

# Treatment

## Review: continuous caregiver support during labour has beneficial maternal and infant outcomes

Hodnett ED. *Caregiver support for women during childbirth*. *Cochrane Database Syst Rev* 2002;(1):CD000199 (latest version 21 Aug 2001).

**QUESTION:** In women in labour, does continuous support by health professionals or lay people have beneficial maternal and infant outcomes?

### Data sources

Studies were identified by using the search strategy developed for the Cochrane Pregnancy and Childbirth Group, which included searching Medline, the Cochrane CENTRAL and Controlled Trials Registers, conference proceedings, and handsearching 38 relevant journal titles.

### Study selection

Studies were selected if they were randomised controlled trials that compared continuous labour support by a professional (nurse or midwife) or lay person with usual care for women in labour in hospital delivery wards.

### Data extraction

Data were extracted on country in which the study was done, hospital policy concerning labour accompaniment, caregiver experience and qualifications, timing and duration of support, methodological quality, and outcomes. Outcomes included need for pain medication, medical interventions, type of delivery, Apgar score, breast feeding, postpartum depression, and length of labour.

### Main results

14 trials (5020 women) met the selection criteria. Continuous support reduced the need for pain medication during labour, operative vaginal delivery, caesarean delivery, and 5 minute Apgar scores <7 (table). Caregiver support also increased the likelihood of fully breast feeding 4–6 weeks after delivery (2 trials) and

showed more favourable maternal views of the childbirth experience (6 trials). Of 2 trials that assessed postpartum anxiety and self esteem, 1 trial showed better results with caregiver support and 1 trial showed no difference. Length of labour was slightly shorter in caregiver support groups (9 trials) (-0.32 h, 95% CI -0.54 to -0.09). When trials were grouped by whether hospitals allowed accompaniment by husbands, partners, or other family members during labour (7 trials) and those that allowed no additional support people (7 trials), the results were consistent.

### Conclusion

In women in labour, continuous support by nurses, midwives, or lay people has beneficial maternal and infant outcomes and has no associated risks.

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*Caregiver support v usual care for women in labour\**

Outcomes	Number of trials	Weighted event rates			
		Caregiver support	Usual care	RRR (95% CI)	NNT (CI)
Any intrapartum analgesia	12	45%	51%	13% (8 to 17)	15 (11 to 25)
Operative vaginal delivery	13	14%	17%	19% (8 to 28)	31 (19 to 77)
Caesarean delivery	14	11%	13%	20% (7 to 32)	38 (23 to 112)
Apgar score <7 at 5 minutes	7	1.1%	2.3%	50% (11 to 71)	84 (48 to 500)

\*Abbreviations defined in glossary; RRR, NNT, and CI calculated from data in article using a fixed effects model.

## COMMENTARY

The systematic review by Hodnett summarises the results of randomised controlled trials that evaluate support by midwives, nurses, or lay people for women in labour. The search for both published and unpublished studies was thorough, the trials were evaluated for methodological quality, and separate analyses were done to compare those hospitals that allowed support people such as husbands, partners, or other family members to accompany the woman during labour with those hospitals that did not allow additional support people.

A previous review found that provision of continuous professional support in labour reduced caesarean sections and operative vaginal deliveries, although the effect on caesarean sections was confined to those settings where non-professional companions were not normally present during labour.<sup>1</sup> Corbett and Callister asked women to rate nursing support behaviours during their labour and delivery, and found that the majority of behaviours considered most helpful were in the emotional support category, particularly in making the woman feel cared about as an individual, appearing calm and confident, and treating the woman with respect.<sup>2</sup>

Although the support interventions varied in the review by Hodnett, they were all provided by women who were experienced, either because they had given birth themselves or were trained as nurses, midwives, doulas, or childbirth educators. Given the benefits shown in this review, Hodnett suggests that efforts to facilitate provision of continuous support should be made and may include changes in the current work activities of midwives and nurses to enable them to have more time to provide support, continuing education sessions that teach the “art and science” of labour support, more flexible methods of staffing labour wards to better match staffing with patient numbers, and adoption of hospital policies that encourage the presence of experienced lay women. Support should include continuous presence, the provision of hands on comfort, and encouragement.

More research is needed to compare the effectiveness of lay people, such as doulas and female relatives, with hospital based professionals, such as nurses and midwives, to determine if labour support benefits the mother and newborn over the long term, and whether labour support is cost effective.

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1 Thornton JG, Lilford RJ. Active management of labour: current knowledge and research issues. *BMJ* 1994;309:366–9.

2 Corbett CA, Callister LC. Nursing support during labour. *Clin Nurs Res* 2000;9:70–83.