Evidence assessment: Summary of a systematic review

Who is this summary for?
This evidence assessment is meant for clinicians, administrators of health facilities and decision makers.

Telephone support for women during pregnancy and the first six weeks after delivery

Key findings
- Telephone support may increase women’s overall satisfaction with their care during pregnancy and the after delivery.
- The use of telephone communication may increase the duration of breastfeeding.
- The babies whose mothers received support may be less likely to be admitted to a neonatal intensive care unit.

Background
Telephone communication is increasingly being accepted as a useful form of support for health care. There is some evidence that telephone support may be of benefit in specific areas of maternal care such as to support breastfeeding and for women at risk of depression. Many telephone-based interventions are currently being used in maternity care. It is of interest to examine which interventions may be of benefit, which are ineffective, and which may be harmful.

Question
What is the effect of telephone support during pregnancy and the first six weeks after delivery compared with routine care, on maternal and infant outcomes?

The use of telephone for women during pregnancy and postpartum in Cameroon: Telephones are not routinely used to support the provision of health care during pregnancy and after delivery. However, less than average satisfaction with care during pregnancy and after delivery suggest that there is room for improvement.
### Table 1: Summary of the systematic review

<table>
<thead>
<tr>
<th>What the review authors searched for</th>
<th>What the review authors found</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Studies</strong></td>
<td>Randomized controlled trials (RCTs) and cluster RCTs.</td>
</tr>
<tr>
<td><strong>Participants</strong></td>
<td>Pregnant women and postnatal women in the first six weeks after delivery.</td>
</tr>
<tr>
<td><strong>Interventions</strong></td>
<td>All interventions aimed at supporting women by using telephones, whether for general support/information or for a specific medical/social reason (e.g. diabetes, smoking). This includes studies where the intervention is introduced in pregnancy or in the first six weeks after delivery or both. Interventions may have been in any setting and delivered by healthcare staff, peer supporters or using automated messaging.</td>
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<tr>
<td><strong>Controls</strong></td>
<td>No controls specified</td>
</tr>
</tbody>
</table>
| **Outcomes** | **Primary outcomes**  
1. Maternal satisfaction with support during pregnancy and the first six months postpartum  
2. Maternal anxiety  
**Secondary outcomes**  
**Maternal outcomes**  
1. Mother-infant attachment  
2. General health  
3. Mortality and serious morbidity (e.g. perineal haematoma or deep surgical infection)  
4. Health service utilisation  
5. Postpartum depression  
6. Positive behavior change (e.g. smoking reduction)  
**Infant outcomes**  
1. Preterm birth/low birthweight  
2. Breastfeeding duration  
3. Infant developmental measures (physical and cognitive as)  
4. Neonatal/infant mortality  
5. Major neonatal/infant morbidity (e.g. prolonged admission to special care baby unit). | Four studies provided data on maternal satisfaction with support during pregnancy and the first six weeks postpartum. Four reported on maternal anxiety, two on health service utilization, two on postpartum depression, seven on smoking reduction. |

**Date of the most recent search:** 23 January 2013

**Limitations:** This is a good quality systematic review. Due to the wide variety of outcomes it was challenging to pool many of the included studies.

**Citation:** Lavender T, Richens Y, Milan SJ, Smyth RMD, Dowswell T. Telephone support for women during pregnancy and the first six weeks postpartum. Cochrane Database of Systematic Reviews 2013, Issue 7. Art. No.: CD009338. DOI: 10.1002/14651858.CD009338.pub2. No.: CD003543. DOI: 10.1002/14651858.CD003543.pub3.
### Summary of Findings

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Relative effect (95% CI)</th>
<th>No of participants (studies)</th>
<th>Quality of the evidence (GRADE)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal satisfaction with support during pregnancy and the first six months postpartum</td>
<td>1.16 (0.79 to 1.54)</td>
<td>132 (2 studies)</td>
<td>⊕⊕⊕⊕ Low</td>
<td>Most of the results of this review are derived from one or two studies and several of the studies had small sample sizes; the authors were unable to pool most of the data. The outcomes and the way they were reported was not consistent.</td>
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<tr>
<td>Maternal anxiety</td>
<td>-0.09 (0.29 to 0.11)</td>
<td>386 (2 studies)</td>
<td>⊕⊕⊕⊕ Low</td>
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<tr>
<td>General health</td>
<td>0.93 (0.72 to 1.21)</td>
<td>37 (1 study)</td>
<td>⊕⊕⊕⊕ Low</td>
<td></td>
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<tr>
<td>Health service utilisation</td>
<td>0.24 (-0.26 to 0.74)</td>
<td>563 (2 studies)</td>
<td>⊕⊕⊕⊕ Low</td>
<td></td>
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<tr>
<td>Positive behaviour change (smoking reduction)</td>
<td>1.12 (0.87 to 1.44)</td>
<td>1361 (4 studies)</td>
<td>⊕⊕⊕⊕ Low</td>
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<tr>
<td>Postpartum depression</td>
<td>0.65 (0.34 to 1.23)</td>
<td>612 (1 study)</td>
<td>⊕⊕⊕⊕ Low</td>
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<tr>
<td>Preterm birth/low birth weight</td>
<td>0.91 (0.77 to 1.08)</td>
<td>3992 (4 studies)</td>
<td>⊕⊕⊕⊕ Low</td>
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</table>

### Applicability

In this review 13 of the studies were conducted out in the USA, 5 in Canada, 2 in Australia, 2 in England, and 1 each in Thailand, New Zealand, Italy, Tanzania and Scotland. Even though only one of these studies was conducted in Africa, some of these interventions can easily be applied in low resource settings.

### Conclusions

Despite some encouraging findings, there is insufficient evidence to recommend routine telephone support for women accessing maternity services, as the evidence from included trials is neither strong nor consistent. Although benefits were found in terms of reduced depression scores, breastfeeding duration and increased overall satisfaction, the current trials do not provide strong enough evidence to warrant investment in resources.

### Prepared by


August 2013