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[Intervention Review]

Continuous support for women during childbirth

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ABSTRACT

Background

Historically, women have generally been attended and supported by other women during labour. However, in hospitals worldwide, continuous support during labour has often become the exception rather than the routine.

Objectives

The primary objective was to assess the effects, on women and their babies, of continuous, one-to-one intrapartum support compared with usual care, in any setting. Secondary objectives were to determine whether the effects of continuous support are influenced by:

1. Routine practices and policies in the birth environment that may affect a woman's autonomy, freedom of movement and ability to cope with labour, including: policies about the presence of support people of the woman's own choosing; epidural analgesia; and continuous electronic fetal monitoring.

2. The provider's relationship to the woman and to the facility: staff member of the facility (and thus has additional loyalties or responsibilities); not a staff member and not part of the woman's social network (present solely for the purpose of providing continuous support, e.g. a doula); or a person chosen by the woman from family members and friends;

3. Timing of onset (early or later in labour);

4. Model of support (support provided only around the time of childbirth or extended to include support during the antenatal and postpartum periods);

5. Country income level (high-income compared to low- and middle-income).

Search methods

We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (31 October 2016), ClinicalTrials.gov, the WHO International Clinical Trials Registry Platform (ICTRP) (1 June 2017) and reference lists of retrieved studies.

Selection criteria

All published and unpublished randomised controlled trials, cluster-randomised trials comparing continuous support during labour with usual care. Quasi-randomised and cross-over designs were not eligible for inclusion.

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Data collection and analysis

Two review authors independently assessed trials for inclusion and risk of bias, extracted data and checked them for accuracy. We sought additional information from the trial authors. The quality of the evidence was assessed using the GRADE approach.

Main results

We included a total of 27 trials, and 26 trials involving 15,858 women provided usable outcome data for analysis. These trials were conducted in 17 different countries: 13 trials were conducted in high-income settings; 13 trials in middle-income settings; and no studies in low-income settings. Women allocated to continuous support were more likely to have a spontaneous vaginal birth (average RR 1.08, 95% confidence interval (CI) 1.04 to 1.12; 21 trials, 14,369 women; *low-quality evidence*) and less likely to report negative ratings of or feelings about their childbirth experience (average RR 0.69, 95% CI 0.59 to 0.79; 11 trials, 11,133 women; *low-quality evidence*) and to use any intrapartum analgesia (average RR 0.90, 95% CI 0.84 to 0.96; 15 trials, 12,433 women). In addition, their labours were shorter (MD -0.69 hours, 95% CI -1.04 to -0.34; 13 trials, 5429 women; *low-quality evidence*), they were less likely to have a caesarean birth (average RR 0.75, 95% CI 0.64 to 0.88; 24 trials, 15,347 women; *low-quality evidence*) or instrumental vaginal birth (RR 0.90, 95% CI 0.85 to 0.96; 19 trials, 14,118 women), regional analgesia (average RR 0.93, 95% CI 0.88 to 0.99; 9 trials, 11,444 women), or a baby with a low five-minute Apgar score (RR 0.62, 95% CI 0.46 to 0.85; 14 trials, 12,615 women). Data from two trials for postpartum depression were not combined due to differences in women, hospitals and care providers included; both trials found fewer women developed depressive symptomatology if they had been supported in birth, although this may have been a chance result in one of the studies (*low-quality evidence*). There was no apparent impact on other intrapartum interventions, maternal or neonatal complications, such as admission to special care nursery (average RR 0.97, 95% CI 0.76 to 1.25; 7 trials, 8897 women; *low-quality evidence*), and exclusive or any breastfeeding at any time point (average RR 1.05, 95% CI 0.96 to 1.16; 4 trials, 5584 women; *low-quality evidence*).

Subgroup analyses suggested that continuous support was most effective at reducing caesarean birth, when the provider was present in a doula role, and in settings in which epidural analgesia was not routinely available. Continuous labour support in settings where women were not permitted to have companions of their choosing with them in labour, was associated with greater likelihood of spontaneous vaginal birth and lower likelihood of a caesarean birth. Subgroup analysis of trials conducted in high-income compared with trials in middle-income countries suggests that continuous labour support offers similar benefits to women and babies for most outcomes, with the exception of caesarean birth, where studies from middle-income countries showed a larger reduction in caesarean birth. No conclusions could be drawn about low-income settings, electronic fetal monitoring, the timing of onset of continuous support or model of support.

Risk of bias varied in included studies: no study clearly blinded women and personnel; only one study sufficiently blinded outcome assessors. All other domains were of varying degrees of risk of bias. The quality of evidence was downgraded for lack of blinding in studies and other limitations in study designs, inconsistency, or imprecision of effect estimates.

Authors' conclusions

Continuous support during labour may improve outcomes for women and infants, including increased spontaneous vaginal birth, shorter duration of labour, and decreased caesarean birth, instrumental vaginal birth, use of any analgesia, use of regional analgesia, low fiveminute Apgar score and negative feelings about childbirth experiences. We found no evidence of harms of continuous labour support. Subgroup analyses should be interpreted with caution, and considered as exploratory and hypothesis-generating, but evidence suggests continuous support with certain provider characteristics, in settings where epidural analgesia was not routinely available, in settings where women were not permitted to have companions of their choosing in labour, and in middle-income country settings, may have a favourable impact on outcomes such as caesarean birth. Future research on continuous support during labour could focus on longer-term outcomes (breastfeeding, mother-infant interactions, postpartum depression, self-esteem, difficulty mothering) and include more woman-centred outcomes in low-income settings.

PLAIN LANGUAGE SUMMARY

Continuous support for women during childbirth

What is the issue?

In the past, women have been cared for and supported by other women during labour and birth, and have had someone with them throughout, which we call 'continuous support'. However, in many countries more women are giving birth in hospital rather than at home. This has meant continuous support during labour has become the exception rather than the norm. The aim of this Cochrane Review was to understand the effect of continuous support on a woman during labour and childbirth, and on her baby. We collected and analysed all relevant studies to answer this question (search date: October 2016).

Why is this important?

Research shows that women value and benefit from the presence of a support person during labour and childbirth. This support may include emotional support (continuous presence, reassurance and praise) and information about labour progress. It may also include advice about coping techniques, comfort measures (comforting touch, massage, warm baths/showers, encouraging mobility, promoting

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adequate fluid intake and output) and speaking up when needed on behalf of the woman. Lack of continuous support during childbirth has led to concerns that the experience of labour and birth may have become dehumanised.

Modern obstetric care frequently means women are required to experience institutional routines. These may have adverse effects on the quality, outcomes and experience of care during labour and childbirth. Supportive care during labour may enhance physiological labour processes, as well as women's feelings of control and confidence in their own strength and ability to give birth. This may reduce the need for obstetric intervention and also improve women's experiences.

What evidence did we find?

We found 26 studies that provided data from 17 countries, involving more than 15,000 women in a wide range of settings and circumstances. The continuous support was provided either by hospital staff (such as nurses or midwives), or women who were not hospital employees and had no personal relationship to the labouring woman (such as doulas or women who were provided with a modest amount of guidance on providing support). In other cases, the support came from companions of the woman's choice from her own network (such as her partner, mother, or friend).

Women who received continuous labour support may be more likely to give birth 'spontaneously', i.e. give birth vaginally with neither ventouse nor forceps nor caesarean. In addition, women may be less likely to use pain medications or to have a caesarean birth, and may be more likely to be satisfied and have shorter labours. Postpartum depression could be lower in women who were supported in labour, but we cannot be sure of this due to the studies being difficult to compare (they were in different settings, with different people giving support). The babies of women who received continuous support may be less likely to have low five-minute Apgar scores (the score used when babies' health and well-being are assessed at birth and shortly afterwards). We did not find any difference in the numbers of babies admitted to special care, and there was no difference found in whether the babies were breastfed at age eight weeks. No adverse effects of support were identified. Overall, the quality of the evidence was all low due to limitations in study design and differences between studies.

What does this mean?

Continuous support in labour may improve a number of outcomes for both mother and baby, and no adverse outcomes have been identified. Continuous support from a person who is present solely to provide support, is not a member of the woman's own network, is experienced in providing labour support, and has at least a modest amount of training (such as a doula), appears beneficial. In comparison with having no companion during labour, support from a chosen family member or friend appears to increase women's satisfaction with their experience. Future research should explore how continuous support can be best provided in different contexts.