

BREASTFEEDING SYNTHESIS

Research Gaps from Cochrane Reviews (Cochrane Library Issue 3, 2008)

As at 20 August 2008

The faces indicate the direction of findings in each review:

- ☺ **Likely to be effective**
- ☹ **Both benefits and risks**
- ❓ **Uncertain or limited effect**
- ☹ **Likely to be ineffective or potentially harmful**

Important research implications are more likely to arise from reviews with uncertain findings or where the benefits and risks are mixed

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INTERVENTIONS DURING PREGNANCY AND BIRTH

❓ **Antenatal breast examination for promoting breastfeeding (Lee 2008)**

No RCTs were identified for inclusion.

Last assessed as up-to-date: 30 March 2008

- Need to assess potential harms and benefits of antenatal breast examination.
- In particular, countries recommending routine antenatal breast examination need to conduct appropriate studies to justify a procedure that some women may find intrusive.
- Need to assess the other effects of antenatal breast examination, such as satisfaction with care and success of breastfeeding.
- Need to assess the effects of antenatal breast examination on the initiation of breastfeeding.

❓ **Antenatal breastfeeding education for increasing breastfeeding duration (Lumbiganon 2007)**

Cochrane protocol, Cochrane review in progress.

❓ **Individual or group antenatal education for childbirth or parenthood, or both (Gagnon 2007)**

None of the nine included trials reported outcomes addressing breastfeeding success.

Last assessed as up-to-date: 1 April 2006

- Need a large, well-designed clinical trial to evaluate the effect of individual or group antenatal education on breastfeeding success.

☺ **Interventions for promoting the initiation of breastfeeding (Dyson 2005)**

Breastfeeding education (either antenatal or postnatal or both) showed a significant effect on increasing initiation rates compared with routine care in low income women in the US.

Last assessed as up-to-date: 30 May 2006

- Need adequately powered further trials, carried out in diverse settings and fully describing the nature of the educational interventions.
- Need to compare interventions that combine education and support with those that offer education alone.

☺ **Home-like versus conventional institutional settings for birth (Hodnett 2005)**

Home-like birth settings are associated with increased breastfeeding initiation and duration .

Last assessed as up-to-date: 18 May 2004

- Future trials of alternative birth settings should seek participants' consent prior to randomization and use bias-free methods of random allocation.
- They need to address the potential confounding effects of differences in the extent of continuity of caregiver in the home-like versus conventional birth settings.
- Need trials of freestanding birth centres.
- Trials of all home-like settings should encourage high response rates to postal questionnaires, and analyse cost-effectiveness.
- Qualitative studies, examining what happens when women are transferred from home-like to conventional birth settings, would shed light on the impact of transfer on women, care providers, and decision-making processes regarding the need for intervention.

POSTNATAL INTERVENTIONS FOR BREASTFEEDING RATES AND/OR DURATION

❓ ***Avoidance of bottles during the establishment of breastfeeds in preterm infants (Collins 2005)***

Cochrane protocol, Cochrane review in progress.

❓ ***Early postnatal discharge from hospital for healthy mothers and term infants (Brown 2002)***

Early discharge was not shown to impact on breastfeeding.

Last assessed as up-to-date: May 2002

- Need large well-designed trials using a standard definition of 'early discharge.'
- Need to establish role of co-interventions (such as antenatal preparation or not).

☺ **Interventions for promoting the initiation of breastfeeding (Dyson 2005)**

Breastfeeding education (either antenatal or postnatal or both) showed a significant effect on increasing initiation rates compared with routine care in low-income women in the US.

Last assessed as up-to-date: 30 May 2006

- Need adequately powered further trials, carried out in diverse settings and fully describing the nature of the educational interventions.
- Need to compare interventions that combine education and support with those that offer education alone.
- Need further research into early mother-infant contact followed by rooming-in until hospital discharge.

❓ **Separate care for new mother and infant versus rooming-in for increasing the duration of breastfeeding (Sharifah 2007)**

Cochrane protocol, Cochrane review in progress.

☺ **Lay health workers in primary and community health care (Lewin 2005)**

Lay health worker programs appear promising in promoting breastfeeding.

Last assessed as up-to-date: August 2001

- Trials need to specify a primary outcome; consider whether the measurement of large number of related outcomes is useful; describe more thoroughly the training and support strategies used, any co-interventions and health care organisation and system issues; and assess possible harms of the interventions.
- Need to explore the transferability to other settings and consumer groups and the effectiveness of different approaches to training, and delivery of lay health worker-led services.
- Need to involve consumers in the planning and support of studies of the effectiveness of lay health worker programs and to assess the effects of consumer involvement.
- Need economic studies to establish the cost-effectiveness of different lay health worker interventions.
- Urgently need a coherent typology of lay health worker interventions to be developed.
- Need to evaluate the effectiveness of lay health workers compared with professional health care providers in delivering interventions in the fields of health education, promotion and the management of disease.

INTERVENTIONS FOR WOMEN WHO ARE BREASTFEEDING

❓ **Antibiotics for mastitis in breastfeeding women (Ng 2005)**

Cochrane protocol, Cochrane review in progress.

❓ **Interventions for preventing mastitis after childbirth (Crepinsek 2008)**

Cochrane protocol, Cochrane review in progress.

? Interventions in the workplace to support breastfeeding for women in employment (Abdulwadud 2007)

No RCTs were identified.

Last assessed as up-to-date: 10 November 2006

- Need RCTs to establish the benefits of various types of workplace interventions to support, encourage and promote breastfeeding among working mothers.

? Medications for increasing milk supply in mothers expressing breastmilk for their hospitalised infants (Donovan 2005)

Cochrane protocol, Cochrane review in progress.

? Methods of milk expression for lactating women (Becker 2006)

Cochrane protocol, Cochrane review in progress.

☺ Support for breastfeeding mothers (Britton 2007)

All forms of extra support increased duration of 'any breastfeeding,' and especially 'exclusive breastfeeding.' Lay and professional support significantly extended duration of any breastfeeding.

Last assessed as up-to-date: 30 January 2006

- Need further RCTs to assess effectiveness of lay, professional and combined support in different settings that include outcomes assessing maternal satisfaction.
- Need to assess effectiveness of different training programmes for lay and professional caregivers.
- Need to determine cost-effectiveness of various support strategies.
- Need to identify specific components of support strategies that are effective/ineffective.
- Need to determine optimal timing and delivery of supportive interventions.

? Treatments for breast engorgement during lactation (Mangesi 2008)

Cochrane protocol, Cochrane review in progress.

? Treatments for suppression of lactation (Oladapo 2006)

Cochrane protocol, Cochrane review in progress.

? Vitamin A supplementation for breastfeeding women (Oliveira 2006)

Cochrane protocol, Cochrane review in progress.

INTERVENTIONS FOR INFANTS BEING BREASTFED

? Early additional food and fluids for healthy breastfed full-term infants (Remington 2007)

Cochrane protocol, Cochrane review in progress.

☺ Optimal duration of exclusive breastfeeding (Kramer 2002)

Babies who are exclusively breastfed for six months experience less infectious morbidity with no growth deficits seen, compared with three to four months mixed breastfeeding.

Last assessed as up to date: 30 December 2006

- Need large randomised trials of exclusive breastfeeding for six months to exclude differences in risk of malnutrition in developing countries, and to confirm or undermine the findings on infectious morbidity.
- Cluster randomization by clinic or even community may be the preferred research design.
- Need to address impacts on child intelligence, neuromotor development, blood pressure, growth, and atopic disease and emotional development.
- Need to determine cost-effectiveness of exclusive breastfeeding.

☺ Early skin-to-skin contact for mothers and their healthy newborn infants (Moore 2007)

Skin-to-skin contact between mothers and babies immediately after birth is associated with more mothers breastfeeding and breastfeeding for longer.

- Need to describe method of skin-to-skin contact in detail in future trials.
- Need to standardise on ways of measuring breastfeeding success and duration.

❓ Kangaroo mother care to reduce morbidity and mortality in low birthweight infants (Conde-Agudelo 2003)

Kangaroo mother care was associated with increasing exclusive breastfeeding at discharge.

Last assessed as up-to-date: 31 December 2002

- Future studies need to address selection bias, attrition, completeness and length of follow-up, and bias in assessing outcomes.

❓ Pacifier use versus no pacifier use in breastfeeding term infants for increasing duration of breastfeeding (Sharifah 2008)

Cochrane protocol, Cochrane review in progress.

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