THE UNIVERSITY of York

DEPARTMENT OF
HEALTH SCIENCES

Promoting breastfeeding in neonatal units

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Background

- Breastfeeding/breastmilk feeding significantly improves mortality and morbidity, and associated health care outcomes
  - For preterm and low birthweight
  - Reduced NEC, invasive infection
  - Improved neuro-developmental outcomes

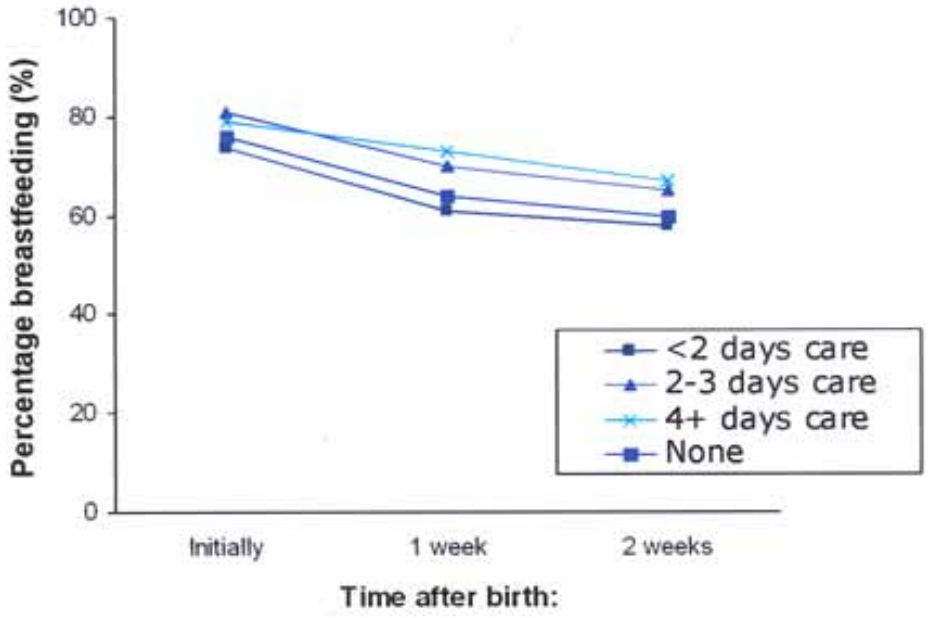
Background

- Earlier transition from parenteral feeding, reduced procedural pain
- Essential part of humane care: skin-to-skin contact, smell, comfort, reduced negative stimulation
- Maternal involvement enhanced

Background

- Potential to address inequalities in health
  - Disadvantaged groups over-represented in neonatal units
  - Breastfeeding rates already low in those groups
  - Increasing breastfeeding/breastmilk feeding will have direct health impact on those most likely to have worst health outcomes

Figure 4.1: Incidence of breastfeeding at birth, one week, and two weeks by whether and how long baby received special care (United Kingdom, 2005)



Base:All Stage 1 mothers

Aim of the study

- To evaluate interventions that promote or inhibit breastfeeding or feeding with breastmilk for infants admitted to neonatal units
  - Clinical, public health and health promotion interventions
  - Concurrent economic analysis
  - Evidence gaps and research agenda identified

Funding support

- Funded by NIHR HealthTechnology Assessment programme

- This presentation does not represent their views

- Full report published 2009

www.ncchta.org

Research team

- Mother and Infant Research Unit
  - Lisa Dyson
  - Sarah King
  - Felicia McCormick
  - Mary Renfrew
- Centre for Reviews and Dissemination
  - Dawn Craig
  - Kate Misso
  - Stephen Rice
- St George's Hospital Medical School
  - Tony Williams
- University of Plymouth
  - Elizabeth Stenhouse

Research team

- Additional input and scrutiny from
  - Advisory Group: academics, health professionals, voluntary sector, UK and international: Chair, Rosie Dodds, NCT
  - Expert input: from units where breastfeeding/breastmilk feeding rates very high: UK, US, Sweden
  - Peer review: internal and external

Methods

- Systematic review, in accordance with CRD guidelines
- Concurrent decision analysis with development of economic model

Methods

- Assessment of practice in units where rates high to inform analysis of findings
- UK, US, Sweden

Findings: overview

- 48 studies
- 1984-2007
- 17 countries - 6 industrialised, 8 UK
- 31 (65%) RCTs
- 7 good quality, 28 moderate quality
- Heterogenous in design, intervention, participants and outcomes
- ‘Standard care’ usually involved limited contact and limited breastfeeding/breastmilk feeding

Findings - overview

- Most studies examined clinically stable babies
- Most examined only one intervention, though interventions interact
- Very few reported psycho-social, economic, or health/wellbeing outcomes for babies or mothers
- Some did include multiple births, very few results reported

Findings - overview

- Effective and cost effective interventions identified – eg
  - Kangaroo skin to skin care
  - Enhanced staff contact, staff training
  - Peer support
  - Help with expression, double pumping

- None in routine use in UK units

Framework for recommendations

- Ottawa Charter for Health Promotion - framework for recommendations and future research agenda
  - Public policy and public health
  - Supportive environments
  - Community action
  - Development of personal and professional skills
  - Reorientation of health services

Implications: Ottawa Charter framework

- Public health and public policy
  - No studies identified
  - This group should be overtly included in policy targets
  - Policy issues should be addressed, eg employment, financial protection
  - Staffing levels urgent priority
  - Facilities should be available for safe transport, storage, feeding of breastmilk
  - Improved monitoring
    - breastfeeding rates - definitions needed
    - health, educational, social and cost outcomes

Implications: Ottawa Charter framework

- Supportive environments
  - Views of parents should be fundamental to organisation of care
  - Avoid non-essential separation of mothers and infants, engage mothers at every opportunity
  - Implement kangaroo care, education and support from skilled staff
  - Support expression in clean, comfortable, private facilities, near the baby
  - Support for mothers to visit frequently: financial and practical
  - Changes to built environment needed: consider in design of new units

Implications: Ottawa Charter framework

- Community action
  - Hospital and community peer support for all mothers
  - With suitable remuneration and training
  - And special consideration of the complex physical and social needs of mothers

Implications: Ottawa Charter framework

- Development of personal and professional skills
  - Trained professional support for all mothers
  - Especially those who are ill
  - Double pumping with suitable pump should be available, plus range of pumps/hand expression to suit mothers' individual needs
  - Cup feeding can be used for clinically stable infants, but only where staff are trained and mothers wish to use it
  - Inadequate evidence for use of caregivers' fingers

Implications: Ottawa Charter framework

- Reorientation of health services
  - Strong and informed leadership
  - Planned change to engage all professional groups
  - Evidence-based policy essential
  - Staff training in essential skills
  - Communication between staff groups should be improved
  - BFI implementation for maternity services

Research agenda

- Improve methodological quality
- Health outcomes
- Parents' views and experiences
- Peer support
- Staff training and behaviour change
- Kangaroo care esp for less clinically stable
- Initiating and sustaining milk production
- Interim feeding methods
- BFI neonatal standards?

Implications for midwives

- Support for mothers, especially those who are ill
- Close, ongoing contact essential
- Support skin to skin care
- Milk expression/feeding a priority
- Ongoing support after discharge – peer and professional
- Communication with neonatal units – joint protocols
- Leadership for change