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 thattelephone support may be of benefit in specific areas of maternal care such as to support breastfeeding and for women at risk ofdepression. Many telephone-based interventions are currently being used in maternity care. It is of interest to examinewhich 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 maternaland 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		
	What the review authors searched for	**What the review authors found**
Studies	Randomized controlled trials (RCTs) and cluster RCTs.	Twenty-nine trials met the inclusion criteria for the review.
Participants	Pregnant women and postnatal women in the first six weeks after delivery.	Thepregnant women or women in the early postpartumperiod (up to six weeks postpartum)
Interventions	All interventions aimed at supportingwomen by using telephones,whether for general support/information or for a specific medical/social reason (e.g. diabetes, smoking). This includes studieswhere the intervention is introduced in pregnancy or in the first sixweeks after delivery or both. Interventionsmay have been in any setting and delivered by healthcare staff,peer supporters or using automated messaging.	Nine of the trials were designed to support breastfeeding women.Six studies aimed to encourage women to quit smoking, or to preventsmoking relapse. Two trials focused specifically on women at high risk of postnataldepression. Two studies focused on women who were at high risk of pretermbirth and in both of these trialswomenreceived phone calls during pregnancy from trained staff.Six of the studies examined more general telephone support interventions.
Controls	No controls specified	No controls specified
Outcomes	**Primary outcomes** 1. Maternal satisfaction with support during pregnancy andthe 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. perinealhaematomaor deep surgical infection). 4. Health service utilisation5. 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 onmaternal satisfaction with support during pregnancy and thefirst six weeks post-partumfour reported on aternal anxiety, twoonhealth service utilization, twoonpostpartum 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

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

Applicability

In this review13 of the studies were conductedout 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.

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August 2013