

New Cochrane Review on Effects of Continuous Labor Support

A new systematic review of the effects of continuous labor support was published in Issue 3, 2003 of *The Cochrane Library*. As the Maternity Center Association (MCA) is a partial supporter of this work, the [review is available here](#), in full and without charge (click for a PDF). This page provides a brief overview.

Background to this systematic review

This new review is descended from the first systematic review of controlled trial research of effects of labor support, which appeared in *Effective Care in Pregnancy and Childbirth* (1989). The current version replaces the Cochrane Review that Ellen Hodnett kept up-to-date from 1995 through 2003: "Caregiver Support for Women During Childbirth." That review contributed to the development of policy statements and guidelines, legislation, and programs promoting continuous labor support in various countries throughout the world.

What's new?

The new review adheres to established Cochrane Collaboration procedures for limiting bias, including a thorough strategy for identifying relevant studies, elimination of relevant studies that are not methodologically adequate, and meta-analytic summary of remaining "included studies," when appropriate. The current version differs in several ways from the one it replaces:

- **new team:** joining Dr. Hodnett, the lead reviewer, are co-authors bringing perspectives on statistics/methodology (Simon Gates), conditions in resource-constrained nations (Justus Hofmeyr), and consumer concerns (Carol Sakala, MCA's Director of Programs)
- **new title:** "Continuous Support for Women During Childbirth"
- **new protocol:** the team began by developing a detailed formal plan specifying the criteria and procedures they would follow to prepare the new review
- **new randomized controlled trials (RCTs):** two new large RCTs were incorporated; the new review summarizes experiences of nearly 13,000 women who participated in 15 trials that took place in 11 countries
- **expanded background and discussion sections:** new topics include explanations for effect of continuous labor support, growth of availability and use of doulas or trained labor support companions, and questions about effects of different types of providers of labor support
- **new subgroup analyses:** the team included several new subgroup analyses comparing effects of continuous support under various conditions.

Research questions

The **main objective** ("main comparison") was to assess the effects, on mothers and their babies, of continuous one-to-one support during labor compared with usual care, in any setting.

Subgroup analyses were planned to compare effects of continuous labor support with different

- **policies about companions of the women's own choice:** whether the study did or did not take place in a setting that allowed women to bring partners and other companions of choice
- **policies about epidural analgesia:** whether epidural was or was not routinely available
- **policies about continuous electronic fetal monitoring (EFM):** whether continuous EFM was or was not routine
- **types of caregiver:** whether the caregiver was a member of the hospital staff (e.g., nurse, midwife or student midwife) or someone from outside
- **timing in the onset of continuous support:** whether the support did or did not begin before active labor.

Outcomes of interest

The review identifies 30 outcomes of interest for the main comparison:

- **labor events:** e.g., artificial oxytocin, epidural analgesia
- **birth events:** e.g., cesarean birth, episiotomy
- **newborn events:** e.g., low 5-minute Apgar score, admission to special care nursery
- **immediate maternal psychological outcomes:** e.g., anxiety during labor, negative rating of experience
- **longer-term maternal outcomes:** e.g., postpartum depression, difficulty mothering.

Pre-determined outcomes for subgroup analyses were: analgesia/anesthesia, way of giving birth (spontaneous, with vacuum extraction or forceps, cesarean), low 5-minute Apgar scores, dissatisfaction or negative view of childbirth experience, and postpartum depression.

Results of main comparison

Numerous graphs available within the full "[Continuous Support...](#)" review (PDF) compare all data that were available from all included studies for the specified outcomes of interest. Considering outcomes reported in at least 4 studies involving at least 1,000 women, **women who received continuous support were less likely than women who did not to:**

- **have regional analgesia**
- **have any analgesia/anesthesia**
- **give birth with vacuum extraction or forceps**
- **give birth by cesarean**
- **report dissatisfaction or a negative rating of their experience.**

Women receiving continuous support were **more likely** than those did not **to give birth spontaneously** — with neither cesarean nor vacuum extraction nor forceps.

Again, considering outcomes reported in 4 or more studies involving at least 1,000 women, **continuous support was neither associated with shorter length of labor nor with decreased likelihood of:**

- artificial oxytocin during labor
- low 5-minute Apgar scores
- newborn admission to special care nursery
- postpartum reports of severe labor pain.

Results of subgroup analyses

Data were not available to compare subgroups with respect to postpartum depression. Here are other subgroup analysis results:

- **policies about companions of the women's own choice:** continuous support appeared to have a stronger impact on analgesia/anesthesia use, spontaneous birth, and cesarean birth in settings in which other support was not permitted; the subgroups were not significantly different with respect to instrumental birth, low 5-minute Apgar scores, and dissatisfaction
- **policies about epidural analgesia:** continuous support appeared to have a stronger impact on use of analgesia/anesthesia, spontaneous birth, and cesarean birth when epidural analgesia was not routinely available; the subgroups were not significantly different with respect to instrumental birth, low 5-minute Apgar scores, and dissatisfaction
- **policies about continuous EFM:** continuous support appeared to have a stronger impact on spontaneous birth when EFM was not routine; the subgroups were not

- significantly different with respect to analgesia/anesthesia, instrumental birth, cesarean birth, low 5-minute Apgar scores, and dissatisfaction
- **type of caregiver:** continuous support appeared to have a stronger impact on anesthesia/analgesia, spontaneous birth, and instrumental birth when the caregiver was not a hospital employee; it only had an impact on cesarean birth when the caregiver was not a hospital employee; the subgroups were not significantly different with respect to dissatisfaction
 - **timing in the onset of continuous support:** continuous support appeared to have a stronger impact on analgesia/anesthesia, spontaneous birth, and cesarean birth when it began before active labor; the subgroups were not significantly different with respect to instrumental birth and dissatisfaction.

Reviewers' conclusions: implications for practice, in part

"Continuous support during labour should be the norm, rather than the exception. All women should be allowed and encouraged to have support people with them continuously during labour.

In general, continuous support from a caregiver during labour appears to confer the greatest benefits when the provider is not an employee of the institution, when epidural analgesia is not routinely used, and when support begins in early labour."

Reviewers' conclusions: implications for research

The following **settings** warrant further research:

- resource-constrained countries.

The following **outcomes** warrant further research:

- effects on mothers' and babies' health and well-being in the postpartum period
- economic analysis of relative costs and benefits.

The following **models** warrant further research:

- North American doula model, with relationship established during pregnancy, support during labor, and support in the postpartum period
- support by a female family member
- support by the husband/partner.

Citation for this review

Hodnett ED, Gates S, Hofmeyr GJ, Sakala C. Continuous support for women during childbirth (Cochrane Review). In: *The Cochrane Library*, Issue 3, 2003. Oxford: Update Software.

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