

# Second-Stage Labor Care Challenges in Spontaneous Bearing Down

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Substantial scientific evidence supports spontaneous maternal bearing down for its associated maternal and fetal physiologic benefits. Imposing specific directions for Valsalva pushing does not result in optimal outcomes but continues to be widely used, particularly when labor progress is less than optimal. However, there are numerous evidence-based approaches that can be used to avoid reverting to directed, prolonged Valsalva bearing down. Nursing care challenges may be encountered when using physiologic approaches; therefore, strategies are detailed to alleviate a variety of problems including ways to promote physiological descent and effectively support women's spontaneous efforts. For example, maternal postural interventions are suggested for asynclitic and occiput posterior fetal positions. When fetal heart rate abnormalities present and the fetus may be compromised, modifications to spontaneous bearing down are suggested as alternatives to longer and stronger Valsalva pushing, such as encouraging the women to use short pushes or breath through contractions until the fetus recovers. Open knee-chest maternal positioning can help to diminish a premature urge to push, while the closed knee-chest position may be more useful if cervical edema occurs. Even with clinical challenges, evidence-based care can help achieve the improved outcomes documented from women's spontaneous bearing-down efforts during the second stage. **Key words:** *nursing care, second-stage labor, spontaneous pushing*

Physiologic second-stage care has been promoted for decades as an evidence-based alternative to the traditional directions that women receive immediately upon reaching complete dilatation: Take a deep breath and hold while the provider counts to 10.<sup>1-4</sup> The term *physiologic* means in line with nature, and women are encouraged to bear down in accordance with their natural urges in positions of their choosing. However, despite supporting scientific evidence of maternal and fetal benefits, the physiologic approach to second-stage labor management has not been widely adopted.<sup>5</sup>

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## PHYSIOLOGIC CONCEPTS IN SECOND STAGE

The first physiologic concept discussed is Valsalva pushing with increased intraabdominal pressure and the associated maternal and fetal effects. Next, the phases of the second stage and their relationship to length of labor and laboring-down strategies are noted.

### Valsalva maneuver

The use of directed Valsalva pushing technique is so ingrained in the culture of American birth practice that it has been difficult to make the change to an approach that requires support of the woman's spontaneous urges.<sup>4-6</sup> American women have also grown to expect specific direction during the second stage,<sup>7</sup> especially as fewer attend childbirth classes and instead rely on media depictions of birth,<sup>8</sup> which are growing in number and accessibility. Commonly used childbirth

films also portray women being directed to hold their breath and push.<sup>8</sup>

Evidence is mounting that the care given to women during second-stage labor directly impacts maternal and fetal outcomes.<sup>9,10</sup> Researchers have compared perineal outcomes between women who used coached pushing compared with those who responded to their own involuntary urges.<sup>11,12</sup> The practice of routine sustained strenuous bearing down during second-stage labor increases pressure on the pelvic floor that is associated with adverse pelvic floor and perineal outcomes.

More recently, the outcomes of 320 unanesthetized low-risk nulliparas at term randomized to groups based on 2 approaches to bearing down were examined.<sup>9,10</sup> The control group included 163 women randomly assigned to the coached pushing group who were instructed to bear down during the peak of the contraction for 10 seconds. The experimental group included 157 women randomly assigned to the uncoached group who were told to “do what comes naturally” in whichever position the women felt comfortable. Women in the coached pushing group had an average 13-minute shortening of the second-stage labor duration.<sup>9</sup> A subgroup of the subjects (67 coached, 61 uncoached) underwent urodynamics testing and pelvic floor function testing at 3 months postpartum. Women in the coached pushing group had decreased bladder capacity (427 mL vs 482 mL,  $P = .051$ ), diminished initial urge to void (160 mL vs 202 mL,  $P = .25$ ), double the amount of detrusor overactivity (16% vs 8%,  $P = .17$ ), and a trend toward stress incontinence (16% vs 12%,  $P = .42$ ).<sup>10</sup> The authors concluded that coached pushing offers only a slight advantage in shortening second-stage labor at the more significant risk of deleterious urodynamic and pelvic floor outcomes.

The fetal response to Valsalva bearing-down efforts has also been studied scientifically.<sup>13-16</sup> The fetus experiences a decrease in oxygen saturation with Valsalva bearing down that is not observed when the mother is supported to use spontaneous bearing down.<sup>16</sup> More specifically, Valsalva pushing efforts sustained for longer than 5 to 6 seconds lead to alterations in maternal and fetal hemodynamics, such as a lowering of maternal blood pressure and blood flow to the placenta, decreased fetal pH and  $PO_2$ , elevated  $PCO_2$ , fetal acidemia, more nonreassuring fetal heart rate deceleration patterns with delayed recovery to baseline, and lower Apgar scores.<sup>13-15</sup> Compounded by the use of a supine maternal position, which also has deleterious hemodynamic consequences,<sup>17,18</sup> these effects may become even more hazardous.

## Spontaneous pushing

When women push spontaneously, they begin to push from their resting respiratory volume,<sup>11</sup> and they push multiple times per contraction (3–5) for 3 to 5 seconds per effort, followed by about 2 seconds of breaths and the release of air.<sup>15,19,20</sup> There is synchrony between the woman’s respiratory and uterine function that may allow spontaneous bearing-down efforts to take advantage of the force generated by abdominal muscle action.<sup>3</sup> Women who use spontaneous bearing down have been observed to wait for the contraction to build to a uterine pressure of at least 30 mm Hg before they begin pushing.<sup>15,19</sup> The efforts also vary in intensity and frequency with each contraction.<sup>15,19,20</sup> Early in the second stage of labor, the efforts are of low amplitude and occur only at the peak of contractions. As the fetus descends, the efforts become more forceful and frequent.<sup>19</sup> Therefore, a pattern in the progression of the second stage has been observed when women had not been arbitrarily directed to push.<sup>16</sup>

Results of trials that compared spontaneous pushing to Valsalva have conflicting results related to the second-stage duration. For example, the results of 2 studies showed no significant increase in the second-stage duration between groups,<sup>11,21</sup> whereas 3 other investigations reported a significantly longer second-stage duration with the use of spontaneous pushing.<sup>14,22,23</sup> However, this prolongation was not associated with adverse neonatal outcomes, and the use of an upright position may reverse the durational effect.<sup>23</sup>

## Phases

The second stage of labor has been described by researchers as at least biphasic.<sup>24,25</sup> The “latent” phase is the time following complete dilatation until the woman feels a strong urge to push. It is during this latent phase that women experience an initial diminished urge to bear down as the fetus passively descends into the vagina. The “active” phase is distinguished by the stronger, rhythmic bearing-down efforts as the head becomes visible on the perineum.

## Laboring down/duration

The concept of the biphasic second stage has been used to allow women with epidural anesthesia to labor down. At complete dilatation, the laboring woman is not instructed to begin bearing down but rather encouraged to rest until she perceives the urge to push or the fetal head becomes visible at the introitus.<sup>26-28</sup> Evidence from a meta-analysis that included 9 randomized controlled trials revealed that the duration

of the second stage was lengthened by an average of 58 minutes in the women in the delayed pushing groups.<sup>28</sup> However, the time spent actively pushing was significantly shorter in 3 of the 9 studies analyzed. Most important, no adverse outcomes were reported with the use of laboring down. This meta-analysis and an additional study of the laboring down approach<sup>16</sup> demonstrated that the fetus will descend and be born without active maternal bearing down and that the prolongation of the total duration of the second stage was not harmful to the mother or the fetus. Measurements from fetal scalp blood samples during the second stage demonstrated that fetal pH, PCO<sub>2</sub>, and lactic acid values remained stable during passive descent, while the woman was not actively pushing.<sup>25</sup> The pH was observed to decline, and the PCO<sub>2</sub> and lactic acid levels increased only when the women began actively bearing down.<sup>25</sup> Therefore, a delay in maternal bearing down has advantages for the fetus.

## NURSING CARE CHALLENGES

Nursing care for women during second-stage labor is complex. It involves frequent and astute assessments of mother and fetus, with individualized care and support. Promoting fetal descent and supporting each woman's labor coping and her pushing efforts are discussed in relation to the literature and the results of a pilot study. Barriers that have been encountered by nurses and midwives when applying physiologic pushing strategies during second-stage labor are discussed.

### Assessment of progress in descent

Generally, progress in the second stage of labor is assessed in descent of the fetal head. However, there is no strict guideline for the expected rate of fetal head descent during the second stage of labor. Instead, the deviations from normal are described. For example, the absence of fetal head engagement at the time of complete cervical dilatation is considered abnormal,<sup>29</sup> protracted descent is defined for primigravidas and multiparas,<sup>30</sup> and the absence or arrest of fetal head descent during active maternal pushing may signal a problem.<sup>30</sup> Therefore, descent of the presenting part is an important consideration in assessing second-stage progress.

The second-stage duration also plays a significant role in clinical decision making concerning progress. The American College of Obstetricians<sup>31</sup> currently recommends that the duration of the second stage not exceed 1 hour for multiparas and 2 hours for a primiparas, and adds an hour to these limits for women who labor with an epidural. However, Zhang<sup>32</sup> found that in

primigravidas fetal head descent from +1 station to +3 may take up to 3 hours (on a -3 to +3 scale), followed by another 30 minutes before the fetus is born. Fetal malposition (occiput posterior [OP] or transverse) at the time of complete dilatation is associated with significant prolongation of the second stage of labor compared with labors where the fetus is anterior.<sup>33</sup> Compound fetal presentations, such as a hand in front of the head, may require more time to allow for descent and therefore progress.<sup>30</sup> When descent is not occurring as anticipated, one of these variations should be considered. However, if the condition of the mother and the fetus is stable, and the prospects for a vaginal delivery are favorable, more time may be necessary for descent and progress to occur.

Following flexion, descent, and internal rotation, the presenting part reaches the pelvic floor. Generally, the bearing-down reflex will be triggered when the fetal head reaches at least a 0 to a +1 station.<sup>19</sup> It is at this station that women commonly experience the first urge to bear down.<sup>3,19</sup> Therefore, station of the fetal head is an important consideration when assessing the woman's transition from the latent to active phase of the second stage.

Station is determined by examining the lowest point of the fetal head in relationship to the ischial spines of the maternal pelvis.<sup>34</sup> Caput and molding can make the assessment of station more challenging. For example, the examiner may palpate the fetal head at a zero station (engaged) when the biparietal diameter is actually 1 to 2 cm higher because of the caput and molding. Therefore, objective and standardized assessment station is necessary to assess descent of the fetal head as the second stage progresses.

### Promotion of physiologic descent

Roberts and Wooley<sup>3</sup> described the conditions that are conducive to fetal descent based on evaluation of the station and position of the vertex as well as the qualities of the cervix that promote descent during second-stage labor. They found that when the cervix is at least 8 to 9 cm dilated, softly retracting, with the fetal head in the OA or OT position, and the station at least +1, the conditions are conducive to further descent and, therefore, bearing down at the peak of contractions will lead to relief without causing harm.<sup>3</sup> Further, these authors suggested that if the conditions are not conducive to fetal descent, then there is no need to provide arbitrary directions for the woman to push. Rather, her attendants should wait until there is at a minimum an involuntary urge to bear down.<sup>1,3</sup> When the condition of the mother and the fetus is stable, the evidence from laboring down literature as well as other research<sup>25,28</sup>

suggest that until there is an involuntary urge to bear down, supporting the mother's rest will not impose risk to the mother or the fetus.<sup>3</sup> Further, "honor the resting phase" of the second stage provides an opportunity to promote passive fetal descent. This will therefore limit the time spent actively bearing down.<sup>35</sup>

### Assessment of pain, coping, and fatigue

One of the concerns with the use of spontaneous bearing down for women without epidural anesthesia is prolongation of the second-stage duration and therefore discomfort.<sup>5</sup> However, there is evidence that spontaneous bearing down is associated with less fatigue<sup>26,36</sup> and enhanced comfort as women respond to their own cues. Since fatigue and pain are closely related during the second stage,<sup>36</sup> mobility and the use of upright positions may improve both in women without epidurals.

### Support of women's spontaneous pushing efforts

Support of the woman's spontaneous bearing-down efforts is an appropriate, evidence-based approach to care that avoids the adverse outcomes of sustained strenuous pushing.<sup>10-12,17</sup> To better understand how to care for women using involuntary bearing down, Sampsel and colleagues<sup>37</sup> addressed the communication strategies that supported and encouraged spontaneous pushing. The researchers analyzed 20 videotaped births of 20 primigravidas collected for use in a prior study. In Table 1, examples of supportive statements are presented in comparison to directive instructions from the study findings. For the spontaneous second stage, support (verbal information and encouragement) from the providers replaces the traditional arbitrary direction for sustained Valsalva bearing down.

Roberts and associates<sup>38</sup> studied when supportive providers became directive. They examined clinical sit-

uations where providers who did not routinely encourage Valsalva bearing-down efforts found it appropriate to encourage more strenuous pushing. The researchers analyzed 10 videotaped births that showed a mixture of supportive and directive care approaches and studied the frequency of change in approach as well as the rationale. They determined that 63% of the verbal communication was directive to the woman to bear down with contractions, 20% combined supportive and direction (supportive direction), and 17% was supportive including praise. Reasons identified by the researchers for the change from supportive to directive care included the following in order of frequency: (1) demonstrations of maternal fatigue, (2) expressions of maternal pain, (3) decrease in urge to bear down, (4) routine (without indication), (5) behaviors that indicated maternal fear, (6) direction from a support person, and (7) fetal compromise. "Supportive direction" was identified in 8 of the 10 tapes and involved a supportive tone with minimal instructions. "Supportive praise" was observed in 9 of the 10 videotapes and included positive reinforcement of the bearing-down efforts observed. Consequently, an awareness of situations, particularly vocalizations of women's needs, appeared to compel some providers to become more directive. Supportive direction does not require a quiet, passive approach, but rather high verbal praise and a reflection to the woman that the nurse or midwife is present and aware of each contraction and the woman's response. Examples include "That's it, you are bringing the baby down," "Wait to push until you feel the urge," and "That's great, try it again." Supportive providers can and do become more directive but need not revert to arbitrary instructions for the use of prolonged Valsalva bearing down.

The remainder of this article will concentrate on applying evidenced-based second-stage labor care, specifically the support of spontaneous pushing when there

**Table 1.** Comparison of supportive versus directive second-stage care<sup>a</sup>

	Supportive "Information"	Directive "Instruction"
Initiation of pushing	Woman follows her own body	Immediate at 10-cm dilatation
Breathing	Self-directed, no deep-cleansing breath	Take a quick breath in between and "Come right back at it"
Coaching	Encouragement, feedback, and praise only	Intense coaching, verbal directions, and/or instructions. "Ritualistic"
Bearing-down efforts	Open-glottis, noise-making, efforts last $\geq$ 6 s	Closed glottis. No noise. Told when to start, duration, and strength of bearing down.
Vaginal examinations	Not used to focus effort	"Push my fingers out"

<sup>a</sup>Adapted from Roberts et al.<sup>38</sup>

are challenges to overcome. Concerns with progress (pushing and descent) and suspected fetal compromise will be addressed.

### **Premature urge to bear down**

The most common cause of a premature urge to bear down is an OP fetal malposition. OP malpositions can occur in 10% to 41% of fetuses at the onset of labor, and most rotate spontaneously during labor.<sup>39</sup> Consequences of the OP-malpositioned fetus include, but are not limited to, an increased incidence of cesarean delivery and prolongation of the second stage of labor.<sup>39</sup> When this position persists in the second stage, it can delay progress and cause significant maternal discomfort and distress.

Perhaps the most effective nursing intervention to rotate the OP fetus is to position the woman on the same side as the fetal back.<sup>39-41</sup> In this position, gravity pulls the fetus to the occiput transverse and then to the anterior position. Other maternal positions that can be used to provide comfort and perhaps aide in rotation include flat-footed squatting, supported squat, asymmetrical positions, and hands and knees (Table 2). However, evidence concerning the efficacy of these positions on rotation of OP fetuses is lacking.<sup>39,40</sup> Maternal positions that provide access to the back of the laboring woman allow the nurse and/or family members to employ strategies such as counter pressure, the pelvic press, and/or the hip squeeze, which may enhance coping with the significant back discomfort.<sup>41</sup>

Asynclitism can also be responsible for problems with progress, specifically descent in the second stage of labor.<sup>41</sup> At the onset of labor, posterior asynclitism is normally present, followed by anterior as fetal descent and labor progresses to internal rotation.<sup>34</sup> Asynclitism is a problem only if it persists when the fetus is deeply in the pelvis.<sup>41</sup>

There are several approaches to addressing fetal asynclitism when it persists in the second stage (Table 2). The abdominal lift can be used in late first or early second stage of labor; the woman can lift her belly with both hands, or use a sheet or sash, beginning before the onset of the contraction.<sup>41</sup> The upward pull on the abdomen can be released following the end of the contraction. The fetal heart rate should be monitored following abdominal lifts to ensure that the umbilical cord is not becoming compressed. An additional or alternative approach is to encourage the laboring woman to assume an asymmetrical position such as the lunge, "duck walk," or stair climbing.<sup>41</sup> An asymmetrical position may be used at the bedside or in bed for second-stage labor care.

In the case of a premature urge to bear down accompanied by an "anterior lip" of cervix, continued assessment of the remaining portion of the cervix as well as descent is advisable. If minimizing the urge to push is a desired goal, postural interventions that diminish the effect of gravity can be employed. For example, the hands and knees, exaggerated Sims, or open knee-chest (knees apart) position may alleviate pressure on the cervix and posterior vagina and therefore potentially diminish the urge to bear down.<sup>41</sup> When an anterior lip persists or become edematous, a closed knee-chest position (knees together) may be attempted because it diminishes the force of gravity on the anterior portion of the cervix.<sup>41</sup> The use of a standing position may help redistribute pressure on the cervix and may also reduce an anterior lip.

### **Nonreassuring fetal heart tracings**

Fetal heart tracing abnormalities, such as variable decelerations and/or bradycardia during the second stage of labor, can be effectively managed by nursing care that does not include Valsalva pushing. However, the nurse may feel the need to provide more direction to the woman whose fetus is experiencing heart rate decelerations. This shift from support of spontaneous bearing down to more directive care may be subtle, and this shift is often made in response to suspected fetal compromise.<sup>38</sup> Because prolonged Valsalva bearing down is not associated with optimal outcomes,<sup>16</sup> when fetal compromise is suspected, spontaneous bearing down that is leading to descent and therefore progress can be supported without reverting to arbitrary direction. If progress is not occurring and the provider feels more direction is necessary, another option is to encourage the woman to hold the bearing-down efforts for only slightly longer. Supportive directions, such as "hold that a little longer," "make a little noise," and "try a little grunt", can be used as an alternative to directing prolonged breath holding. These types of efforts have been described as "mini pushes."<sup>42</sup> The woman can usually return the demonstration of an open-glottis grunt (Table 2) and then can apply this to the subsequent contractions. This form of coached pushing can be viewed as an intervention, when progress is not occurring and the nurse feels that more specific direction is needed but wants to avoid the consequences of prolonged Valsalva bearing-down efforts.

When the nurse feels that even more prolonged bearing-down efforts are necessary to accomplish the birth in a timely fashion, the woman can safely be encouraged to hold each effort for up to 6 seconds (Table 2) without deleterious effects on the fetus.<sup>19,22</sup> Further, the woman should be repositioned to the

**Table 2.** Nursing interventions for bearing-down challenges

Maternal urge to bear down	Evaluation of intervention			
	Cervical dilatation	Fetal status	Maternal status	Intervention
None	Complete	Reassuring	Comfortable, resting quietly, "trance-like"	Honor the resting phase, "labor down" <sup>35</sup>
Present	Complete	Nonreassuring	Variable	Position changes to nonsupine <sup>43</sup>
Present, but diminished	Complete	Nonreassuring	Variable	Encourage open-glottis, "mini-pushes," <sup>42</sup> or "grunting" with contractions
Present	Complete	Bradycardia	Anxious, fatigued	Breathe through contractions <sup>45</sup>
Premature	8 cm or less, firm and not retracting	Reassuring, suspected asynclitism	Uncomfortable with urgency to bear down	Support bearing down at the peak of contraction to provide relief, <sup>3</sup> abdominal lift <sup>41</sup>
Premature	Complete or anterior lip	Reassuring, occiput posterior	Uncomfortable with back pain	As above. Side-lying, same side as fetal back. <sup>41</sup> If cervical edema, see below
Premature	9 cm or more, and cervix is soft and retracting	Reassuring	Behaviors suggest nearing spontaneous birth	Support spontaneous bearing down at the peak of contractions <sup>3</sup>
Uncoordinated	Anterior lip	Reassuring	Uncontrollable urge, may not be well coordinated	Hands and knees position <sup>41</sup>
Strong, uncontrollable urge	Cervical edema, swollen anterior lip	Reassuring	Frustrated, fatigued	Therapeutic rest via narcotic analgesia, position in closed knee-chest, or hands and knees over bean bag <sup>41</sup>
				Continue position changes, support passive fetal descent <sup>4</sup>
				Continue to support spontaneous bearing down
				Continue to support "mini-pushes" <sup>42</sup> or "grunting"
				Continue to breathe through contractions <sup>41,46</sup>
				If maternal relief of discomfort noted, continue abdominal lift <sup>41</sup>
				If backache resolves, continue to monitor progress and descent with spontaneous bearing down
				Support spontaneous pushing in a position of comfort <sup>3</sup>
				Alternate position or support woman in choosing an alternate position <sup>3</sup>
				Monitor cervix at intervals
				Continue position changes, await spontaneous urge to bear down <sup>4</sup>
				Direct bearing down using open-glottis efforts $\leq 6$ s duration <sup>47</sup>
				Hold bearing-down efforts longer but $\leq 6$ s <sup>25,43</sup>
				Bear down with every other or every third contraction with efforts of $\leq 6$ s <sup>43</sup>
				Open knee-chest, climb stairs, lunge, push at the peak of contractions <sup>3,41</sup>
				Attempt squatting, hands and knees positions, avoid supine position <sup>41</sup>
				Vaginal examination to verify, encourage rest, or pushing at the peak of contraction <sup>3</sup>
				Alternate positions frequently <sup>3</sup>
				Notify birth attendant, consider epidural, continue to support therapeutic rest <sup>41</sup>

side-lying or hands and knees position for intrauterine resuscitation and may be encouraged to push with every other or every third contraction (Table 2), thereby enhancing the fetal oxygen reserve during the contractions where the woman breathes through the contractions.<sup>43,44</sup> If a second-stage fetal bradycardia is noted, instruction to have the woman breathe instead of Valsalva push has also been shown to improve fetal response and recovery.<sup>16,24,45</sup> The presence of late decelerations requires intrauterine resuscitation techniques and the involvement of the birth attendant as a priority.<sup>44</sup> However, the use of Valsalva bearing down should especially be avoided when fetal compromise is suspected.

### No urge to push

It is not uncommon for women to reach complete dilatation and experience no urge to bear down. When this occurs, the conditions are not conducive to fetal descent.<sup>3</sup> Therefore, one option is to wait until the woman feels the urge to push and then support her in those spontaneous urges. In this manner, even women without epidurals can experience passive fetal descent and “labor down” the fetus.

The challenge occurs when the woman is not coping with a passive approach. Position changes every 15 to 30 minutes to prevent inertia and promote descent, and fetal head rotation<sup>46</sup> is a strategy that can be employed (Table 2). Another strategy to promote descent and therefore the urge to bear down is to encourage the woman to stand at the bedside and take advantage of gravity and the mobility of the pelvis, which may allow the fetus to get into a more optimal position to facilitate descent.<sup>3,37,41,47,48</sup> An additional benefit is that upright positions are associated with diminished perception of pain.<sup>49</sup> Sitting on a commode has the added advantage of encouraging the woman to empty her bladder. The standing position removes pressure on the sacrum and therefore can increase the pelvic diameters.<sup>48</sup> During contractions, the woman can lean over the side rail and in between contractions stand up straight and rock. Her ability to cope and breathe through the contractions can improve considerably with this active approach. The squatting position presents another option because it increases the outlet diameters of the pelvis and may have facilitated descent to trigger the Ferguson’s reflex.<sup>46</sup> However, most women require significant support and frequent periods of rest to employ squatting during second-stage labor. During each contraction, the nurse can provide constant supportive comments and positive feedback.<sup>7</sup> Asymmetrical positions that also address potential asynclitism (as discussed previously) can be used to pro-

mote passive fetal descent and allow the fetal head time to reach the pelvic point and trigger the woman’s urge to bear down.

There is also evidence that some women resist pushing for various reasons.<sup>50</sup> Holding back was defined by McKay based on evidence from 25 videotaped births and interviews with care providers and postpartum women as withholding pushing efforts for physical or emotional reasons. This holding back behavior was attributed to feelings of embarrassment, lack of readiness to become a mother, or waiting for someone to arrive. It is distinguished from the latent phase of the second stage where there is an absence of the urge to bear down. Awareness of the potential for psychologic barriers to pushing may allow nurses to use therapeutic listening skills that promote readiness rather than imposing rigid and arbitrary direction to push. Intense directions for when and how to push may challenge the woman’s confidence in her ability to give birth.<sup>7</sup>

## CONCLUSIONS

The second stage of labor has been reconceptualized to support physiologic approaches to improve maternal and fetal outcomes.<sup>4,35</sup> This evidence can be brought to the bedside to improve nursing care, even when challenges in labor progress are encountered.

It is imperative for nurses to recognize the value of women’s spontaneous bearing-down efforts and their power to result in progress. Nurses and midwives who remain at the bedside during late first stage and all of the second stage of labor can play a significant role in the type of second-stage labor care laboring women receive. The presence of the nurse and/or midwife provides an opportunity to identify the physiologic onset of the second stage of labor. The nurse or midwife can then acknowledge the cues that the woman experiences and support her responses to them as an alternative to arbitrary directions to push and/or frequent vaginal examinations. The adoption of the physiologic management approach requires knowledge that maternal spontaneous bearing-down efforts will lead to progress and confidence that those efforts will not significantly prolong the second stage. When the second stage progresses normally, the pattern of progression positively reinforces nursing care that supports spontaneous bearing-down efforts. If however, the second stage lengthens, the nurse may be concerned that the woman will be submitted to unnecessary interventions. Therefore, less than optimal progress challenges the nurse to continue to support spontaneous bearing down.

Nursing care that includes directed maternal bearing down in the face of deviations in second-stage progress or fetal condition should be reevaluated based on scientific evidence. Strategies to address these challenges have been presented within a physiologic care framework to avoid the use of Valsalva bearing down. When there is a deviation, reverting to prolonged Valsalva bearing down should be avoided because of the potential to develop the associated negative maternal and fetal outcomes. Nurses and midwives can use the skills of physiologic care even in the face of second-stage challenges and still retain the benefits of the approach.

Strategies to promote a widespread change in second-stage nursing practice have been attempted without great success.<sup>6</sup> In a multisite second-stage labor research utilization project, barriers and obstacles to a change were identified. These included long-reinforced practice patterns of directed pushing among nurses and birth attendants, perception that spontaneous pushing led to prolonged second-stage duration, lack of clarity about how to use or support spontaneous pushing, physician countermanding nursing instructions, as well as individual resistance to change. Nurses

and midwives need to take every opportunity to provide second-stage care in an evidence-based manner to all women, regardless of epidural use. Supportive care strategies, with words of encouragement and information as well as promotion of maternal position changes, are helpful alternatives to ritualistic directions. This type of care can reinforce the messages that the woman is receiving from her body concerning how and when to push.

Nurses and midwives can prepare their patients for a physiologic second stage by describing recognition of the cues that the conditions are conducive to fetal descent. Further, nurses and midwives can describe how they will support women in natural pushing and how that might contrast from media images encountered. Ongoing discussions about physiologic pushing among nurses, midwives, and other providers can include mutual exchange of strategies that they have found helpful. Even in the face of clinical challenges, evidence-based nursing care can help achieve the improved outcomes that have been documented from women's spontaneous bearing-down efforts during the second stage.

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