Healthy Birth Practice #5: Avoid Giving Birth on Your Back and Follow Your Body's Urge to Push

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ABSTRACT

Tradition, not evidence, continues to drive the management of the second stage of labor in most hospitals. This is an overview of current evidence associated with best practices for healthy outcomes for mothers and babies.

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Nearly four decades ago, international research published in the *Journal of Perinatal Medicine* (Caldeyro-Barcia et al., 1981) examined the relationship between the management of the second stage of labor and maternal/infant outcomes. In the intervening years, it has become increasingly evident that the issues identified were multifaceted and complex. Computerized documentation has made it possible to collect clinical outcome data and to correlate the data to specific practices. The information is being used to reduce the incidence of adverse events including unexpected surgical birth, post-birth hemorrhage, and low APGAR scores. Electronic fetal monitoring has confirmed that prolonged sustained, directed pushing in a supine position has the potential to alter the fetal heart rate (Osborne,

2014), leading to a variety of interventions, commonly including the use of supplemental oxygen and contributing to an increase in operative and surgical births. Infants may require post-birth resuscitation, which may result in maternal–infant separation and delayed initiation of breastfeeding. In low-risk women, traditional practices for second-stage labor management appears to have limited or no benefit for either women or babies.

In recent years, there has been a renewed interest in understanding the progression of labor and birth from the perspective of normal physiology and the information is being used to systematically examine the impact of interventions that have been part of the birth experiences of women for the past 60 years. Sustained, forceful pushing that begins when the cervix is determined to be completely dilated remains the standard of care within many birthing units in the belief that the second stage of labor is significantly shortened by the practice. Guidelines for the optimal duration of the second stage of labor lack consensus and remain controversial

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Electronic fetal monitoring has confirmed that prolonged sustained, directed pushing in a supine position has the potential to alter the fetal heart rate, leading to a variety of interventions.

(Leveno et al., 2016). Research continues to compare the experiences of women with regional analgesia with those who choose methods for pain management that facilitate freedom of movement and allow maternal identification of the sensations associated with normal descent of the infant.

In 2017 the American College of Obstetricians and Gynecologists (ACOG) issued a Committee Opinion titled *Approaches to Limit Interventions During Labor and Birth* (ACOG, 2017). The document concluded that there was insufficient data to support the historical practice of coaching women to engage in sustained breath holding (Valsalva technique) and recommended that “each woman should be encouraged to use the (breathing) technique that she prefers” noting that women who do not receive specific direction from a caregiver choose to push in short bursts with the glottis open. Additionally, the position paper concluded that in the absence of complications “women may be offered a period of rest” (1–2 hours) at the onset of the second stage of labor, bearing down when the urge is self-identified. The use of the lithotomy (supine with legs supported by stirrups) position for second stage and or birth is not specifically addressed, though the document supports “frequent position changes . . . as long as adopted positions allow appropriate maternal and fetal monitoring and treatments.”

Multidisciplinary research (Garpiel, 2018) has demonstrated that outcomes are improved for low-risk women and their infants when standardized protocols guide caregivers through the second stage of labor. The research that formed the basis for the protocols did not find that the historical management of directed pushing in the lithotomy position for a predetermined length of time positively improved outcomes, and was associated with increased maternal fatigue, which has a negative impact on patient satisfaction (Mahlmeister, 2008), increasingly recognized as an important component of overall well-being and successful transitioning to early parenting.

WHAT IS KNOWN

Despite an abundance of evidence that refutes the efficacy of giving birth in lithotomy position following a predetermined period of directed pushing, many women in the United States remain unaware of the benefits of alternative positioning and self-directed efforts. The abandonment of clinical practices based on years of tradition appears unlikely to occur without increased awareness of research

and maternal demand for care that incorporates best practices for safe, healthy birth.

It has been observed that women rarely select a supine (on the back) position during labor (Hanson, 2009; Osborne, 2014) unless instructed to do so by caregivers, typically to improve electronic monitoring of the fetal heart. Physiologically the position has been associated with diminished blood flow to the uterus and placenta resulting in identifiable changes in the baby’s heart rate pattern. When these changes occur, the first step toward resolution is typically a change of position from supine to side-lying yet women are usually repositioned on their backs for birth itself.

Data collected sequentially by the *Listening to Mothers* surveys (I, II, III) indicate that very few women in the United States are using alternative positions for birth with more than 68% reporting that birth occurred in lithotomy position with the head slightly elevated. Standing, kneeling, and squatting take advantage of gravity to help move the baby through the pelvis. Additionally, squatting increases the size of the pelvis (Simkin & Ancheta, 2011), making more room for the baby to descend. Squatting, even with the acknowledged benefits, is the most exhausting position and is frequently alternated with side-lying, semisitting, and kneeling with resting between contractions strongly recommended.

Throughout the course of labor, including the second stage, women benefit from frequent position changes and ideally, should be free to select them at will. The use of regional block analgesia (epidurals) often limits the ability of laboring women to change positions without assistance, increasing reliance on family and caregivers to intervene. In many hospitals, policies are in place that require women to remain in bed following placement of the block to prevent injuries due to accidental falls. Maternal movement is also complicated by the need for intravenous hydration, continuous fetal monitoring, and indwelling bladder catheters. These interventions do not prevent women from using alternative positions during labor and birth, but they may not be achievable without a great deal of assistance.

Currently, multiple organizations are studying the factors that have contributed to a rise in cesarean birth among women who have no identified risk

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factors and appear to be excellent candidates for spontaneous vaginal birth. In 2014 the Society for Maternal-Fetal Medicine (SMFM) and ACOG collaborated in the development of a consensus statement addressing the cesarean birth rate, and in the process, challenged historical beliefs related to the management of the second stage of labor including optimal length. This document supported the expert opinion of ACOG published in 2017 that determined that a period of rest at the onset of the second stage of labor had no negative effects if there was no indication that an expedited birth would benefit mother or infant.

During this time of rest, the work of fetal descent is facilitated by the contraction of the uterus, commonly called “laboring down” in contrast to directed maternal efforts to bear down or push with the contractions. The period of rest ends whenever an undeniable urge to bear down with each contraction is identified by the mother or according to facility policy, whichever comes first. Unfortunately, to date, there remains significant disagreement (Leveno et al., 2016) about how long the period of rest can be without compromising the well-being of either mother or baby.

Consistent care practices, based on best available evidence, have been shown to improve birth outcomes for both women and babies. Within birth settings, these are commonly called “bundles” and are used to provide standardized guidelines for managing specific aspects of care. In recent years “bundles” have addressed the use of oxytocin, identification and management of excessive bleeding, and the timing of inductions that are not medically indicated. These bundles have resulted in fewer cases of fetal distress related to oxytocin, fewer women requiring blood transfusions, and fewer babies separated from mothers due to late-preterm birth inductions. There has been increasing interest in developing a “bundle” for the management of the second stage

of labor, specifically identifying the practices that might reduce surgical intervention without increasing adverse outcomes.

Garpiel (2018) reported on a quality improvement project at a multihospital health system that resulted in a reduction in surgical births, an increase in maternal satisfaction, and no differences in maternal morbidity or negative outcomes for babies. Using evidence-based practices advocated by both the Association of Women’s Health, Obstetrics, and Neonatal Nurses (AWHONN) and the American College of Nurse-Midwives (ACNM), a framework was developed that worked to support the normal physiology of birth and avoided unnecessary interventions.

Three specific practices became the foundation of the “bundle”:

1. Delay maternal bearing down indefinitely until the woman herself reports an urge push or the head is visible at the vaginal opening when fetal tolerance is evident by fetal heart tones within the normal range.
2. Support spontaneous maternal pushing efforts, typically short bursts, rather than prolonged breath holding associated with directed pushing (Valsalva technique).
3. Consider fetal tolerance, descent, and rotation before diagnosing failure to progress.

The article noted that continuous fetal monitoring provided support for being more patient when the second stage extended beyond the average length and using active pushing efforts rather than complete dilation of the cervix as the starting time. Decision-making should be guided by clinical progress and maternal–fetal tolerance rather than by the clock.

Closing the Gap Between Research and Practice

Changing the management of the final hours of labor and birth requires interdisciplinary commitment by everyone on the birth team. Childbirth educators can help class participants develop strategies that facilitate physiologic birth. Participants can be educated about the relationship between common interventions, (epidurals) and can be encouraged to have realistic expectations for the length of the second stage of labor. Nurses in the labor and birth area need the support of the leadership team to change traditional practices to reflect ones that are rooted in evidence. Waiting for the initiation of spontaneous

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pushing efforts requires patience and a willingness to assist the patient to change position every 15 to 30 minutes. The almost universal use of continuous fetal monitoring can provide reassurance that delayed pushing poses limited risk to mother and baby. Second-stage “bundles” can provide the guidelines needed to ensure that women are allowed the time and autonomy to give birth in the position of their choice without the directed coaching of the past.

More than 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 has not been easy but appears inevitable as evidence-based care becomes the gold standard for safe, healthy birth.

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DISCLOSURE

The author has no relevant financial interest or affiliations with any commercial interests related to the subjects discussed within this article.

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