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Why the Supine Position and Directed Pushing are not good for giving birth

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23(4): 207–210. doi: [10.1891/10581243.23.4.207] PMCID: PMC4235063 PMID: 25411541 Healthy Birth Practice #5: Avoid Giving Birth on Your Back and Follow Your Body's Urge to Push Joyce T. DiFranco, RN, BSN, LCCE, FACCE and Marilyn Curl, RNC, CNM, LCCE, FACCE

Abstract: Women in the United States are still giving birth in the supine position and are restricted in how long they can push and encouraged to push forcefully by their caregivers. Research does not support these activities.

There is discussion about current research and suggestions on how to improve the quality of the birth experience. This article is an updated evidence based review of the "Lamaze International Care Practices That Promote Normal Birth, Care Practice #5: Spontaneous Pushing in Upright or Gravity Neutral Positions," published in The Journal of Perinatal Education, 16(3), 2007. Keywords: second stage labor, confidence, labor support, position, open glottis pushing, closed glottis pushing, spontaneous pushing, urge to push, length of second stage, current ACOG recommendations, optimal birth

Women today have limited experience with physiologic birth, largely because of the technological approach favored in hospitals. This approach left a generation of women with birth memories who were affected by the widespread use of general anesthesia, which was eventually abandoned in favor of the regional block anesthesia widely used today. Women are no longer unconscious during the final phase of childbearing but often lose the sensations that facilitate the bearing down efforts needed to move the infant through the birth canal and into their waiting arms. Current issues surrounding the second stage of labor are multifaceted and complex. A growing body of research confirms that an understanding of the normal processes of birth is essential to the management of the second stage of labor. Historically, women have recognized and instinctively used the natural laws of gravity and selective positioning without the constraints that often accompany the medical model of birth. Research today indicates that most women give birth in a supine position using a directed style of pushing despite a growing body of knowledge that confirms that this has disadvantages for both mother and baby. In addition, the use of epidural analgesia/anesthesia appears to have altered the anticipated norms of second stage labor in ways which are not fully understood. Many hospitals have policies that dictate how long the second stage of labor should be allowed to continue before surgical intervention is indicated, even when there are no identifiable risks to either mother or baby. Acquiring information that is both unbiased and reliable is a challenge that remains for women who seek to have a safe, healthy birth, and for the providers who support them. This article is an

updated evidence based review of the “Lamaze International Care Practices That Promote Normal Birth, Care Practice #5: Spontaneous Pushing in Upright or Gravity Neutral Positions,” published in The Journal of Perinatal Education, 16(3), 2007. POSITIONING FOR BIRTH: A HISTORICAL PERSPECTIVE Throughout history, images have depicted women actively birthing in positions that use gravity to facilitate the downward movement of the unborn child—a strategy that is likely to improve efficiency 10/26/2018 Healthy Birth Practice #5: Avoid Giving Birth on Your Back and Follow Your Body’s Urge to Push https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4235063/ 2/5 and reduce maternal fatigue. Until doctors began using forceps in the 17th century (Wertz, 1977), women were shown giving birth standing, sitting, and squatting (Gupta, Hofmeyr, & Shehmar, 2012). With the support of family members and community midwives, laboring women were creative in their solutions and have been depicted using stationary posts, slung hammocks, birthing stools, and ropes to gain leverage during this final stage of labor. Sequential data collected by the Listening to Mothers surveys (I, II, III) indicate that very few women are using alternative positions in the United States, with the vast majority (68%) reporting that birth occurred in the supine position or lithotomy position and with semi reclining as the most commonly reported (23%) upright position (Declercq, Sakala, Corry, & Applebaum, 2006; Declercq, Sakala, Corry, Applebaum, & Herrlich, 2013; Declerq, Sakala, Corry, Applebaum, & Risher, 2002). Less than 10% reported giving birth in the more traditional positions of squatting, standing, or side-lying.

More than three decades of research confirms that giving birth in a supine position has distinct disadvantages with no demonstrable benefits to either mother or infant. By comparing the data in earlier surveys to the most recent version (Declercq et al., 2013), it appears that the number of women giving birth in any position but supine is decreasing. UPRIGHT POSITIONING Standing, kneeling, and squatting take advantage of gravity to help the baby move down into the pelvis. In addition, squatting increases the size of the pelvis (Johnson, Johnson, & Gupta, 1991; Simkin & Ancheta, 2011), providing more room for the baby to m 10/26/2018 Healthy Birth Practice #5: Avoid Giving Birth on Your Back and Follow Your Body's Urge to Push https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4235063 / 3/5

More than 30 years ago, researchers began to question the practice of directed pushing, which was initiated when the cervix reached full dilation without taking into consideration individual variances and maternal feedback (Caldeyro Barcia, 1979). Since that time, multiple studies have confirmed the efficacy of patient directed pushing (Albers, Sedler, Bedrick, Teaf, & Peralta, 2006; Prins, Boem, Lucas, & Hutton, 2011; Roberts & Hanson, 2007) when evaluating both maternal and fetal outcomes. In spite of these findings, directed pushing remains the norm according to the second version of the Listening to Mothers survey (Declercq, Sakala, Corry, & Applebaum, 2006), when 79% of the participants reported that nurses and healthcare providers directed their pushing efforts. Women who are encouraged to push in coordination with a self perceived urge consistently limit efforts to short

bursts of 5–7 seconds and often grunt, groan, or moan, releasing air through an open glottis. This practice improves oxygenation through synchronized efforts of the uterus and respiratory systems (Osborne, 2014). Research does not support the widespread practice of directed pushing, which has been shown to stress the maternal cardiovascular system, reduce circulating oxygen, and trigger changes in the fetal heart rate. Goer and Romano (2012) found evidence to demonstrate that directed, forceful pushing had the potential to increase pressure on the baby and the umbilical cord and the tissues of the perineum resulting in more tears and a weaker pelvic floor musculature, which can result in urinary incontinence. One study (Bloom, Casey, Schaffer, McIntire, & Leveno, 2006) showed that directed pushing shortened the second stage of labor by an average of 13 min, which is not considered a significant difference. Given the potential for untoward outcomes associated with directed pushing, the practice should be carefully considered by caregivers who believe that a shortened second stage is a beneficial goal.
CLINICAL CONTROVERSIES IN SECONDSTAGE MANAGEMENT The optimal duration of the second stage of labor remains an unknown entity, but a growing body of research supports a reevaluation of long held beliefs. Physiologically, there is often a time after full dilation is achieved when contractions slow down, allowing the woman a period of rest while the infant continues to passively descend. During this time, the woman may report little or no urge to assist with spontaneous bearing down efforts. Historically, in 1954, the American College of Obstetricians and Gynecologists (ACOG) recommended that 2 hr be considered the

normal length of time from complete dilation to birth for nulliparous women and 1 hr less for the multipara. A recent study by Cheng, Shaffer, Nicholson, and Caughey (2014) suggests that second stage can take as long as 5 hr for nulliparous women to complete when epidural analgesia is used. In February 2014, ACOG issued a joint statement with the Society for Maternal Fetal Medicine relative to current research. They concluded in the "Safe Prevention of Primary Cesarean Delivery" that the risks of increasing the anticipated length of the second stage of labor appear to be "low and incremental." There was no mention of the use of positioning to facilitate rotation and descent and no acknowledgment that spontaneous pushing might be preferred over prolonged directed pushing. The report did recognize that the continuous presence of support personnel, "such as a doula," could be one of the most effective tools available to improve labor and birth outcomes.

CLOSING THE GAP BETWEEN RESEARCH AND PRACTICE Conflicting beliefs and a resistance to the incorporation of research findings in the clinical setting continue to impact the management of the second stage of labor. Despite irrefutable evidence that prolonged, directed pushing is of limited value and may, in fact, have negative consequences for both mothers and babies, it remains the standard of care in many hospitals. Midwives have generally been more open to the recommended changes than physicians and nurses, who often choose to continue doing what they have always done. Despite irrefutable evidence that prolonged, directed pushing is of limited value and may, in fact, have negative consequences for both mothers and babies,

it remains the standard of care in many hospitals. 10/26/2018 Healthy Birth Practice #5: Avoid Giving Birth on Your Back and Follow Your Body's Urge to Push https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4235063 / 4/5 •

Childbirth educators should continue to teach families about the benefits of approaching birth physiologically and should help them understand how the process is enhanced by an evidence based approach that includes the following: • Self determined positioning throughout the second stage of labor • Recognition that the length of the second stage is variable and may be prolonged without adverse effects • Willingness to delay active pushing efforts until the body's natural urge is recognized • Continuous labor support provided by family members and professional caregivers Nearly a decade ago, Lamaze International recommended that women opt for upright positioning and spontaneous, rather than directed, pushing efforts. In the intervening years, not a single study has refuted this approach to second stage management. Changing the culture of birth will not be easy but appears inevitable as evidence based care becomes the expectation throughout health care. The care practices will continue to provide a framework for safe, healthy birth. Biography JOYCE T. DIFRANCO has been a Lamaze certified childbirth educator for 30 years and a teacher trainer for 25 years. She is currently retired. MARILYN CURL is a member of Lamaze International since 1979. She is a past president, member of the certification council, and chair of accreditation.

She is currently working as an interim nurse manager in a rural hospital in eastern Washington State.

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