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

健康分娩实践 #5: 避免分娩时仰卧, 顺应身体的本能用力

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## ABSTRACT

### 摘要

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.

美国女性仍旧采用仰卧的方式分娩, 分娩的用力有时间限制, 并且是在照护者的鼓励下使劲用力。这些做法都没有调查研究的证据支撑。对于目前关于如何提升分娩体验质量的研究和建议, 一直伴随有相关讨论。本文是对《围产教育杂志》里发表的《倡导正常分娩的国际拉玛泽照护实践, 照护实践 #5: 采用直立或能借助重力的姿势, 顺应本能用力》2007, 16(3) 的最新循证综述。

*The Journal of Perinatal Education*, 23(4), 207–210, <http://dx.doi.org/10.1891/1058-1243.23.4.207>

**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

《围产教育杂志》, 23(4), 207–210, <http://dx.doi.org/10.1891/1058-1243.23.4.207>

**关键词:** 第二产程、信心、待产支持、姿势、开嗓用力、闭嗓用力、自发力、用力的冲动、第二产程时长、美国妇产科学会目前的建议、最佳分娩

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

*Healthy Birth Practice #5* | DiFranco and Curl

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.

如今的女性对生理性分娩的体验有限, 很大程度上是由于医院偏好采取技术手段。这种技术为

上的方式让一代女性都留下了伴随着全身麻醉的分娩记忆。如今全麻已经被摒弃，而局部阻断性麻醉已得到广泛使用。女性在分娩的最后阶段不再毫无知觉，但还是会丧失部分向下用力的感觉，而这种用力是将婴儿娩出产道、来到妈妈的怀抱所需要的。

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.

第二产程涉及的问题多种多样，相当复杂。越来越多的研究发现，了解产程的自然过程，对于管理第二产程至关重要。过去女性就已经认识到、且本能地利用重力这种自然法则，选择不同的体位，不受到分娩医疗模式的限制。如今的研究显示，大部分女性在分娩时还是采取仰卧，并在指导下用力，尽管有越来越多的证据证明这对母婴并无好处。此外，硬膜外麻醉/麻醉似乎改变了我们对第二产程的期待标准，这种改变的原因我们还没有完全理解。很多医院规定了在出现手术干预指征之前允许第二产程持续的时长，即便对母婴并没有明确的风险。对希望拥有安全健康的分娩的女性和支持她们的照护者来说，获得中立和可信的信息并不容易。

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.

本文是对《围产教育杂志》里发表的《倡导正常分娩的国际拉玛泽照护实践，照护实践#5:采用直立或能借助重力的姿势，顺应本能用力》2007，16(3)的最新循证综述。

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 and reduce maternal fatigue.

从历史图片资料中可以看到，以前女性分娩时采用可以借助重力的姿势，促使胎儿下降——这种方法提高分娩的效率，减少疲惫。

## POSITIONING FOR BIRTH: A HISTORICAL PERSPECTIVE

### 从历史视角来看分娩体位

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 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.

我们可以从历史图片资料中看到，以往的女性分娩时采用可以借助重力的姿势，促使胎儿下降——这种方法提高分娩的效率，减少疲惫。直到 17 世纪医生开始使用产钳(Wertz, 1977)之前，我们可以看到女性站着、坐着或蹲着分娩 (Gupta, Hofmeyr, & Shehmar, 2012)。在家人和社区助产士的支持下，产妇充分发挥创造性，可以从记载中看到她们在产程的最后阶段运用固定的把杆、吊床、分娩凳和绳子来为自己助力。

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; Declercq, 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.

《倾听母亲》调查 (I, II, III) 中收集的序列数据显示，美国只有少数女性变换体位，大部分(68%)女性说自己分娩时采取的是平躺姿势或截石位，半躺是最常使用的(23%)直立姿势(Declercq, Sakala, Corry, & Applebaum, 2006; Declercq, Sakala, Corry, Applebaum, & Herrlich, 2013; Declercq, Sakala, Corry, Applebaum, & Risher, 2002)。只有不到 10% 的女性说自己采用了蹲、站、侧躺等更传统的体位。三十多年来的研究都证实，分娩时仰卧对母婴有显著的危害，却没有明显的益处。通

过对比最近的数据与早年调查的数据 (Declercq 等人, 2013)，采用平躺以外分娩姿势的女性人数正在下降。

## UPRIGHT POSITIONING

### 直立姿势

Standing, kneeling, and squatting take advantage of gravity to help the baby move down into the pelvis.

站姿、跪姿和蹲姿都是借助重力帮宝宝通过骨盆。

In addition, squatting increases the size of the pelvis (Johnson, Johnson, & Gupta, 1991; Simkin & Ancheta, 2011), providing more room for the baby to maneuver and descend. Squatting, even with its acknowledged benefits, is the most exhausting position and is frequently combined with side-lying, semi-sitting, and kneeling, with resting between contractions strongly encouraged.

此外，蹲姿可以让盆腔扩大(Johnson, Johnson, & Gupta, 1991; Simkin & Ancheta, 2011)，为胎儿的转动和下降提供更多空间。下蹲纵然有种种已知益处，但它是费力的姿势，通常与侧躺、半坐和跪姿结合使用，建议产妇在宫缩之间休息。

Penny Simkin, the well-known physical therapist and birth expert, suggests that it may be helpful for others to support the woman by holding her under the arms so that there is minimal weight on her feet and legs. Such a strategy helps conserve maternal energy and creates more space for the infant by lengthening the trunk of the body (Simkin & Ancheta, 2011).

知名理疗专家和分娩专家 Penny Simkin 建议，可以支撑产妇的腋窝下方，这样可以最大限度地减少她的腿脚受力。这种方法帮她保存体力，并通过伸长躯干为宝宝提供更多空间(Simkin & Ancheta, 2011)。

Even though positions such as side-lying, hands-and-knees, and semi-reclining lose the advantages associated with gravity, other benefits include heightened relaxation and the opportunity to rest more effectively between contractions. Birthing in the side-lying position has been shown to reduce perineal tearing by allowing the presenting part to descend more slowly (Shorten, Donsante, & Shorten, 2002). Like squatting and standing, the dimensions of the pelvis can be maximized by the hands-and-knees position, which is often used to relieve the back pain that may occur when the infant remains in a persistent occiput posterior presentation (Stremler et al., 2005).

尽管侧躺、手膝位和半躺等姿势无法借助重力，但是它们有其它优点，包括让产妇更放松、在宫缩之间更高效地休息。侧躺分娩被证实可以减少会阴撕裂，这是因为先露部分可以更快地下降(Shorten, Donsante, & Shorten, 2002)。与蹲姿和站姿一样，手膝位可以帮助扩张盆腔和缓解背痛，背痛可能由于持续的枕后位所致(Stremler 等, 2005)。

Throughout the course of labor, including the second stage, women benefit from frequent position changes and, ideally, should be free to select or reject them at will. The use of regional block analgesia frequently limits the ability of the laboring woman to change position without assistance, increasing reliance on caregivers and family to intervene. In many hospitals, policies are in place that require women to remain in bed following placement of the block to prevent injury because of accidental falls. Even distribution of the pain medication given through the epidural catheter is best achieved when the woman remains supine or semi-reclined—positions which are sometimes associated with reduced blood flow to the baby because of compression of major blood vessels located posterior to the uterus (Roberts & Hanson, 2007). Maternal movement is also complicated by the need for intravenous hydration, continuous monitoring of the fetal heart, and use of indwelling urinary catheters to prevent bladder distension. These common practices do not prevent

women from using various positions during labor and birth but may not be achievable without a great deal of assistance.

在包括第二产程的整个产程中，女性频繁变换体位都大有益处，她们应该随自己的心愿选择采取或者拒绝采取这些体位。局部阻断性麻醉的运用往往限制了女性独立变换体位的能力，增加了对照护者的依赖或家人干预的程度。很多医院都规定女性在进行阻断后卧床，以预防意外跌倒而造成损伤。通过硬膜外麻醉导管注入的镇痛药，在女性仰卧或半仰卧时得到最好的扩散效果——这种姿势使得子宫后方的主要血管受压迫，给宝宝的供血就会减少(Roberts & Hanson, 2007)。静脉输液、持续胎心监护和防止膀胱膨胀的留置导尿管，也都会影响产妇的移动。这些常见的做法不会阻止产妇在待产和分娩时变换体位，但是如果没有别人的帮助可能难于做到。

## OPTIMIZING OUTCOMES

### 优化结果

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 health-care providers directed their pushing efforts.

30 多年前，研究者开始质疑指导下的用力。宫口一旦全开就开始指导用力，不考虑个人差异和产妇的反馈(Caldeyro-Barcia, 1979)。从那时起，多项研究在评估母婴结局时，对患者主导用力的有效性进行了证实。(Albers, Sedler, Bedrick, Teaf, & Peralta, 2006; Prins, Boem, Lucas, & Hutton, 2011; Roberts & Hanson, 2007)。尽管有这些研究成果，《倾听母亲》(Declercq, Sakala, Corry, & Applebaum, 2006)第二期的调查显示指导用力仍是惯常做法。79%的被调查者都称她们是在护士和照护者的指导下用力的。

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.

那些按照自己本能的冲动而用力的女性，用力的持续时间往往只有短短的 5-7 秒，通常伴有呻吟，打开声门吐气。这种做法会使子宫和呼吸系统协调同步，改善氧气供给(Osborne, 2014)。研究并不支持广泛使用的指导下用力，这种做法已被证实会给产妇的心血管系统带来负担，减少氧气输送，引发胎心率变化。Goer 和 Romano (2012)已找到了证据：指导下的强行用力可能会给宝宝、脐带和会阴组织增加压力，使得撕裂更严重，盆底肌肉组织变弱，可能造成尿失禁。

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.

一项研究(Bloom, Casey, Schaffer, McIntire, & Leveno, 2006)显示，指导用力平均只让第二产程缩短 13 分钟，这并不算明显的改善。考虑到指导用力可能带来的不利后果，那些认为缩短第二产程有益的照护者应该仔细斟酌。

## CLINICAL CONTROVERSIES IN SECOND-STAGE MANAGEMENT

### 第二产程管理的临床争议

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 per-

sonnel, “such as a doula,” could be one of the most effective tools available to improve labor and birth outcomes.

第二产程的最佳持续时间尚且未知，但越来越多的研究表明我们需要重新审视一些老观念。生理上，宫口开全后往往有一个宫缩变慢的阶段，让产妇得到休息，此时胎儿仍然在被动下降。此时，产妇想要自发用力的冲动很少甚至完全没有。1954年，美国妇产科学会建议了正常的时长，即初产妇从宫口全开到分娩是2小时，经产妇是不到1小时。Cheng, Shaffer, Nicholson 和 Caughey (2014)的最近一项调查显示，用了硬膜外麻醉的初产妇，第二产程可能会长达5小时。在2014年2月，美国妇产科学会与母胎医学会发布了一项与当前研究相关的联合声明。他们在《安全避免首次剖宫产》里指出，延长第二产程预期时长的风险是“低而渐进的”。该文并未提及用变换体位来促进胎儿的旋转和下降，也没有指出自发用力可能比持续的指导用力更好。不过该报告确实承认支持团队的持续照护，“比如导乐”，可能是改善待产和分娩结果最有效的方法之一。

## CLOSING THE GAP BETWEEN RESEARCH AND PRACTICE

### 缩小研究和实践的差距

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.

观点对立，以及抗拒将研究结果应用到临床实践中，继续影响着对于第二产程的管理。尽管已有无可辩驳的证据证明：延长的指导用力并无多大价值，实际上还可能对母婴有负面影响，它仍然是很多医院的常规照护手段。助产士总体上更愿意接受建议来进行改变，相比之下，医生和护士往往选择继续一贯的做法。

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.

尽管已有无可辩驳的证据证明：延长的指导用力并无多大价值，实际上还可能对母婴有负面影响，它仍然是很多医院的常规照护手段。

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:

分娩教育者应继续向家庭教授生理性分娩的益处，并帮助他们了解如何通过包括如下的循证方法支持生理性分娩：

- Self-determined positioning throughout the second stage of labor  
在第二产程始终自主选择体位
- Recognition that the length of the second stage is variable and may be prolonged without adverse effects  
认识到第二产程的时长因人而异，延长可能并无不利结果
- Willingness to delay active pushing efforts until the body's natural urge is recognized  
愿意等到身体出现自然冲动以后再积极用力
- Continuous labor support provided by family members and professional caregivers

家庭成员和专业照护者提供持续的待产支持

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.

近 10 年前，国际拉玛泽协会就建议女性选择直立的姿势，以及自发用力而不是指导用力。自那以后，没有任何其他研究来反驳第二产程管理的方式。改变分娩的传统理念不会一帆风顺，但随着循证照护成为医疗领域的一大期望，这种改变似乎是不可避免的。照护实践会继续提供安全、健康的分娩框架。

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