

TOOLS FOR SUPPORTING NATURAL CHILDBIRTH

This Whole Health tool includes information to support a Whole Health approach to childbirth. Research is reviewed regarding continuous support during labor, high-touch, and noninvasive measures, and pain relief approaches including waterbirth, sterile water papules, positioning, acupuncture, hypnosis, other mind-body techniques, and warm packs.

CONTINUOUS SUPPORT DURING LABOR

“Historically, women have been attended and supported by other women during labor. However, in recent decades in hospitals worldwide, continuous support during labor has become the exception rather than the routine. Concerns about the consequent dehumanization of women's birth experiences have led to calls for a return to continuous support, by women for women, during labor.”[1] To come to this conclusion, Cochrane reviewed over 27 trials of continuous support during labor, which included 15,858 women. This support should include continuous presence of a birth companion who provides hands-on comfort and encouragement.[2]

Studies have shown that continuous support during labor improves outcomes for women and infants, including:

- Reduces the chances of having a caesarean section
- Reduces epidural or other analgesic use
- Reduces use of oxytocin (Pitocin)
- Reduces the duration of labor
- Reduces the use of forceps and vacuum extraction
- Reduces the chances of health complications and hospitalizations
- Reduces dissatisfaction with the birth experience

Interestingly, continuous labor support was also found to be of even greater benefit when the support provider was not a member of the hospital staff, when the support began early in labor, and when labor occurred in settings in which epidural analgesia was not routinely available.[2] In most hospitals around the country, it is the labor and delivery nurse, a member of the hospital staff, who provides support to the laboring woman. This support cannot be continuous by the very nature of hospital nursing duties. Even if each patient has her own nurse, shift change occurs, and nurses have increasing demands on their time, including chart documentation, blood draws, and vital signs. They are also required to keep the physician, who is almost always absent from the bedside, up-to-date with regard to the patient's progress. Doula and midwives are other options, and both are likely to be beneficial in the current hospital environment.

MIDWIFERY

Certified nurse-midwives (CNMs) are registered nurses who have completed graduate-level training in midwifery and passed a national certification exam. Midwifery is legal in

all 50 states and the District of Columbia. They can prescribe medication in 50 states and can practice in homes, birth centers, clinics, and hospitals. Based on data published as of 2018, nurse-midwives attended 13% of all births in the United States.[3] Insurance coverage for midwifery services is common, but availability may vary, depending on local resources.

The midwives' model of care differs from the medical model, which physicians practice in hospital settings. The midwives' model of care is based on the fact that pregnancy and birth are normal life processes. This model of care includes the following:

- Monitoring the physical, psychological, and social well-being of the mother throughout the childbearing cycle
- Providing the mother with individualized education, counseling, and prenatal care
- Offering continuous hands-on assistance during labor and delivery
- Minimizing technological interventions
- Identifying and referring women who require obstetrical attention

Cochrane published a meta-analysis of 15 trials in 2016 comparing birth, neonatal, and postpartum outcomes of midwives versus physicians.[4] Midwives outperformed physicians in almost all areas. Women who delivered under the care of a midwife were more likely to have a vaginal birth, less likely to deliver preterm, less likely to have an epidural, less likely to have an episiotomy, and less likely to have an instrumented delivery. Physicians and midwives had equal rates of fetal loss/neonatal death after 24 weeks gestation. There were trends toward higher rates of maternal satisfaction and cost savings with the midwifery model. These findings led Cochrane to conclude that women who received midwifery-led continuity models of care were less likely to experience intervention and were more likely to be satisfied, with no increased risk of adverse outcomes.

The "[Listening to Mothers in California](#)" report was a statewide, population-based survey of all mothers who delivered in California in 2016.[5] This included 2,539 women across ethnicities and socioeconomic groups. The primary findings from the survey were that women who used midwives as their birth attendants were less likely to experience medical interventions, labor induction, labor augmentation, use pain medication or epidurals, and felt that they had more power to make decisions in their labors.

DOULAS

It is often difficult or impossible for physicians to be continuously present to support laboring women, due to the varied commitments their jobs entail. Acknowledging the benefits women gain from continuous support, many physicians may wish to guide their patients to a trained labor support person. A model that may be feasible is employing the use of a doula.

Doula is a Greek word meaning "a woman who serves." A birth doula is a specially trained birth companion, not a friend or loved one, who provides labor support. She performs no

clinical tasks, nor does she give medical advice. She is simply present to provide hands-on support to the laboring woman.

A randomized controlled trial looking at doulas was done with 420 nulliparous middle-income or upper-income women, accompanied by their male partners.[6] Women were randomized to either receive doula support during labor, or to receive the standard support of nursing staff and their spouses only. Obstetric care was provided by private obstetricians. In line with what Cochrane has described for other types of continuous support in labor, the results of doula use were positive. The C-section rate was 13% in the doula group and 25% among the control group. For women undergoing induction, C-section rates were 13% versus 59%. The doula group also had a lower rate of epidural analgesia: 65% versus 76%. There have been several other studies which have had similar results in different groups of women.

HIGH-TOUCH, NONINVASIVE MEASURES

Many practices that have proved effective are underused in today's maternity care for healthy low-risk women. They include the following[7]:

- Prenatal vitamins
- Use of midwife or family physician
- Continuous presence of a companion for the mother during labor
- Upright and side-lying positions during labor and delivery, which are associated with less severe pain than lying down on one's back
- Vaginal birth after caesarean (VBAC) for most women
- Early mother-baby skin-to-skin contact

PAIN RELIEF IN LABOR

Whether or not a woman has the benefit of continuous support during labor, there are other nonmedication approaches that may aid pain relief. Research is sparse for most nonmedication approaches. Some methods which are potentially effective include the use of warm water emersion, sterile water papules, positioning, acupuncture, self-hypnosis, and warm packs. Nonpharmacological interventions that enable women to feel supported, safe, and respected can lead to improved childbirth experiences.[8]

WATERBIRTH

Warm water emersion, or waterbirth, has been used to aid labor for centuries and has recently gained popularity in the United States. Proponents of waterbirth claim that it aids in relaxation, provides pain relief, facilitates physiologic birth, and increases satisfaction with care.[9] Despite a significant amount of research on safety, waterbirth continues to have very limited availability around the country.

Cochrane did a systematic review on waterbirth in 2018.[10] It looked at 15 trials including 3,663 women. They found that waterbirth had little effect on mode of birth or

perineal trauma but may reduce the use of regional analgesia. No adverse effects on the fetus were seen. Similarly, a systematic review published in 2015 also found that waterbirth was not associated with adverse outcomes in a population of low-risk women.[11] Many women find waterbirth empowering and feel that it enhances their sense of autonomy and control.[12]

STERILE WATER PAPULES

The use of sterile water papules is a lesser-known technique to help reduce the pain of back labor. It involves injecting 0.1 mL of sterile water into four areas just under the skin of the lower back. (To see the points, do a web search of “sterile water papules.”) This is thought to provide nerve stimulation that distracts from pain. It can provide relief for two to three hours, and it can be repeated. There has been one randomized, placebo-controlled trial of 272 women which showed effectiveness and safety.[13]

POSITIONING

Positioning of the laboring woman’s body has long been the cornerstone of midwifery skills for facilitating delivery, as well as for aiding in pain management. There are entire books written on the subject of positioning the laboring woman, but little research has been done in this area. A systematic review was published in 2002, which concluded that an upright position in stage I of labor aided in pain relief and the same was found for squatting in stage II.[14] It was also concluded that squatting facilitated a faster delivery. For more information on positioning the laboring woman, *The Labor Progress Handbook* by Simkin, Hanson, and Ancheta is a good resource.[15]

ACUPUNCTURE, SELF-HYPNOSIS, AND OTHER MANUAL THERAPIES

A 2016 Cochrane review looked at the use of self-hypnosis in labor.[16] The reviewers found that hypnosis may reduce the overall use of analgesia during labor, but not epidural use. No clear differences were found between women in the hypnosis group and those in the control groups for satisfaction with pain relief, sense of coping with labor, or spontaneous vaginal birth. They concluded there was not good evidence available to recommend hypnosis in labor. However, it is a safe and low-risk strategy for women to try. A systematic review looking at the use of acupuncture for pain relief in labor also found limited evidence to support recommending its use.[17] Massage, warm packs, and thermal manual methods may have a role in reducing pain, reducing length of labor, and improving women's sense of control and emotional experiences.[18]

OTHER MIND-BODY TECHNIQUES FOR LABOR PAIN REDUCTION

Women may choose to practice relaxation techniques during pregnancy in anticipation of labor. Yoga, Guided Imagery, prayer, meditation, and various breathing techniques are tools for self-relaxation. Many communities offer prenatal yoga classes, which can also be a nice way for pregnant women to form community and stay physically active.

WARM PACKS

Lastly, the use of warm packs is commonplace in most hospitals in the United States, and the data on their benefit is worth noting separately. One large, randomized-controlled trial of 717 women found that the application of warm packs to the perineum starting late in the second stage of labor significantly reduced the risk of 3rd and 4th degree laceration.[19] Warm pack use also reduced pain during birth and in the immediate postpartum. There was also some indication that they may reduce the risk of urinary incontinence at three months postpartum, although the data for this was not as strong.

RESOURCE LINKS

- [Listening to Mothers in California](https://www.nationalpartnership.org/our-work/health/listening-to-mothers-ca/): <https://www.nationalpartnership.org/our-work/health/listening-to-mothers-ca/>

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