-to-skin contact? *Clinical Lactation*, 5(2), 41-50. doi: 10.1891/2158-0782.5.2.41

Dalbry, R., Calais, E., & Berg, M. (2011). Mothers' experiences of skin-to-skin care of healthy full-term newborns: A phenomenology study. *Sexual and Reproductive Healthcare*, 2(2011), 107-111. doi: 10.1016/j.srhc.2011.03.003

Dumas, L., Lepage, M., Bystrova, K., Mathiesen, A.S., Welles-Nyström, B., & Widström, A.M. (2013). Influence of skin-to-skin contact and rooming-in on early mother-infant interaction: A randomized controlled trial. *Clinical Nursing Research*, 22(3), 310-336. doi: 10.1177/1054773812468316

Ludington-Hoe, S. M., & Swinth, J. Y. (1996). Developmental aspects of kangaroo care. *JOGNN*, 25(8), 691-703. doi: 10.1111/j.1552-6909.1996.tb01483.x

Moore, E. R., Anderson, G. C., Bergman, N., & Dowswell, T. (2012). Early skin-to-skin contact for mothers and their healthy newborn infants (Review). *Cochrane Database of Systematic Reviews*, 2012(5). doi: 10.1002/14651858.CD003519.pub3

Pejovic, N. J., & Herkules, E. (2013). Unexpected collapse of healthy newborn infants: Risk factors, supervision, and hypothermia treatment. *Acta Paediatrica*, 102(7), 680-688. doi: 10.1111/apa.12244

Sedman, G., Umikrishnan, S., Kenny, E., Myslinski, S., Cairns-Smith, S., Mulligan, B., & Engmann, C. (2015). Barriers and enablers of kangaroo mother care practice: A systematic review. *PLoS ONE*, 10(5), 1-20. doi: 10.1371/journal.pone.0125643

Strivastava, S., Gupta, A., Bhatnagar, A., & Dutta, S. (2014). Effect of very early skin to skin contact on success at breastfeeding and preventing hypothermia in neonate. *Indian Journal of Public Health*, 58(1), 22-26. doi: 10.4103/0019-557X.128160