Effect of antenatal peer support on breastfeeding initiation: a systematic review
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CRD summary
This review concluded that universal antenatal peer support did not appear to improve rates of breastfeeding initiation. Targeted antenatal peer support may have been beneficial, but this effect may have been related to context. Any new peer-support programme should undergo concurrent high-quality evaluation. This review was generally well-conducted. These conclusions reflect the evidence presented and are likely to be reliable.

Authors' objectives
To assess the effectiveness of antenatal peer support on breastfeeding initiation.

Searching
MEDLINE, EMBASE, British Nursing Index, CINAHL, Current Controlled Trials and The Cochrane Library were searched from inception to 2008 with no language restrictions. Reference lists of retrieved articles were screened. An updated search was performed in MEDLINE in January 2009.

Study selection
Randomised controlled trials (RCTs) and quasi-randomised and cohort studies with concurrent control that evaluated peer-support interventions in the antenatal period for pregnant women were eligible for inclusion. Peer support was defined as support offered by women who had themselves breastfed, who were from the same socioeconomic status and locality as those being supported and who had received appropriate training. The review outcome was breastfeeding initiation (defined as any attempt to breastfeed).

The included studies evaluated either universal peer support (offered to all women) or targeted peer support (offered only to women who were considering breastfeeding). All control groups received routine maternity care. All included studies involved both antenatal and postnatal peer support in their interventions. The included participants were predominantly women with low-incomes. The method of support varied between studies and included one or more of telephone, clinic and home visits. Where reported, the number of contacts per woman ranged from one to three. The included studies were conducted in USA, Mexico and UK.

Two reviewers independently assessed studies for inclusion. Any disagreements were resolved by consulting another two reviewers.

Assessment of study quality
Study quality was assessed using an adapted tool of the risk in experimental and observational studies. The tool classified quality into high, medium or low for selection, performance, measurement and attrition bias on the basis of study design, execution and analysis. Criteria assessed included randomisation, allocation concealment, similarity of groups at baseline, similarity for cointerventions between groups, statistical adjustment made for any differences, length of follow-up, imputation for missing values, completeness of follow-up data and intention-to-treat analysis.

Two reviewers performed validity assessment.

Data extraction
Data were extracted on the rate of breastfeeding non-initiation to enable calculation of relative risks (RRs) with 95% confidence intervals (CIs).

Two reviewers performed data extraction.

Methods of synthesis
The studies were combined in a narrative synthesis. Meta-analysis was performed on studies that did not have a high risk of bias. Pooled relative risks with 95% CIs were calculated. Statistical heterogeneity was assessed using $X^2$ and $I^2$. For cluster trials, a design effect was computed from intraclass correlation coefficients and cluster-adjusted estimates. When intraclass correlation coefficients were not reported, the design effect was calculated using mean intraclass correlation coefficients from the trials.

**Results of the review**

Eleven studies were included in the review (n=5,445 participants): seven RCTs and four observational studies. Six RCTs were judged to be high quality. One RCT and all the observational studies were classified as medium to low quality.

**Universal peer support** (seven studies, n=4,416): When pooling high-quality RCTs, there was no significant difference in the rate of breastfeeding non-initiation between the antenatal peer support and control groups (RR 0.96, 95% CI 0.76 to 1.22; three RCTs). No significant heterogeneity was observed. Three observational studies showed that women in the intervention group were significantly more likely to initiate breastfeeding than the control group.

**Targeted peer support** (four studies, n=1,029): When pooling high-quality RCTs, targeted peer support was associated with a significant reduction in breastfeeding non-initiation (RR 0.64, 95% CI 0.41 to 0.99; three RCTs). Significant heterogeneity was found ($I^2=69.0\%$). One observational study showed a significantly higher rate of breastfeeding initiation with targeted peer support compared with the control group.

**Authors’ conclusions**

Universal antenatal peer support did not appear to improve rates of breastfeeding initiation. Targeted antenatal peer support may have been beneficial, but this effect may have been related to context. Any new peer-support programme should undergo concurrent high-quality evaluation.

**CRD commentary**

This review’s inclusion criteria were clear. Relevant databases were searched. Efforts were made to find published and unpublished studies and there were no language restrictions, which reduced the risks of publication and language biases. Sufficient attempts were made to minimise the errors and biases in the review process. Appropriate criteria were used to assess study quality. Most of the included studies relied on self-reporting data, which may have been subject to recall bias. Appropriate methods were used to synthesise the results. The synthesis appropriately took into account differences in the quality of included studies. Statistical heterogeneity was assessed.

This review was generally well conducted. The authors’ conclusions reflect the evidence presented and are likely to be reliable.

**Implications of the review for practice and research**

**Practice**: The authors did not state any implications for practice.

**Research**: The authors stated that future studies should evaluate the effectiveness of more intensive interventions and the combination of antenatal and immediate postpartum breastfeeding support.

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