

The Natural Child Birthing Approaches and Its Outcomes: A Short Review Article

Dharitri Swain

Author Affiliation: Assistant Professor, Dept. of Obstetrics and Gynaecology, College of Nursing, All India Institute of Medical Sciences (AIIMS), Bhubaneswar, Sijua, P.O: Dumduma, Dist: Khurda, Odisha-751019.

Abstract

Natural birthing gives extra comfort and calm and reduce labor pain has been reported by many studies. In a natural birthing option woman moves in response to what she feels. Whether she gives birth in a hospital, birthing center, or at home. She is able to use a wide variety of comfort measures; for example, moving freely, listening to music, taking a shower or bath, and having her feet and hands massaged. The three important natural birthing options for less pain and feel joy during birth practiced in some countries not much popular in many counties like India is Water birth, Hypnobirthing and Bradley method. Water birth is a method of giving birth to a child in a bath tub or pool full of warm water mostly practiced in birthing center. Hypnosis is a state of deep mental and physical relaxation that enables the hypnotized person to focus intensely on a thought or feeling, blocking outside distractions. In this state, proponents say, the mind is more open to suggestions that change our beliefs and behavior. The Bradley Method of natural childbirth also known as "husband-coached childbirth" is a method of natural childbirth which emphasizes on mother's body, diet and exercise throughout pregnancy; and it teaches couples to manage labor through deep breathing and the support of a partner or labor coach.

Keywords: Natural Birth; Water Birth; Hypnobirth; Birthing Center; Bradley Method.

Introduction

Pain is a complex, personal, subjective, multifactorial phenomenon which is influenced by physiological, biological, sociocultural and economic factors. Labour pain is as one of the most severe pain known to mankind and exclusively suffered by womankind. Natural birthing gives extra comfort and calm and reduce labor pain has been reported by many studies [1].

In a natural birthing option woman moves in

response to what she feels. Whether she gives birth in a hospital, birthing center, or at home. She is able to use a wide variety of comfort measures; for example, moving freely, listening to music, taking a shower or bath, and having her feet and hands massaged [2].

She is able to create an environment that is just what she needs as she does the hard work of labor and birth. She pushes her baby down the birth canal, responding now to the pressure of contractions and the baby as he rotates through the pelvis and moves down the birth canal. She moves, changes position,

Reprint Request: Dharitri Swain, Assistant Professor, Dept. of Obstetrics and Gynaecology, College of Nursing, All India Institute of Medical Sciences (AIIMS), Bhubaneswar, Sijua, P.O: Dumduma, Dist: Khurda, Odisha-751019.
E-mail: dhari79@yahoo.co.in, dharithriswain79@gmail.com

and grunts, sometimes holding her breath—all in response to what she is feeling. In this way, she not only protects the muscles of the birth canal and perineum but also protects her baby as he is born. A great surge of adrenaline insures that the mother is alert, even if her labor has been long. She is totally focused on her baby, ready and eager to embrace him. Baby is eager and alert, too. The stimulation of his journey has primed him for the transition to life outside the womb [2].

The three important natural birthing options for less pain and feel joy during birth practiced in some countries not much popular in many counties like India.

- Water birth
- Hypnobirth
- Bradley method

Water Birth

It is a method of giving birth to a child in a bath tub or pool full of warm water. Water immersion must be defined as providing a depth of water which enables the mother to sit in water that covers her belly completely and comes up to her breast level or kneel in water on her haunches which comes up to just below her breast level. Any amount of water less than this does not constitute true immersion and will not create the buoyancy effect and produce the chemical and hormonal changes which enhance a more rapid labor. After an initial immersion of approximately thirty minutes the body responds by releasing more oxytocin, but only if the body experiences deep immersion, leading to buoyancy [3].

Criteria of Water Birth [3,4,5]

Many hospitals use the five-centimeter rule, only allowing mothers to enter the bath when they are in active labor and dilated to more than five centimeters. Some physiological data supports this rule, but each and every situation must be evaluated and then judged. Some mothers find a bath in early labor useful for its calming effect and to determine if labor has actually started [3,4].

The water sometimes slows or stops labor if used too early. On the other hand, if contractions are strong and regular with either a small amount of dilation or none at all, a bath might be in order to help the mother relax enough to facilitate the dilation. It has been suggested that the bath be used in a “trial

of water” for at least one hour, allowing the mother to judge its effectiveness. Women report that often the contractions seem to space out or become less effective if they enter the bath too soon, thus requiring them to leave the bath. Then again, midwives report that some women can go from one centimeter to complete dilation within the first hour or two of immersion. Deep immersion seems to be a key factor. If the pool or bath is not deep enough, at least providing water up to breast level and completely covering the belly, then the benefits of the bath may be less noticeable. The warm water will still provide comfort and the mother will benefit from being upright, in control and drug free, but full immersion promotes more physiological responses, the most notable being a redistribution of blood volume, which stimulates the release of oxytocin and vasopressin [5]. Study reports found following criteria for safe water birthing option:

- Uncomplicated pregnancy of at least 37 weeks.
- Established active labour
- Good regular contractions
- dilatation of cervix
- Descent of presenting part
- Absence of bleeding greater than bloody show
- Spontaneous or on-going labor after misoprostol or Pitocin

Birth Centre

A medical facility available in a hospital, that is designed to provide a comfortable home like setting during child birth and generally less restrictive than a hospital in its regulations, as in permitting midwifery or allowing family members or friends to attend the delivery.

At present, water birth is often practiced by those who choose to have a home birth, because the majority of hospitals have not yet installed proper birth pools in their maternity wards. Water birth international listed more than 300 U.S. hospitals that offered such facilities [5]. In India many birthing centers are tried for water birth and accepted as a safe method of delivery.

Organization

- Variety of health care professionals operates in the birth centre setting.
- Employ Registered Nurse midwives
- Obstetrician & Pediatrician.

- Typically do have medical equipments including I.V lines & fluids, oxygen for mother & infants, infant resuscitators, infant warmers, local anesthesia, oxytocin.

Policies and Procedures [5]

A first study conducted in Hyderabad, India on maternal and neonatal health in Water birth. Studies found Water birth considerably eases the baby's transition from inside her mother's womb to the outside world. Water birth is less traumatic for the baby when it is born from a "watery" environment in the mother's womb into another "watery" environment, for example in a tub. For the mother too, being in water during labor reduces labor pains substantially, as water has a therapeutic effect on her. At their Natural Birthing Center, mothers who labor in water are more calm, and fearless. Pushing is less painful in warm water, as the perineal tissues stretch more easily, without giving pain. Our midwives and staff are experts in helping mothers use water birthing techniques by following certain policy and procedures and give mothers and baby a chance to experience the wonders of water as a birthing [6].

A study was conducted in UK by comparing the perinatal mortality rate among water birth babies with other low risk births. This study tried to estimate mortality and morbidity rates for babies delivered in water and reported five perinatal death. None of the five perinatal deaths recorded among the waterbirths was attributable to delivery in water. Admissions to special care baby units were slightly lower for the water-born babies than admissions for other low-risk babies [7]. This was a landmark study in providing significant reassurance about the safety of water birth. So study recommends following written policy and procedures for safe water birth:

- Identifying the risk group.
- Transfer the client if ineligible.
- Written plans.
- Protocol for medications & lab testing.
- Protocol for FHR monitoring.
- Protocol for the provision of MMR vaccine.
- Applicant shall assure that transfer of care shall be available for 24 hrs for day.
- Client shall receive & sign written informed consent.
- Birth centre shall provide [8]:

* Education

- * Follow up
- * Registration of birth
- * Rapid HIV test & care HIV positive women
- * Immunization
- * Reporting patient abuse & neglect

Criteria

- No bad obstetrical history.
- Correct pregnancy considered low risk.
- Careful screening in early pregnancy.
- Provide prenatal care throughout their pregnancy.

Exclusion Criteria

All study conducted on effect of water birthing technique states following exclusion criteria [2,3,5].

- Systemic diseases-Cardiovascular, Respiratory, Hematological, Infective disease, Immune system, Endocrinal, Renal disorders and Neurological & G.I problems.
- Bad obstetrical history.
- Problems in current pregnancy and labour.
- Fetal indications.
- Previous Gynecological history.
- Social history

Advantages

- Providing women with exceptional care, support and knowledge.
- Couples and families completely involving
- Provide comfortable midwifery care in a non institutional setting.
- Women are free to move, get in positions that are comfortable to them.
- Women are free to eat and drink.
- Comfort measures such as hydrotherapy, massage, warm and cold compress & visualization and relaxation technique.

Birth Centre Vs Hospital [7]

- Birth centre provide natural child birth.
- Less chance for getting infection than in a hospital.
- Decreased rate of vacuum extraction & forceps

deliveries at centre .

- Fathers can be totally involved & can help deliver the baby at a birth centre.
- Hospital birth is a science but birth in a centre is an art and science.
- Birth centre is a private, romantic affair, hospital is a public occasion.
- Private hospitals are expensive.
- Government hospitals, insufficient space, often overcrowded.
- Decreased rate of postnatal depression after centre birth.
- Birth centre involves spiritual, emotional, social, physical, mental, romantic, medical, religious & natural aspects.
- Husbands have plenty to do at centre, in hospital often make husbands feel like privileged bystanders.
- Woman who gives birth at home has more confidence & increased psychological boost.

Benefits of Waterbirth

Waterbirth International has reviewed the best available evidence and offers the guidelines to assist midwives and women in their decision making process around the use of water immersion for labour and birth based on following benefits of water birth [4]:

- Facilitates mobility and enables the mother to assume any position which is comfortable for labor and pushing
- Speeds up labor
- Reduces blood pressure
- Gives mother more feelings of control
- Provides significant pain relief
- Promotes relaxation and Conserves her energy
- Reduces the need for drugs and interventions
- Protects the mother from interventions by giving her a protected private space.
- Reduces perineal tearing
- Reduces cesarean section rates
- Is highly rated by mothers - typically stating they would consider giving birth in water again
- Is highly rated by midwives
- Encourages an easier birth for mother and a gentler welcome for baby

Hypnobirthing

Founder: Marie Mongan, 1989

Hypnobirthing is the use of hypnosis to achieve maximum relaxation, comfort and relief during birth.

Hypnosis is a state of deep mental and physical relaxation that enables the hypnotized person to focus intensely on a thought or feeling, blocking outside distractions. In this state, proponents say, the mind is more open to suggestions that change our beliefs and behavior. When a woman prepares for childbirth with hypnosis, these suggestions aim to replace fear and expectations of pain with confident expectations of a safe, gentle – even comfortable birth [8].

When it should be Started? [9]

- Ideal time is from 25-30 weeks of pregnancy
- It s conducted in five classes
- Each session combines discussion and practice of some of the following :
- Basic muscle relaxation technique and visualization
- Deep abdominal breathing and guided imagery
- Using music to help relaxation
- Self hypnosis and positive ‘self talk’

How does Hypnosis Work for Labor?

Hypnosis advocates give several explanations of how the process works. One theory holds that when a woman feels fear during childbirth, her body releases stress hormones that trigger the body’s “fight or flight” response. This causes muscles to tighten and interferes with the birthing process [10]. By training the subconscious mind to expect a safe, gentle birth, they say, women can avoid going into the fight-or-flight state, allowing for a smoother birth. Relaxation can lower maternal levels of circulating catecholamines [stress hormones], and lower levels of catecholamines can facilitate uterine contractions [11].

–“The subconscious mind is responsible for many of our bodily functions, and it’s also the house of our belief systems,” - Rache Yellin.

–A Hypno Birthing instructor fill the mother’s mind with positive images and associations of birth, so she can call on these while she’s giving birth. It’s combining the positive powers of the mind with the natural animal body [12].

–Relaxes the mother’s muscles and nervous system

to the point that she feels less pain or even no pain at all because women can respond to hypnotic suggestions so well that they release "feel-good" hormones, such as endorphins and serotonin, while giving birth.

- *Every Woman's Guide to Choosing Less Pain and More Joy during Childbirth.*

Outcome of Hypnobirthing

Studies specifically evaluating Hypnobirthing were not found, but six published studies evaluated outcomes of hypnosis in laboring women (Huntley, Coon, & Ernst, 2004; Cyna, Andrew, & Robinson, 2006; Cyna, Andrew, & McAuliffe, 2006; Fisher, Esplin, Stoddard, & Silver, 2009; Kringeland, Kjersti, Daltveit, & Moller, 2010; Madden, Middleton, Cyna, Matthewson, & Jones, 2012) [13-18].

Systematic Review of hypnosis for pain relief in labor and childbirth. Key finding of the study was decrease in length of 1st stage of labor for hypnosis, reduction in use of oxytocin for augmentation for hypnosis and increased NSVDs with hypnosis [14].

Comparison of birth outcomes for 77 Australian women who self-selected to receive training in hypnosis (closely mirrored intervention taught in HypnoBirthing) compared with 3249 women who did not; all had hospital births found that spontaneous vaginal births in women without epidural ($P < .05$): Nulliparous (46% with hypnosis; 32% control), Multiparous (67% with hypnosis; 54% control), Spontaneous vaginal births in women with epidural ($P < .05$): Nulliparous (36% with hypnosis; 53% control) Multiparous (19% with hypnosis; 29% control). Study finding shows that Hypnosis patients were self selected and had generally expressed interest in hypnosis, Women expressed interest in hypnosis to avoid epidural analgesia/ other interventions [15].

A RCT was conducted among 38 women to compare hypnobirthing with standard childbirth classes on satisfaction with childbirth experience, anxiety with labor [16]. The finding was agreed with other study [15] and found that Hypnobirthing perceived greater ability to cope during childbirth after course completion. Also Hypnobirth recalled relatively poorer intrapartum coping skill ($p = .02$) at delivery. No difference among groups in route of delivery, birth weight, Apgar scores, or intrapartum/postpartum epidural and analgesic use was noticed in the group.

Hypnobirthing act as a natural birth as possible. Study of Norwegian women stated that 72% desire "as natural a birth as possible" [17]. Although better

research is needed, some studies have shown that mothers using hypnosis in childbirth use less pain medication and rate their pain as less severe. Anecdotally, some mothers who used hypnosis report feeling little or even no pain. Others report less success. Hypnosis may be a good choice for mother who wants a pain relief option other than medication. And unlike medication, hypnosis has no side effects or risks [13].

Systematic review on hypnosis for pain management during labor & childbirth reveals that there is a difference in favor of women in hypnosis groups ($P < .05$) [18]:

1. ↓pain intensity
2. ↓time in active labor
3. ↓number of hospital days
4. Hypnosis training in 1st & 2nd trimester ↓ use of pharmacological pain relief in labor (RR .42, $P < .00001$) but not when training done only in 3rd trimester
5. Hypnosis training with 4 or more classes ↓ rate of spontaneous vaginal births (RR 1.59, $P = .025$) but not < 4 classes

Hypnosis programs for childbirth present birth as gentle, perhaps even comfortable, and teach women that they can rely on their body and mind to get through the process. For some women, this is in keeping with their beliefs about birth, and they may find a hypnosis program the best childbirth preparation class for them [19,20].

Some study reported following benefits [21-23]:

- Reduced need for pain medications
- Reduced need for episiotomy
- Less fatigue from labour
- The birth companion helps the mother to stay calm and focus on the techniques learned
- Brings the mother in control during birth to enjoy wonderful birth experience

Disadvantages [24,25]:

- Long duration of labour.
- Time consuming, so not popular with many obstetricians.
- The level of hypnotic state required to tolerate pain of birthing is high.
- Lack of experienced practitioners.
- Courses and materials can be costly.

Bradley Method

The Bradley Method of natural childbirth also known as “husband-coached childbirth” is a method of natural childbirth developed in 1947 by Robert A. Bradley, M.D. (1917–1998).

The Bradley Method emphasizes that birth is a natural process: mothers are encouraged to trust their body and focus on diet and exercise throughout pregnancy; and it teaches couples to manage labor through deep breathing and the support of a partner or labor coach [26].

Bradley Course-Antenatal Education

Teachers of the Bradley Method believe that – with adequate preparation, education and help from a loving, supportive coach—most women can give birth naturally, without drugs or surgery. The Bradley Method emphasizes measures that can be taken to help keep women healthy and low-risk in order to avoid complications that may lead to medical intervention. The classes are thorough and personal, classes are limited to eight couples and are often even smaller [28].

The course will focus on following areas:

- Nutrition and how it affects a growing fetus
- The importance of exercise (when appropriate) during pregnancy
- Common pregnancy symptoms and complaints, and how to cope with them
- Techniques for relaxation during labor and birth, with an emphasis on natural breathing methods to help you “tune-in” and manage your pain rather than distract you from it
- Methods to help partner be an active participant and a skilled coach on labor day
- The stages of labour and how to cope with the changes of body experiences during each one
- Medical interventions and how to avoid unnecessary ones
- How to reduce risk of having caesarean and what to do if it becomes medically necessary
- Making a birth plan and how to communicate effectively with medical team
- Breast feeding, caring for a newborn, and adjusting to role as parents

Criteria for Bradley Method

- Dr. Bradley believed certain conditions were

essential for a laboring woman [27]:

- -Darkness, solitude, quiet environment
- -Physical comfort during the first stage of labor
- -Physical relaxation, controlled breathing
- -Need for closed eyes/appearance of sleep.
- - The laboring women would have a supportive coach/husband in this process.

Outcome of Bradley Method

Although no published studies discussing the success and effectiveness of Bradley Method could be found, two articles, both peer-reviewed, were identified. In the first article, a birthing instructor discusses her own statistics for women she had trained (L. Bradley, 1995), and in the second article, results are given from 16 couples who participated in 4 different Bradley Method classes with different instructors (Monto, 1996).

Personal statistics from 65 couples taught by childbirth educator found that 10.7% cesarean surgery rate and 3% pain medication (not specified whether epidural or intravenous) [29].

Also report of 16 couples who participated in Bradley Method classes with 4 different instructors stated that Five-sixths achieved planned home birth, 8 births without medications, 25% cesarean surgery rate [30].

To discuss purpose and breakdown of the Bradley method classes study finding reported that “Bradley teachers in general find that their students have lower rates of induction, cesareans, pain drugs, episiotomy, IVs, and so on. Bradley students generally have higher rates of breastfeeding and frequently express high satisfaction with their births and the classes-Evidence for this comes from statements made at various gatherings of Bradley teachers, and from results of about 185 births to Bradley class attendees in the Omaha, Nebraska area [31].

Reference

1. Smith CA, Collins CT, Cyna AM, Crowther CA. Complementary and alternative therapies for pain management in labour. *Cochrane Database of Systematic Reviews*. 2006; Issue 4. Art. No.: CD0003521. DOI: 10.1002/14651858. CD0003521. pub2.
2. Johnson, Paul. Birth under water--to breathe or not to breathe. *British Journal of Obstetrics and Gynaecology*. 103; 1996: 202-208.

3. Fewell, J.E., Johnson, P. Upper airway dynamics during breathing and during apnea in fetal lambs. *Journal of Physiology*. 339; 1983: 495-504.
4. Rush, J, et al. The effects of whirlpool baths in labor: a randomized, controlled trial. *Birth*. 1996; 23(3): 136-43.
5. D.Swain, Water birth is an alternative to Air birth- A Comprehensive Review article. *Asian Journal of Nursing Education and Research*. 2013; 3(2): 69-78
6. Water birth survey Report. Hyderabad, Available from: URL:[http://www. healthy mother .com/volume- and -issue/2009\(unpublished\)](http://www.healthy mother .com/volume- and -issue/2009(unpublished)).
7. Gilbert RE, Tookey PA. Perinatal mortality and morbidity among babies delivered in water: national surveillance study. *British Midwifery Journal*. 1999; 319(7208): 483-7.
8. Harper, B. Water birth Basics: from newborn breathing to hospital protocols. *Midwifery Today*, 54; 2009:9-15, 68.
9. Mongan, Marie F. (2005). *Hypno Birthing: The Mongan Method: A Natural Approach To A Safe, Easier, More Comfortable Birthing* (3rd Edition). HCI.
10. Cyna, A. M.; McAuliffe, G. L.; Andrew, M. I. (2004). "Hypnosis for pain relief in labour and childbirth: A systematic review". *British Journal of Anaesthesia* 93 (4): 505-511. doi:10.1093/bja/ aeh225. PMID 15277295.
11. Sado, M.; Ota, E.; Stickley, A.; Mori, R. (2012). Sado, Mitsuhiro, ed. "Hypnosis during pregnancy, childbirth, and the postnatal period for preventing postnatal depression". *The Cochrane Library* 6: CD009062. doi:10.1002/14651858. CD009062. pub2. PMID 22696381.
12. Jones, L.; Othman, M.; Dowswell, T.; Alfirevic, Z.; Gates, S.; Newburn, M.; Jordan, S.; Lavender, T.; Neilson, J. P. (2012). Neilson, James P, ed. "Pain management for women in labour: an overview of systematic reviews". *The Cochrane Library* 3: CD009234. doi:10.1002/14651858. CD009234. pub2. PMID 22419342.
13. Cyna, A.M., McAuliffe, G.L., & Andrew, M.I. Hypnosis for pain relief in labour and childbirth: A systematic review. *British Journal of Anesthesia*. 2004; 93(4): 505-511. doi: 10.1093/bja/aeh225.
14. Cyna, A.M., Andrew, M.I., & McAuliffe, G.I. Antenatal self-hypnosis for labour and childbirth: A pilot study. *Anesthesia Intensive Care*. 2006; 34: 464-469.
15. Cyna, A. M., Andrew, M. I., Robinson, J. S., Crowther, C. A., Baghurst, P., Turnbull, D., Whittle, C. Hypnosis antenatal training for childbirth (HATCH): A randomized controlled trial [NCT00282204]. *BMC Pregnancy and Childbirth*. 2006; 6(5): 1-12. doi: 10.1186/1471-2393-6-5.
16. Fisher, B., Esplin, S., Stoddard, G., & Silver, R. Randomized controlled trial of hypnobirthing versus standard childbirth classes: Patient satisfaction and attitudes towards labor. *American Journal of Obstetrics & Gynecology*. 2009; 201(6): S61-S62. doi: 10.1016/j.ajog.2009.10.140
17. Kringeland, T., Daltveit, A. K., & Moller, A. How does preference for natural childbirth relate to the actual mode of delivery? A population-based cohort study from Norway. *Birth*. 2010; 37(1): 21-27. doi: 10.1111/j.1523-536X.2009.00374.x
18. HypnoBirthing Institute (2013). Childbirth classes for gentle birthing. Retrieved from <http://www.hypnobirthing.com>
19. Madden, K., Middleton, P., Cyna, A. M., Matthewson, M., & Jones, L. (2012). Hypnosis for pain management during labour and childbirth [(Review)]. *The Cochrane Collaboration*, 11. doi: 10.1002/14651858.CD009356.pub2.
20. Jones, Shirley. "HypnoBirthing. The breakthrough approach to safer, easier, comfortable birthing". *British Journal of Midwifery*. 2008; 16(10): 694-694.
21. Martin J. A., Hamilton B. E., Ventura S. J., Osterman M. J. K., Wilson E., Matthews T. J. Births: Final data for 2010. *National Vital Statistics*. 2012; 61(1). Retrieved from http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_01.pdf [PubMed]
22. Phillips-Moore, J. "Hypno Birthing". *The Australian Journal of Holistic Nursing*. 2005; 12(1): 41-2. Retrieved 22 September 2012.
23. Wainer, N. "HypnoBirthing. A radical change on our perspective of pain in childbirth.". *Midwifery today with international midwife*. 2000; (55): 36-38. PMID 11189565.
24. Mottershead, N. "Hypnosis: removing the labour from birth.". *The practising midwife*. 2006 March; 9(3): 26-7, 29. PMID 16562656.
25. Graves, Katharine (2012). *The Hypno Birthing Book - An inspirational guide for a calm, confident, natural birth*. ISBN 978-0-9571445-0-7.
26. Odent, Michel; Dick-Read, Grantly (2004). *Childbirth z without fear: the principles and practice of natural childbirth*. Pinter & Martin. ISBN 0-9530964-6-7.
27. Childbirth education: Get ready for labor and delivery, Mayo Clinic, July 25, 2009, accessed July 10, 2011.
28. Walker D.S., Visger J.M., Rossie D. Contemporary childbirth education models. *Journal of Midwifery & Women's Health*. 2009; 54: 469-476. 10.1016/j.jmwh.2009.02.013 [PubMed] [Cross Ref]
29. American Academy of Husband-Coached Childbirth (2013). Course content. Retrieved from <http://www.bradleymethod.com>
30. Bradley R. A. *Husband-coached childbirth: The Bradley method of natural childbirth* (5th ed.). New

- York, NY: Bantam Dell. 2008.
31. Declercq E. R., Sakala C., Corry M. P., Applebaum S., Herrlich A. (2013). Listening to Mothers III: Report of the third National U.S. Survey of Women's Childbearing Experiences. New York, NY: Childbirth Connection; Retrieved from <http://www.childbirthconnection.org/reports/linteningtomothers>
 32. Comparison of the Bradley Method and HypnoBirthing Childbirth Education Classes Corry A. Varner, DNP, RN, CNM, WHNP* J Perinat Educ. 2015;24(2): 128-136. doi: 10.1891/1946-6560.24.2.128.
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