

Continuous Support for Women During Childbirth: 2017 Cochrane Review Update

Key Takeaways

JULY 2017

A popular Cochrane [systematic review](#) that summarizes the best available studies about the effects of continuous support on laboring women and their newborns has just been updated.¹ This document will help policymakers, clinicians, hospitals, health plans and systems, journalists, doulas, educators and others with an interest in labor support understand the review's key findings. Read the 2017 Cochrane review, *Continuous Support for Women During Childbirth*, at https://www.researchgate.net/publication/318258538_Continuous_support_for_women_during_childbirth

Why are systematic reviews, and especially Cochrane reviews, rigorous and trustworthy?

When researchers prepare a systematic review, they seek data from all available better-quality studies on a given question. Whenever feasible, they use special statistical techniques to pool related data and assess the weight of better quality studies. The [National Academy of Medicine](#) (formerly the Institute of Medicine) has called this powerful approach the best way of “finding what works in health care.” Cochrane, an international network that creates and makes available systematic reviews, is recognized as a gold standard for trusted, high-quality health care information. Reviews from the Cochrane Pregnancy and Childbirth Group incorporate only data from randomized controlled trials, so we can be reasonably certain that the intervention itself is responsible for any measured differences in outcomes. What's more, Cochrane reviews benefit from extensive support (e.g., searches, software, standards) and undergo extensive peer and consumer review.

Why do we need this updated systematic review about continuous labor support?

This systematic review has been periodically updated since 1989 to add newer studies and reflect the increasingly rigorous Cochrane standards. Keeping it up-to-date ensures it can be used to give best current knowledge to interested parties and inform guidelines, policies and programs.

What's new in this version of the review?

The 2017 update includes the 27 available studies that met the inclusion criteria. Across those studies, 15,858 women contributed data. This update incorporates four new studies (10 reports) and four reports of previously included studies. Studies were carried out in 17 middle- and high-income countries.

The authors added six new outcomes related to women’s experience of care, bringing the total outcomes investigated to 23. The quality of evidence was also scored according to the GRADE approach for the first time ([see below](#)).

How is “continuous labor support” defined in this review?

The review update includes studies where any person provided support continuously during labor (at a minimum during “active labor” and often longer) and birth. The support might include help with comfort measures, emotional support, information and communicating the woman’s wishes to others. The support person could have a health care position (such as doula or nurse) or none (for example, a friend of the laboring woman), and any amount of training for the support role or none.

What is the most important takeaway from the review?

Continuous labor support appears to offer impressive benefits and no harms to women and newborns, especially when provided by someone in a [doula role](#). This appears to be an important care practice for those who wish to improve the quality, outcomes and experience of maternity care.

What are the benefits of continuous labor support?

Per the 2017 update, across all relevant studies, women with continuous labor support seemed *more* likely to have had:

- ▶ Spontaneous vaginal births (with neither vacuum extraction nor forceps)
- ▶ Shorter labors

Women with continuous labor support seemed *less* likely to have had:

- ▶ A negative birth experience
- ▶ Any pain medication while giving birth
- ▶ Regional pain medication (such as epidural or spinal)
- ▶ An instrumental vaginal birth (with vacuum extraction or forceps)
- ▶ A cesarean birth
- ▶ A low 5-minute Apgar score (rating of the baby’s status shortly after birth)

Each of these outcomes was statistically more likely for women with continuous labor support versus none.

What outcomes may not be affected by continuous labor support?

The review update found that continuous labor support overall did not seem to make a difference to the following outcomes:

- ▶ Newborn admission to special care nursery
- ▶ Any or exclusive breastfeeding
- ▶ Serious perineal tears
- ▶ Postpartum report of severe labor pain
- ▶ Use of synthetic oxytocin (pitocin or “pit” to speed labor)

For the other outcomes examined in the review, there were too few studies and women to draw conclusions.

Does continuous labor support have any known harms?

Continuous labor support is a rare example of a health care practice found to have many benefits and no known harms! The review update found no evidence of harm in any of the outcomes studied.

Does continuous labor support have different effects when provided by different types of people?

The authors broke the data down and looked at whether the effects of continuous labor support might differ when provided by people in different roles – doula role versus hospital staff versus members of the woman’s social network. “Doula role” means someone who is neither a member of the hospital staff nor a member of the woman’s social network, and is present only to provide labor support. For two of the six key outcomes with data to look at this question, there were significant differences among different types of labor support providers:

- ▶ Looking at all studies with data on cesarean birth, continuous labor support seemed to *decrease* a woman’s likelihood of having a cesarean birth. However, when sorting the studies by type of provider, only support from someone in a doula role seemed to reduce risk for cesarean birth. Support from hospital staff or a member of the woman’s social network did not clearly affect the woman’s chance of having a cesarean birth.
- ▶ Looking at all studies with data on a woman’s likelihood of having a negative birth experience, continuous labor support seemed to *decrease* a woman’s likelihood of having a negative birth experience. Upon further analysis, however, only support from someone in a doula role or a member of the woman’s social network seemed to have this effect. Support from hospital staff did not appear to affect her chance of a negative birth experience.

Among the three types of providers of continuous support, someone in a doula role appears to offer the greatest set of benefits to laboring women. In comparison with women receiving no continuous labor support, women with doula role support were an impressive:

- ▶ 39 percent less likely to have a cesarean birth
- ▶ 35 percent less likely to have a negative birth experience
- ▶ 15 percent more likely to have a spontaneous vaginal birth

The review also found that the doula role was associated with notable but non-significant (not clearly different from women with no continuous support) reduced use of synthetic oxytocin, any pain medication while giving birth, and newborn admission to a special care nursery. More studies are needed to help understand whether these might be true effects.

In comparison with women with no labor support, the only, though quite important, clearly measured benefit of support provided by a member of the woman’s social network was reduced likelihood of negative ratings of the childbirth experience. (Of course, there are valuable non-measured benefits, including sharing this momentous life experience!)

Does continuous labor support have different effects in different clinical contexts?

The authors of the review update also broke the data down and looked at whether hospital unit policies appeared to impact the effect of continuous support.

- ▶ The authors explored whether the availability of epidurals might make a difference in effects of labor support. They found that in settings where epidurals were not typically available, women with support were more likely to experience several benefits: reduced cesarean birth, reduced newborn admission to special care nursery, and reduced negative rating of the childbirth experience.
- ▶ The researchers explored whether use of electronic fetal monitoring (EFM) might make a difference in effects of labor support. They found that there were no clear differences in outcome between settings where EFM was and was not routinely used. (Unfortunately, authors were unable to learn about EFM policies for several included studies, which limits understanding about whether EFM might impact effectiveness of labor support.)
- ▶ The authors explored whether policies permitting companions of the woman's choice made a difference in effects of labor support. They found that in settings where companions typically were not permitted women with support were more likely to experience some benefits: more spontaneous vaginal birth, less cesarean birth and possibly less use of pain medications while giving birth.

These results suggest that there may be limits to the ability of continuous support to counterbalance effects of more medicalized “high-tech” care. And continuous support may be especially valuable in settings where it reduces the isolation of laboring without companions.

Does continuous labor support have different effects in countries with different income levels?

The review compared studies in high- and middle-income countries using World Bank criteria. (No included studies were carried out in low-income countries.) Women in middle-income countries appear to be more likely to experience cesarean reduction with continuous labor support than women in high-income countries. For other outcomes examined, there were no clear differences in effects of support between the two country income levels. Both income levels appeared to benefit from support through greater likelihood of spontaneous vaginal birth and lower likelihood of negative ratings of birth experience. Both appeared to experience reduced use of any labor pain medication with support, though results are unclear. Continuous support did not seem to impact use of synthetic oxytocin and newborn admission to a special care nursery in either income level.

What is still unknown about the effects of continuous labor support?

Despite the clear evidence of many benefits and no harms found in this review, many important questions about possible effects of continuous labor support cannot be answered at present. The authors identify the following open questions and welcome studies to answer them:

- ▶ Does training or do different types of training impact the effectiveness of continuous labor support?
- ▶ How do effects of continuous labor support compare with the effects of receiving support before, during and after labor? (The new update includes the first eligible study of the “extended” model with pregnancy, labor and postpartum support.)

- ▶ Does continuous labor support affect longer-term outcomes such as postpartum depression or women’s mothering experiences? (Follow-up after hospital discharge has been limited.)
- ▶ Do effects of continuous labor support differ between women giving birth for the first time and women who have given birth previously?
- ▶ Do effects of continuous labor support differ between low-risk women and those with pregnancy complications?

What is the GRADE approach and how do I interpret the low “quality of evidence” ratings in this report?

For the first time, this review update included GRADE ratings, which are now a part of Cochrane reviews. The [GRADE approach](#) is a respected international system for assessing the quality of evidence for specific outcomes. The GRADE rating system assigns a score of high, moderate, low, or very low. Seven of the review outcomes (all five “primary” outcomes and two others) were scored on the GRADE scale, and each was rated low. The inability to blind study participants and their caregivers to whether the woman received usual care or labor support, which is unavoidable with this intervention, resulted in one grade level loss. Each outcome was downgraded another level for other reasons, such as limitations in the study designs or inconsistent effect sizes. If you’re familiar with the high level of trustworthiness of Cochrane reviews, these low ratings may come as a surprise. It’s worth remembering that this review update synthesizes the highest quality evidence currently available, and that its findings are consistent in the direction of effect, as well as with hypotheses about how and why continuous labor support has the effects it does, discussed in the Background section of the review.

Have new Cochrane review standards resulted in any other notable changes to the 2017 version of this review?

Past versions of this review similarly found that continuous labor support increases a woman’s likelihood of experiencing notable clinical benefits and has no identified harms. As a result, authors recommended in the review text providing all laboring women with access to continuous support. New Cochrane review standards prohibit authors from making practice recommendations. Those familiar with previous versions of this review may notice that prior practice recommendations have thus been removed in the 2017 update.

Are resources available to help pregnant women understand benefits of labor support, including results of the new review?

Yes, the [labor support section](#) at ChildbirthConnection.org has been updated to reflect the results of the 2017 Cochrane review update.

¹ Bohren, M.A., Hofmeyr, G.J., Sakala, C., Fukuzawa, R.K., & Cuthbert, A. Continuous support for women during childbirth. *Cochrane Database of Systematic Reviews*, 2017(7), 1-169.

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