Kangaroo care and breastfeeding for babies in neonatal units and their parents

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Maternal and Child Health workstream: Glasgow workshop 2017
Evidence base for promoting breastfeeding in neonatal units
Kangaroo care and breastfeeding
Systematic review 2009

• Practices that increased breastfeeding in neonatal units
  – 48 studies

• Identified seven effective practices
  – none in routine care

• Kangaroo/skin-to-skin contact resulted in significant improvements in
  – breastfeeding, head circumference growth, oxygen saturation, hypothermia and serious morbidity at two and six months; no adverse effects

Renfrew et al 2009 HTA 13(40), 1-188
Twenty-year Follow-up of Kangaroo Mother Care Versus Traditional Care

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BACKGROUND AND OBJECTIVES: Kangaroo mother care (KMC) is a multifaceted intervention for preterm and low birth weight infants and their parents. Short- and mid-term benefits of KMC on survival, neurodevelopment, breastfeeding, and the quality of mother–infant bonding were documented in a randomized controlled trial (RCT) conducted in Colombia from 1993 to 1996. The aim of the present study was to evaluate the persistence of these results in young adulthood.

METHODS: From 2012 to 2014, a total of 494 (69%) of the 716 participants of the original RCT known to be alive were identified; 441 (62% of the participants in the original RCT) were re-enrolled, and results for the 264 participants weighing ≤1800 g at birth were analyzed. The KMC and control groups were compared for health status and neurologic, cognitive, and social functioning with the use of neuroimaging, neurophysiologic, and behavioral tests.

RESULTS: The effects of KMC at 1 year on IQ and home environment were still present 20 years later in the most fragile individuals, and KMC parents were more protective and nurturing, reflected by reduced school absenteeism and reduced hyperactivity, aggressiveness, externalization, and socio-deviant conduct of young adults. Neuroimaging showed larger volume of the left caudate nucleus in the KMC group.
Photo thanks to Magnetofilms.com and Y&H HIEC
Courtesy of Liz Jones, North Staffs NHS Trust, England
Courtesy of N Wight MD, IBCLC, Sharp Mary Birch Hospital for Women & Children California
To change from one system to another, evidence of effectiveness is essential, but not sufficient – need to create safe, sustained, change

Photos thanks to Magnetofilms.com and Y&H HIEC
Evidence of change

• 20% increase in kangaroo care across the region

• 800 additional babies and families receiving kangaroo care over the project’s lifetime

• If this increase maintained, 800-1,500 additional babies per year will benefit from kangaroo care

• 20% increase in babies receiving breastmilk at discharge from neonatal units in the Yorkshire Network
  • in one large teaching hospital over 70% of babies receiving breastmilk at discharge

Evidence-based change: saving resources

- Changes generated between
  - £2 of benefit for every £1 invested (minimum cost assumptions) and
  - £7 of benefit for every £1 invested (maximum cost assumptions)

- From reduced length of stay, reduction in infections and serious illness

Why is change hard?
Responses from Y&H HIEC

• lack of a strong unit culture that did not promote or support evidence-based change
• lack of leadership at senior levels
• lack of multidisciplinary education and training
• lack of engagement of women themselves in developing policies and practice
• and broader societal attitudes and expectations

Y&H HIEC project Yorkshire and North Trent 2011
Lessons learned

• Listen to the data
• Unique contexts and common experiences
• Collaborative working
• Engagement with parents
• Unexpected challenges and benefits
• Combination of clinical skills with improvement
• Motivation
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Thank you!

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