Benefits of Using an Upright Laboring Position as Compared to Supine in the Second Stage of Labor and the Impact on the Use of Assisted Devices

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Upright Position Compared to Supine in the Second Stage of Labor

Obstetricians often suggest for mothers to lay supine during the second stage of labor. What evidence supports this clinical decision for recommending a specific position? The delivery of a baby is when the second stage of labor ends and the third stage of labor begins when the placenta is delivered (Berta et al., 2019). Berta et al. (2019) states that women in the second stage of labor are at greater risk for assisted deliveries, such as the use of forceps, episiotomies or a vacuum while lying supine. An episiotomy is used to expedite delivery and to create a more controlled vaginal tear. Episiotomies are also used to help release tension of the perineum (Lund et al., 2016). The use of assisted devices increases many risks for the mother and the fetus. The risks to the mother include a higher incidence of episiotomy, perineal tears, and obstetric anal sphincter injury (Lebraud et al., 2021). Even though it's a low risk, an assisted delivery can cause injury to the baby's scalp, bleeding inside the skull and nerve damage (Lebraud et al., 2021).

Problem Statement

There are many risks associated with the use of assistive devices during labor. By informing providers about the benefits of an upright position compared to supine based on current evidence, there may be less risk for harm to the mother and their baby during delivery. Recommendations based on current scholarly research, may also promote provider preferences that are optimal for delivery. The aim of this project is to inform obstetricians, residents, and midwives the advantages of delivering in an upright position. This MSN quality improvement project provides current evidence that suggests sitting in an upright position compared to supine during the second stage of labor, may decrease the need for an assisted delivery.

PICO Question

Research has shown that the upright laboring position may have benefits for women during childbirth, such as reducing the need for assisted devices like forceps or vacuum extraction. In laboring mothers, does an upright laboring position as compared to supine in the second stage of labor decrease the use of assisted devices?

Background and Significance

When the cervix is completely dilated, the second stage of labor begins. Gupta et al. (2017) stated that giving birth in a supine position is chosen out of the convenience of the provider to assist with the birth of a baby. With convenience in mind, many women express that being supine is more painful as well as more difficult while in the second stage of labor. It is suggested that women prefer to be in the upright position to give their pelvis the ability to expand, which will help the baby move down into the birth canal (Gupta et al., 2017). It is important for physicians and midwives to have knowledge of different labor positions. This is crucial to encourage women and their families to make informed decisions regarding their care (Berta et al., 2019).

Assisted devices have many risks for the fetus and the mother. The risks to the mother include a higher incidence of episiotomy, perineal tearing, and obstetric anal sphincter injury (Lebraud et al., 2021). Assisted devices are commonly indicated due to a prolonged second stage of labor and concerning fetal heart rate tracings (Ismail et al., 2020). According to Lund et al. (2014), one of the risks of assisted deliveries is a sphincter injury. An obstetric anal sphincter injury (OASIS) can lead to anal incontinence in up to 50% of women with assisted deliveries (Lund et al., 2016). When a vacuum, forceps or an episiotomy is indicated the risk of a third or fourth degree tear, postpartum hemorrhage and a sphincter injury increases (Ismail et al., 2020). Forceps have been associated with a quicker delivery than the use of vacuum assisted delivery.

However, the use of forceps has increased the chances of neonatal complications such as scalp lacerations, nerve damage and skull fractures (Ismail et al., 2020).

According to Caughey et al. (2014), the elements of a non reassuring fetal heart rate tracing such as decreased variability with recurrent late decelerations, variable decelerations, and bradycardia have been associated with abnormal neonatal arterial umbilical cord pH. Efforts to correct the fetal heart tracing include maternal position changes, fluid boluses, oxygen supplementation and assessment of maternal hypotension. These interventions are also known as uterine resuscitation efforts (Caughey et al., 2014). If these efforts do not resolve the tracing abnormalities, a rapid delivery is indicated (Caughey et al., 2014). Recurrent variable decelerations are associated with umbilical cord compression and late decelerations are associated with placental insufficiency. If decelerations are persistent over the course of labor, it can lead to fetal acidemia (Caughey et al., 2014). Position changes such as sitting upright can alleviate cord compression and increase blood volume to the placenta (Caughey et al., 2014). It is suggested that the upright position benefits the baby and the mother due to the weight of the uterus not occluding the maternal blood vessels (Gupta et al., 2017). When supine, the blood vessels have the potential to occlude, leading to fetal decelerations and the need for an assistant delivery emergently (Gupta et al., 2017).

Assistant devices are indicated with a prolonged second stage of labor due to the increased risk of infection and third and fourth degree perineal tears (Caughey et al., 2014). According to Caughey et al. (2014) a longer duration of the second stage of labor is associated with adverse maternal outcomes. Researchers have found that every hour in the second stage decreases the chances of having a spontaneous delivery and an increased chance of morbidity (Caughey et al., 2014).

The duration of the second stage of labor can decrease while sitting upright due to gravity and the weight of the uterus working together to create stronger contractions (Berta et al., 2019). Stronger contractions in an upright position will help guide the baby towards the birth canal. Having a shorter time while pushing in the second stage enhances maternal efforts. Additionally, sitting upright may assist the fetus to turn if indicated (Berta et al., 2019).

In a systematic review, Gupta et al, (2017), collected data from randomized, quasirandomized and cluster-randomized controlled trials. The trials consisted of pregnant women in
the second stage of labor in any upright position compared with supine or lithotomy positions.

The studies compared the benefits of maternal, fetal, neonatal and caregiver outcomes. The
combined sample size of the reviewed studies included more than 9,000 women. The authors
concluded that there were many benefits to being in an upright position while in labor. The key
benefits according to the study showed that the length of the second stage of labor slightly
decreased as well as the use of assisted devices and episiotomies while in an upright position.

There were also fewer abnormal fetal heart tracings. Unfortunately, there was an increase in
estimated blood loss after delivery of 500 mL and a slight increase of second degree perineal
tears (Gupta et al., 2017).

According to Hemmerich et al. (2019), upright maternal positioning has been shown to increase the pelvic diameter and improve pelvic alignment. Improving pelvic alignment, decreases the risk of shoulder dystocia and the use of assisted devices. A three dimensional pelvic model simulated the pelvis of a squatting pregnant woman and a squatting non pregnant woman. The pelvic model also demonstrated the ligament laxity of a pregnant woman in supine. Ligament laxity has been shown to increase during pregnancy. This phenomenon increases

pelvic mobility to facilitate the birth of the baby in the second stage of labor (Hemmerich et al., 2019).

The study demonstrated substantial movement while in a squatting position that was far beyond being supine. The effects of squatting were more pronounced than non pregnant women most likely due to the increase in body mass while pregnant and the increase in ligament laxity while in a squatting position. Berta et al. (2019) studied that sitting up right is considered a flexible sacral position, which in turn decreases the length of the second stage. The authors stated that the gravity acting on the weight of the baby provides force in the direction of the birth canal compared to towards the laboring women's spine as would be the case in supine (Hemmerich et al., 2019). Including the additional force of gravity, an upright position reduced the association with assisted delivery, and less abnormal fetal heart rate strips (Hemmerich et al., 2019).

Barriers to implementing an upright position might be the use of an epidural and maternal exhaustion. The anesthetic motor block may significantly influence the second stage of labor (Colciago et al., 2019). The epidural can block the natural urge to push. It can make it harder for the mother to guide pushing if she is unable to feel her contractions and the length of the second stage of labor can increase (Colciago et al., 2019). According to Colciago et al. (2019), in an interview with midwives, they stated they do not recommend epidural boluses in the second stage of labor due to the impact on pushing. Another barrier to being in an upright position for extended amounts of time is maternal exhaustion (Hemmerich et al., 2019). Sitting in an upright position for an extended amount of time, is not as sustainable as supine (Hemmerich et al., 2019). Additionally, a third barrier is lack of healthcare provider knowledge to incorporate the upright position during the second stage. Overall, the barriers to implementing an upright position during labor that involve the use of an epidural, maternal exhaustion, prolonged periods

of sitting, and healthcare provider knowledge gaps highlight the need for further research and education in order to promote better outcomes for both mothers and infants.

Theoretical frameworks can be used to help guide clinical improvement projects such as ways to inform providers regarding positioning in labor. Providers should learn and be able to adapt to a new practice based on clinical research, which can be difficult when providers practice based on tradition rather than based on evidence. Implementing an environment that promotes evidence-based patient care, is why theories are beneficial to practice. With the use of the transformative learning theory and the science of unitary human beings, practice can be greatly impacted.

Theory

According to Briese et al. (2020), the transformative learning theory was created as a framework to help understand the complexity of adult beliefs and the impact on teaching. The science of unitary human beings is a fundamental theory that helps healthcare workers understand how incorporating the environment, patient beliefs and preferences has on healing (Gonzalo, 2021). Together these theories will help inform providers who work with laboring women on current literature regarding the impact on positioning in the second stage of labor as well as creating the environment needed to give safe and effective care.

Transformative Learning Theory

The transformative learning theory comes from the fact that adults have acquired a range of experiences that have molded their values, associations, and concepts on how they live life (Briese et al., 2020). According to Mezirow (1997), "Adults have a strong tendency to reject ideas that fail to fit their preconceptions, labeling those ideas as unworthy for consideration" (p. 5). Briese et al. (2020) indicates, change is almost impossible for adults if their viewpoints are

not challenged. When these challenges are accompanied by experiences that are reinforced through repetition is when there is a change to an individual's viewpoint (Brieses, 2020). Simulation can assist in giving experiences to bring about changes in viewpoints. Simulations in healthcare have become an integral tool in many education programs (Briese et al., 2020). The transformative learning theory has mirrored what the simulation process should include. Simulation based learning (SBL) should consist of pre-briefing, an active scenario and debriefing to help prepare for future experiences through active learning. If simulation is not feasible, supplying current literature to providers is another way to challenge provider preferences (Briese et al., 2020).

Science of Unitary Human Beings

The science of unitary human beings (SUHB) views nursing as both a science and an art, which created a model that helps address the environment as a crucial part of the patient's experience (Gonzalo, 2021). SUHB theory uses the environment to help blend science and art to ensure a smooth recovery process for patients (Gonzalo, 2021). SUHB theory challenges the healthcare provider to evaluate how the environment may change the health outcomes of a patient (Gonzalo, 2021). The mind plays a vital role in nursing. Every nurse and doctor must reconcile within themselves the reason why their work is important to them. According to the SUHB, humans are complex and the environment that they create is what really impacts patient care (Gonzalo, 2021). With this use of SUHB, providers can educate patients regarding positions based on current evidence that will optimize labor and their environment.

Theories Influence on Advanced Practice of Nursing

Together, these theories have influenced the advanced practice of nursing by understanding how to learn and understand the complexity of patient care to enhance the safety

and quality of care given. The transformative learning theory has influenced the advanced practice of nursing by acknowledging that adults learn from experiences and their current views being challenged (Briese et al., 2020). Whereas the science of unitary human beings assists APRNs to incorporate an environment that is safe, effective, and promotes a better patient experience (Gonzalo, 2021).

Theoretical Framework Analysis

Supine positions in the second stage of labor have been implemented for many years, but they fail to fit current preconceptions (Alsehemi & Shaban, 2021). Informing healthcare providers about current literature regarding an upright position during the second stage of labor to improve outcomes is warranted. The two theories chosen for the framework of this project are the transformative learning theory and the unitary human beings' theory.

The transformative learning theory focuses on not only the individual's learning experience but the self-reflection with peers (Briese et al., 2020). Creating an in-person simulation that incorporates an upright position in the second stage of labor versus supine can show the impact of positioning on decreasing the use of assistive devices. Based on the transformative learning theory, research should include a visual aid such as a presentation and the chance for participants to evaluate the research, ask questions, judge arguments, and reflect on the experience (Briese et al., 2020). Through self-reflection, the human point of view can change as well as the attitude surrounding the new experience (Briese et al., 2020).

Creating a simulation reenacting the second stage of labor in which those participating have full information, the ability to assess evidence, challenge, and judge arguments creates an environment where the human point of view can change (Briese et al., 2020). The science of unitary human beings allows nurses to assess the environment and the patient as one. When assessing a patient and their treatment plan, the provider can assess any outside environmental

factors that may alter the health and recovery of the patient (Gonzalo, 2021). The science of unitary human beings' theory (SUHB) suggests that a patient's environment and the patient themselves should be considered as one (Gonzalo, 2021). Informing advanced practice providers, such as midwives, and obstetricians how to apply the principles in this theory to help create a labor supportive environment in the delivery room.

Advising healthcare providers will be based on how to promote upright positioning while in the second stage of labor to decrease the likelihood of assistive devices being needed. With proper labor support based on scholarly research, the patient will be in an environment that will help promote the best outcome for delivery.

Theoretical Contribution to APRN Profession

The birth of a baby is an extraordinary time for the mother as well as for the family. It is crucial that a mother's wishes are valued and implemented as much as possible (Alsehimi & Shaban, 2021). Through the transformative learning theory, information to healthcare providers regarding current literature may decrease the use of assistive devices during deliveries, decrease the length of stay and decrease overall costs (Alsehimi & Shaban, 2021).

According to Alsehemi & Shaban (2021), many healthcare providers continue to practice a supine position for their own convenience and disregard a woman's preference and desires. By adjusting labor support options based on scholarly evidence while supporting the patient's preference, the SUHB theory can impact the advanced practice role. Providers will continue to learn by experience and repetition and may change practice based on the evidence presented (Briese et al., 2020).

Theories Implications to Guide Personal APRN Practice

An APRN can use the transformative learning theory to impact practice by helping to understand personal biases and values that may influence patient care (Briese et al., 2020).

Referring to this theoretical framework in practice may open the opportunity to reflect on experiences with peers and ask questions supported by scholarly sources. A future APRN can use the transformative learning theory to help educate peers with a better understanding of how learning can evolve through experiences and depends on the learner's ability to process the new information (Briese et al., 2020).

The science of unitary human beings theory can impact future practice by encompassing two dimensions: nursing as an art and as a science. According to Gonzalo (2021), the use of science and art to better serve people is based on the nature of nursing. The nature of nursing implements scientific knowledge that the nurse brings to practice. Using these two theories will help provide quality and safety for the patient and the expecting family in the delivery room.

Literature Search

Current literature regarding an upright position during labor and the impact it has on the rate of assisted devices were found by CINAHL Complete, Cochrane Library, Google Scholar and PubMed. In CINAHL, upright position in labor or upright birthing position concluded 87 results. Upright birthing position in the Cochrane Library resulted in 3 reviews and 69 trials. In PubMed, the term instrumental vaginal births resulted in 740 articles. To narrow the search, clinical trials were applied resulting in 41. PubMed also had 9 results that were found for terms such as assisted delivery or forceps delivery and squatting position and second stage of labor. Many studies were excluded due to being a systematic review or the increased risk for bias. This review will offer evidence from four different studies to include four randomized control trials (Colciago et al., 2019; Gardosi et al., 1989; Nasir et al., 2007; Racinet et al., 1999; Simarro et al., 2017).

Definitions

The following definitions were used in this project:

- 1) *Squatting position* posture where the weight of the body is on the feet, but the knees and hips are bent (Nasir et al., 2007; Racinet et al., 1999).
- 2) *Episiotomy* a surgical cut made at the opening of the vagina during childbirth, to aid a difficult delivery and prevent rupture of tissues (Nasir et al., 2007).
- 3) Assisted devices the use of forceps or a vacuum to help guide the fetal head out of the birth canal (Racinet et al., 1999).

The main topics being discussed in the literature review is childbirth in a squatting position, the result of decreased use of instrumental deliveries, and the positive impact that positioning has on laboring moms. The population used were patients who were greater than 37 weeks' gestation, presenting in active labor with cephalic presentation (Nasir et al., 2007).

Literature Review

In the literature found, several themes have emerged that are important in supporting this capstone project PICO question that related to the optimal position for the second stage of labor. One important theme is the comparison between upright positions, such as squatting or standing versus supine positions, such as lying on the back and the impact it has on labor outcomes.

Additional themes are the potential for an upright position to decrease the estimated blood loss (EBL) and the need for assistive measures, such as forceps, episiotomies, or vacuum extraction. These themes are significant because they have potential to impact the health outcomes of both mothers and infants during childbirth. As such, exploring these themes can provide valuable insights into the most effective interventions for optimizing childbirth practices.

Labor Position: Upright versus Supine

In all four studies, some type of upright position was implemented for the study group and the control group implemented a traditional supine position (Gardiso et al., 1989, Nasir et al.,

2007, Racinet et al., 1999 & Simarro et al., 2017). Simarro et al. (2017) and Racinet et al. (1999) showed evidence that women found it was easier to push while in an upright position. In contrast, Nasir et al. (2007) found that women often preferred supine due to exhaustion in an upright position. All four studies discuss that an upright laboring position compared to supine may yield better outcomes for the mother and baby (Gardiso et al., 1989, Nasir et al., 2007, Racinet et al., 1999, Simarro et al., 2017). Racinet (1999) and Nasir et al., (2007) implemented a squat upright position and supine. Compared to Gardosi et al. (1989) which implemented multiple upright positions such as squatting, kneeling, sitting, or standing. The four studies discussed did not offer a definition of an upright position to help providers evaluate the evidence. If the studies did define which upright position was used, providers could have more solid evidence to promote certain positions. Regardless, it was found that any upright position that was implemented, there was less likely a need for assisted devices, which in turn promoted better outcomes.

Colciago's (2019) qualitative study conducted in Italy explored the negative opinions of midwives towards the use of supine positioning during the second stage of labor, as it is currently mandated by obstetricians' protocols. The study found that midwives believed that supine positioning could lead to increased maternal discomfort, prolonged labor, and a higher risk of fetal distress. Furthermore, the study revealed that midwives felt a lack of autonomy and were often overruled by obstetricians, leading to the imposition of suboptimal positions.

However, the study suggested that informing healthcare providers about optimal positioning during the second stage could give midwives more autonomy, potentially leading to improved maternal and fetal outcomes. By allowing midwives to choose positions that are most comfortable for the mother and promote effective labor progress, the study suggested that

healthcare providers can facilitate a more positive birthing experience for women (Colciago, 2019).

Specifically, Nasir et al. (2007) concluded that women who adopted an upright position for delivery experienced less pain, perineal trauma and fewer episiotomies and instrumental deliveries than those who delivered in supine. Gardosi et al. (1989) found that transitioning to an upright position when labor progression was slow seemed to be beneficial. Racinet et al. (1999) showed a tendency to decrease the length of the second stage which in turn reduced the use of forceps.

Additionally, it is important to understand that an upright position may not be appropriate for certain medical conditions such as placenta previa or cord prolapse, as it can increase complications (Racinet et al., 1999).

Using any type of upright position versus just one specific position in research can create a deficit in knowledge of understanding which upright position was the most beneficial. Two out of the four studies implemented only a squatting upright position versus supine (Racinet et al., 1999, & Nasir et al. 2007). There was conflicting evidence that the squatting position specifically is theoretically an advantage comparatively to other upright positions due to the effectiveness of uterine contractions, maternal efforts, and increasing the pelvic diameters (Racinet et al., 1999, & Nasir et al. 2007). Overall, the concluding evidence based on the literature indicated that an upright position in general compared to supine may decrease the likelihood of assisted devices during the second stage of labor.

Instrumental Assisted Deliveries

Another repetitive theme from the studies was the emergence of less instrumental assisted delivery with the upright positioned as compared to supine laboring positions during the second

stage of labor. It was found that 11% of patients had a forceps delivery in an upright position as compared to 24% in the supine position (Nasir et al., 2007). Simmaro et al. (2017) reported similar results. They reported 39% instrumental assisted deliveries in supine as compared to 24% instrumental assisted delivery in an upright position. Gardosi et al. (1989) found that 7% of deliveries in an upright position resulted in an instrumental delivery compared to 12% in a supine position. According to Gardosi et al., (1989) there is a clinically apparent reduction of forceps deliveries in an upright position which influenced midwives' attitudes regarding positioning.

The evidence reviewed provides support that an upright position versus supine during the second stage of labor decreases the likelihood for the necessity of assisted deliveries. This is important because it can decrease the possible risks to the mother and the infant during delivery.

Decrease in Estimated Blood Loss

Simarro et al. (2017) found that when women who implemented an upright position decreased the duration of labor and the use of oxytocin. In turn, the amount of estimated blood loss after delivery was decreased. Nasir et al. (2007) also found that a supine position may decrease the effectiveness in pushing which can increase the amount of EBL compared to upright positioning. In contrast, Racinet et al. (1999) and Gardiso et al. (1989) found that the estimated blood loss in both groups were similar with no increase in postpartum hemorrhages in either laboring position. Racinet et al. (1999) and Gardosi et al. (1989) also did not include EBL values comparing between upright versus supine laboring positions. To conclude, there may be a decrease in the amount of blood loss in the second stage of labor for those that choose to adopt an upright position.

According to Gardosi et al. (1989) there was clearly more intact perineum in an upright position. Even though the authors did not find a decrease in the amount of estimated blood loss (EBL), further research should be performed to better measure if there is a difference in blood loss with intact perineum due to the use of assisted devices.

Reliable data regarding the amount of blood loss was not recorded, so objective results are not available. Delivery room observers seemed to notice an increase in the blood loss after interventions such as episiotomies or forceps (Simarro et al., 217). This observation indicates further research is needed (Simarro et al., 2017). If in fact the estimated blood loss is increased for women who have assisted deliveries, there is even more to support an upright position during labor.

Limitations and Strengths

Regarding an upright laboring position versus supine, there are limitations and strengths to each position and the outcomes that have been studied. Understanding the limitations and strengths of studies help guide practitioners to provide safe and more competent care.

Limitations to the studies were that only participants between 37 and 42 weeks of gestation were included (Simarro et al., 2017). Limitations to having an upright position is that it was difficult to obtain for many participants. Many women would begin in an upright position, but due to the length of labor and exhaustion a supine position often promoted rest. Current literature discusses that an upright position can be more difficult for the mother to control her pushing. There are clearly clinical advantages, but further research needs to be conducted. Another limitation is that not one of the studies provided a definition of an upright position. By defining an upright position, it would help give providers more evidence in support of a specific upright position instead of vague terms that may not be well understood.

On the other hand, the main strengths of the studies included is that they offered strong statistical evidence to support the use of an upright position. The studies included women who were motivated to use an upright position as opposed to supine. Additionally, Simarro et al. (2017) and Nasir et al. (2007) discussed the contraindications for an upright position. In four of the studies reviewed, exclusion criteria was provided to help with discrepancies and possible biases. Exclusion criteria was previous cesarean section, less than 37-week gestation, greater than 42-week gestation, hypertensive disorders, and intrauterine growth restriction (Gardiso et al., 1989, Nasir et al., 2007, Racinet et al., 1999 & Simarro et al., 2017).

According to the literature, the use of an upright position during the second stage of labor may help to shorten the duration of the second stage of labor and reduce the need for interventions such as vacuum extraction or forceps delivery (Gardiso et al., 1989, Nasir et al., 2007, Racinet et al., 1999 & Simarro et al., 2017). Additionally, an upright position can help to alleviate back pain and discomfort for the mother, as it allows her to shift her weight and find a comfortable position (Nasir et al., 2007 & Gardosi et al., 1989). Lastly, another strength is that an upright position can also improve the mother's ability to push effectively and be more in control (Racinet et al., 1999).

Gaps in Literature

Currently, the available evidence is limited due to the lack of current research. Originally the research was to be less than five years old. Due to minimal current literature the search was expanded beyond five years. The studies included in this literature review had a small sample size with some conflicting results. Some studies indicated a decrease in blood loss while in an upright position versus supine and other studies did not find a correlation. Some studies discussed the use of episiotomies while some only discussed forceps, or vacuums.

Furthermore, much of the research that has been conducted does not have clear definitions defining what upright position was being used, which can introduce bias and reliability of the findings. The lack of robust, up-to-date research makes it challenging to determine the best position for the second stage of labor and make evidence based on current recommendations. To address these gaps, further research is needed to better understand the benefits and drawbacks of each position to establish the most effective position for maternal and fetal outcomes. To conclude, informing providers about the current literature in hopes to adopt an upright position for their patients may help address these gaps by creating more opportunity for research.

Conclusion

In conclusion, women and their infants are at an increased risk for harm due to the use of assisted devices during the second stage of labor. Current practices are lying supine while pushing in the second stage of labor have shown to increase the risk of an assisted delivery. An upright position may help decrease the need for assisted delivery: forceps, vacuum or episiotomy. Although there is a lack of comprehensive research on this topic, evidence suggests that adopting an upright position during labor can positively impact maternal and fetal outcomes. Several theories support the benefits of an upright position, including the length of labor and its impact of decreasing assisted devices, and the potential to decrease estimated blood loss. Even though there is a paucity of research available for review, there is positive evidence nonetheless to encourage providers to adopt the upright laboring position. Therefore, it is essential for providers to be informed on the current literature that shows the benefits and encourage them to support women who wish to adopt these practices.

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