

11-2012

Kangaroo Mother Care for Premature and Low Birthweight Infants

Emma Rahn

Cedarville University, erahn@cedarville.edu

Bethany Hotchkiss

Cedarville University, bethanyhotchkiss@cedarville.edu

Follow this and additional works at: [http://digitalcommons.cedarville.edu/
pharmacy_nursing_poster_session](http://digitalcommons.cedarville.edu/pharmacy_nursing_poster_session)

 Part of the [Obstetrics and Gynecology Commons](#), and the [Pediatrics Commons](#)

Recommended Citation

Rahn, Emma and Hotchkiss, Bethany, "Kangaroo Mother Care for Premature and Low Birthweight Infants" (2012). *Pharmacy and Nursing Student Research and Evidence-Based Medicine Poster Session*. 33.

http://digitalcommons.cedarville.edu/pharmacy_nursing_poster_session/33

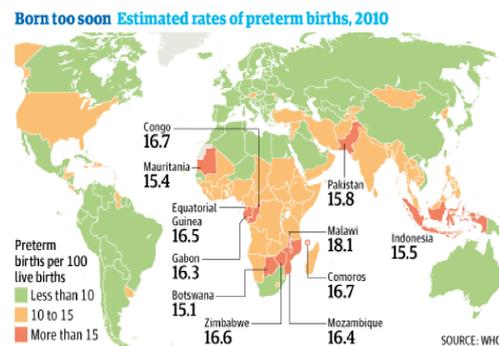
This Poster Session is brought to you for free and open access by DigitalCommons@Cedarville, a service of the Centennial Library. It has been accepted for inclusion in Pharmacy and Nursing Student Research and Evidence-Based Medicine Poster Session by an authorized administrator of DigitalCommons@Cedarville. For more information, please contact digitalcommons@cedarville.edu.

Kangaroo Mother Care for Premature and Low Birthweight Infants

Emma Rahn and Bethany Hotchkiss
Cedarville University School of Nursing

PATIENT CARE ISSUE

- Millions of babies are born prematurely or at a low birth weight each year
- 60-80% of neonatal deaths occur because of this problem¹
- Traditional care requires expensive, high-tech equipment, and highly trained professionals¹
- Kangaroo Mother Care is a treatment for premature and LBW that includes prolonged skin to skin contact that supports thermal regulation, breastfeeding, and early intervention to complications^{3,6}



EVIDENCE-BASED PRACTICE QUESTION

- Is Kangaroo Mother Care more beneficial to the physiological and psychological health of mom and baby than conventional care?

P- Mothers and their premature and/or LBW infants

I- Kangaroo Mother Care

C- Conventional neonatal care – use of incubators and radiators

O- Decreased mortality, morbidity, cost, future health and behavioral problems
Increase in parental involvement, maternal health, growth, and breastfeeding

REGISTERED NURSE INTERVIEW

- Interviewed a NICU nurse at Dayton Children's Hospital
- KMC is not a mandatory policy, but highly encouraged
- She has personally witnessed many of the benefits of KMC
- Dayton Children's policy reports many of the observed advantages of KMC

METHODS

- Databases searched: PubMed and Canadian Paediatric Society
- Keywords used: Kangaroo Mother Care, Kangaroo Care, preterm infants, morbidity, mortality, and low-income settings
- Exclusion Criteria: Publication date 5+ years ago or had a focus too specific for our research
- Inclusion Criteria: Studied relationship of KMC to mother-child well-being.
- Total Articles Found: 286
- Articles Considered: 16
- Articles Used: 8

REFERENCES

1. Conde-Agudelo A., Belizan JM., Diaz-Rossello J (2011). Kangaroo mother care to reduce morbidity and mortality in low birthweight infants. Cochrane Database of Systematic Reviews, Issue 3. Art. No.: CD002771. doi: 10.1002/14651858.CD002771.pub2.
2. Fetus and Newborn Committee Canadian Paediatric Society (2012). Kangaroo care for the preterm infant and family. Canadian Paediatric Society, 17(3):141-3.
3. Haxton, Dawn, J. Doering, L. Gingras, L. Kelly (2012). Implementing Skin-To-Skin Contact at Birth Using the Iowa Model. *Association of Women's Health, Obstetric and Neonatal Nurses*.
4. Lawn, Joy E., Mwansa-Kambafwile, Judith, Horta, Bernardo L., Barros, Fernando C., and Cousens, Simon (2010). 'Kangaroo mother care' to prevent neonatal deaths due to preterm birth complications. *International Journal of Epidemiology*; 39: i144-i154. Doi: 10.1093/ije/dyq031.
5. Nyqvist, KH, and an Expert Group of the International Network on Kangaroo Mother Care (2010). State of the art and recommendations Kangaroo mother care: application in a high-tech environment. *Acta Paediatrica: Nurturing the Child*, doi: 10.1111/j.1651-2227.2010.01794.x.
6. Nyqvist, KH., and Members of an Expert Group of the International Network on Kangaroo Mother Care (2010). Towards universal Kangaroo Mother Care: recommendations and report from the First European conference and Seventh International Workshop on Kangaroo Mother Care. *Acta Paediatrica: Nurturing the Child*, doi: 10.1111/j.1651-2227.2010.01787.x.

RESULTS OF KMC INTERVENTION

Mortality: 51% decrease in neonatal deaths who weighed less than 2000g at birth³

Morbidity: Reduction of occurrence infection and hypothermia at discharge and upper respiratory tract infection at 6 months follow up¹

Parental Involvement: Home environment after discharge of KMC families is more optimal than that of conventional families⁴

Maternal Health: Increased competency of care needs, increased confidence in their role and reduction of postpartum depression and hemorrhage^{2,3,6,7}

Growth: Increases weight, length and head circumference measurements during neonatal period⁷

Breastfeeding: Babies have a better sucking reflex, breastfeed more exclusively and improved growth and neurological development^{2,3,7}

Finances: KMC decreases preterm neonatal care costs by 50%¹

Future Behavioral Effects: KMC infants scored better on the Mental Developmental Index and Psychomotor Development Index of the Bayley Scales of Infant Development at 6 and 12 months²



SYNTHESIS OF EVIDENCE

- Overall, KMC produced benefits among all concepts researched.
- Implementation setbacks: Time commitment of family and encouragement and support from nurses

EVIDENCE-BASED PRACTICE RECOMMENDATIONS

- Facilities should ensure nursing staff knowledge and encouragement to candidates of KMC⁷
- Nurses should work to offer a calming and welcoming environment for parents to provide care⁵
- Breastfeeding should be a main goal and nurses should be there to assist if needed⁵
- Parental education on proper technique and signs of distress to observe for⁵
- Based on these recommendations, Dayton Children's should keep their KMC policy as is but should increase patient awareness



LIMITATIONS

- Minor gaps were found in 5 of our articles
- None of the 8 articles used blind studies
- There were few articles on KMC published in the US

REFERENCES

7. Thukral, Anu, D. Chawla, R. Agarwal, A. Deorari, V. Paul (2008). Kangaroo Mother Care-an Alternative to Conventional Care. *Symposium on AIIMS Protocols in Neonatology-V*, Volume 75 (5):497-503.
8. http://ije.oxfordjournals.org/content/39/suppl_1/i144.long
9. <http://www.guardian.co.uk/society/2012/may/02/premature-baby-deaths-preventable-repor>
10. <http://olivermosesbook.blogspot.com/2012/06/kangaroo-care.html>