Healthy Birth Practice #4: Avoid Interventions Unless They Are Medically Necessary

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ABSTRACT

Maternity care in the United States continues to be intervention intensive. The routine use of intravenous fluids, restrictions on eating and drinking, continuous electronic fetal monitoring, epidural analgesia, and augmentation of labor characterize most U.S. births. The use of episiotomy has decreased but is still higher than it should be. These interventions disturb the normal physiology of labor and birth and restrict women's ability to cope with labor. The result is a cascade of interventions that increase risk, including the risk of cesarean surgery, for women and babies. This paper describes the use and effect of routine interventions on the physiologic process of labor and birth and identifies the unintended consequences resulting from the routine use of these interventions in labor and birth.

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INTRODUCTION

Maternity care in the United States continues to be intervention intensive despite substantive evidence that the routine use of intervention without medical indication increases risk for mothers and babies. *Listening to Mothers III* (Declercq, Sakala, Corry, Applebaum, & Herrlich, 2013), the most recent national survey of women's pregnancy, birth, and postpartum experiences, reports that for women who gave

birth from June 2011 to June 2012, 89% of women experienced electronic fetal monitoring (EFM) (66% continuously), 62% received intravenous fluids, 79% experienced restrictions on eating, and 60% experienced restrictions on drinking in labor. Sixty seven percent of women who gave birth vaginally had an epidural in labor and 31% were given Pitocin to speed up their labors. Twenty percent of women had their membranes artificially ruptured. Seventeen percent of women had an episiotomy and 31% had a cesarean. The high use of these interventions reflects a system wide, maternity care philosophy of expecting trouble. There is an increasing body of research that suggests that the routine use

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of each of these interventions, rather than decreasing the risk of trouble in labor and birth, actually increases complications for both women and their babies. In the last decade, the maternal mortality rate has increased, and the cesarean rate continues to be extremely high. Both statistics are cause for alarm. In response, the American College of Obstetricians and Gynecologists (ACOG) released two position papers proposing evidence-based strategies to reduce the cesarean rate and limit interventions in labor and birth (2014, 2019). In 2018, the World Health Organization (WHO) released *Intrapartum Care for a Positive Childbirth Experience*. In 2018, Childbirth Connection and the National Partnership for Women and Children released *The Blueprint for Advancing High Quality Maternity Care through Physiologic Childbearing*. All three publications take a strong stand in support of the physiology of labor and birth and the importance of not interfering in that process without clear medical indication.

The purpose of this paper is to review the literature related to the evidence basis and the outcomes associated with the interventions routinely used in labor and birth in the United States. The findings make the case for the value of maternity care that avoids the use of routine interventions.

NORMAL PHYSIOLOGY OF LABOR AND BIRTH

The physiologic process of labor and birth is largely driven by hormones, and the hormonal orchestration of the process is easily disrupted. Buckley (2015) provides a seminal systematic review of this complex interplay of hormones that prepare the body for birth and then orchestrate the process of labor. In the last weeks of pregnancy the cervix under the influences of increasing amounts of oxytocin and prolactin softens, and may begin to efface and dilate. The uterus becomes increasingly sensitive to oxytocin. This preparation is essential for labor to progress optimally.

During labor increasing amounts of oxytocin increase both the strength and the efficiency of the contractions. The increasingly strong contractions cause increasingly high levels of pain. As women cope with the increasingly painful contractions, increasing amounts of oxytocin are released. If the pain is taken away (for instance, with an epidural), oxytocin levels drop and contractions become fewer and less effective. Most often oxytocin

augmentation is then needed to keep labor moving. If, however, the laboring woman can manage the increasingly painful contractions, the contractions become more frequent and more effective. At some point, when oxytocin levels are high, endorphins are released. Endorphins produce an intuitive, dream-like state and pain perception decreases. This makes coping with the contractions easier. Endorphins in labor are sometimes called “nature’s narcotic.” If the woman requires an epidural and oxytocin augmentation, she does not experience this endorphin release because exogenous oxytocin (pitocin) does not cross the blood–brain barrier.

Catecholamines, the stress hormones, are released if the mother is fearful, or if she does not feel safe and protected. Early in labor, high levels of catecholamines can slow or even stop labor. At the end of labor, however, there is a natural surge of catecholamines that facilitates the quick birth of the baby, even in a tired mother. If the natural, physiological process of labor and birth has not been disrupted both mother and baby have large amounts of circulating oxytocin and catecholamines at the birth. The effect is an alert, eager mother and baby who are ready to greet each other calmly and begin breastfeeding.

Optimal care in childbirth is care that facilitates rather than disrupts the normal physiology. There is substantial research evidence for five birth practices that facilitate the physiologic process: letting labor start on its own (so that mother and baby are ready for labor); freedom of movement (to help women cope with pain, to protect the birth canal and the baby during rotation and descent of the baby); labor support (to decrease fear, enhance emotional and physical relaxation and provide for privacy); spontaneous pushing and birth in upright positions (to facilitate rotation and descent of the baby); and keeping mother and baby together (to facilitate transition of the baby to extrauterine life, breastfeeding, and placental separation) (Goer & Romano, 2012; WHO, 2018). These findings are summarized in healthy birth practice papers by Amis (2019), Crenshaw (2019), Curl (2019), Green and Hotelling (2019), and Ondeck (2019).

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Routine interventions have the potential to interfere with the physiologic processes at every point in labor and birth, leading to a cascade of other interventions, and ultimately increasing risk for mothers and babies. Because of this, optimal care includes avoiding routine interventions unless there is a clear medical indication, the fourth Healthy Birth practice.

ROUTINE INTERVENTIONS

Restrictions on Eating and Drinking

Listening to Mothers III reported that, in the United States, 79% of women were restricted from eating and 60% were restricted from drinking in labor. Restrictions on eating and drinking in labor were based on the observations of Mendelson in the 1940s. Mendelson observed that during general anesthesia there was an increased risk of vomiting and aspiration of stomach contents into the lungs leading to severe lung disease or death. Obstetric anesthesia has changed dramatically since the 1940s. General anesthesia is rarely used, there is greater use of regional anesthesia, and unlike in Mendelson's time, the airway is protected during general anesthesia reducing the risk of aspiration. It's also important to know that the stomach is never empty, and fasting doesn't ensure less acidic stomach contents, so restricting intake does not achieve the intended result of an empty stomach. With advances in anesthesia delivery, it seems logical that there is no longer a need to restrict eating and drinking in labor. In addition, fasting in labor is unpleasant and makes it more difficult for women to meet the demands of labor and may cause longer and more painful labors (Singata et al., 2013).

Singata et al. (2013) conducted the Cochrane systematic review of eating and drinking in labor. The review looked at studies of any restriction of fluids and food in labor compared with being able to eat and drink. Five studies involving 3,130 women were reviewed. Most studies had looked at specific foods being recommended, though one study let women choose what they wished to eat and drink. There were neither benefits nor harms associated with restricting

eating and drinking in labor for woman at low risk for needing anesthesia. There were no studies identified that looked at women who were at high risk for needing anesthesia. Based on the findings, the Cochrane recommendation is that women should be free to eat or drink what they want in labor. Goer and Romano's review of the research literature arrived at the same conclusion (2012).

The WHO (2018) and the American College of Nurse-Midwives (ACNM, 2016) recommend that women eat and drink in labor. Despite the evidence in support of the safety of eating and drinking in labor, the American Society of Anesthesiologists (2017) and the ACOG (2019) continue to recommend that oral intake for low-risk women be restricted to clear fluids.

Intravenous Fluids

Dawood, Dowswell, and Quenby (2013) conducted a Cochrane Systematic Review of the effect of intravenous on length of labor. They too note as background that there is almost no risk of aspiration when general anesthesia is administered today. And since there is no clear evidence of harm associated with oral intake during labor, the practice of restricting eating and drinking in labor should be abandoned; and rather than routine administration of intravenous fluids, they should only be administered for clinical reasons or if the women become ketotic. They note also the potential maternal and neonatal morbidity that may arise from the unnecessary administration of intravenous fluids, including large weight loss of infants whose mothers received intravenous fluids in labor (Chantry, Nonnesen-Rivers, Pearson, Cohen, & Dewey, 2011). The findings of the systematic review did not provide evidence that intravenous use affected length of labor and it did not provide evidence to recommend the routine use of intravenous fluid in labor.

Goer and Romano's review includes studies that suggest that intravenous fluids in labor can cause symptomatic fluid overload and that can decrease uterine contractility. There is also evidence that intravenous fluid that contains glucose, unless given slowly, can cause hyperglycemia in the mother and fetus and hypoglycemia in the newborn (Goer & Romano, 2012). There is also some evidence that breast edema caused by excessive fluids in labor can affect breastfeeding.

There is no evidence basis for the routine use of intravenous fluids in labor and there appears to be

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some risk associated with the practice. WHO (2018), ACNM (2016), and the ACOG (2019) do not recommend the routine use of intravenous fluids in healthy, low-risk women.

Electronic Fetal Monitoring

EFM was introduced and was touted as a way to decrease cerebral palsy and perinatal mortality. Although there was no research to support its value it quickly became a standard of practice. Before that time the fetal heart rate was assessed using intermittent auscultation with a stethoscope. Today intermittent auscultation is most often done using Doppler ultrasound. *Listening to Mothers II* reported that 89% of women had the fetal heart rate assessed with EFM and 66% of women had continuous EFM. Only 11% of women had the fetal heart rate monitored with intermittent auscultation (Declercq et al., 2013).

Randomized controlled trials dating from the late 70s have consistently found no difference in infant outcomes but increased maternal morbidity related to an increase in cesarean surgery in the EFM group compared to intermittent auscultation. Most recently, Alfrevic, Devane, and Gyte (2013) conducted a systematic review of 13 randomized controlled trials comparing neonatal and maternal outcomes in women who had continuous EFM or intermittent auscultation during labor. The trials included 37,715 women. There was no difference in perinatal mortality or cerebral palsy but women who were monitored continuously with EFM were more likely to have a cesarean or instrumental birth. Neonatal seizures were less in the infants exposed to high doses of oxytocin in the EFM groups compared to infants exposed to high doses of oxytocin in the intermittent auscultation groups.

Goer and Romano (2012) in their review also identify the increased likelihood of cesarean surgery and instrument vaginal birth and its failure to reduce the incidence of cerebral palsy. The review also identified that the admission test strip (routine use of continuous EFM for a limited time) increases interventions without improving neonatal outcomes.

EFM disrupts normal physiology of labor by restricting movement and potentially interfering with appropriate labor support as providers and family watch the monitor. It certainly limits women's access to comfort measures like showers, tubs, and birth balls and that ultimately can increase the chance

that she will need an epidural, and a further cascade of interventions.

The increased cesarean rate is probably due, in part, to problems with interpretation. ACOG and SMFM (2014) in *Safe Prevention of the Primary Cesarean Delivery*, note that recurrent variable decelerations appear to be physiologic response to repetitive compressions of the umbilical cord and are not pathologic. This is a marked change in medical thinking. The paper provides an in depth discussion of fetal heart rate patterns and interventions other than cesarean to deal with this clinically. ACOG, in its 2019 update on limiting interventions in labor, recommends the use of intermittent auscultation rather than EFM for low-risk women as the preferred standard of care.

There continues to be discussion in the literature that expresses concern with the failure of obstetricians to abandon the routine use of EFM. Sartwelle (2012) in the *Journal of Legal Medicine* had this to say about EFM:

Despite its ubiquity and acceptance in daily clinical obstetrical practice, there are and always have been some important, esoteric EFM secrets: its scientific foundation is feeble; inter-observer/intra-observer reliability is poor; the false-positive prediction of fetal distress rate is greater than 99%; it has substantially increased the cesarean section rate with attendant mortality and morbidity; and it failed completely in its initial stated promise—reducing by half the incidence of cerebral palsy (CP), mental retardation (MR), and perinatal mortality. Any other medical procedure with such an abysmal pedigree would have gone the way of bleeding by medieval barbers. (Sartwelle, 2012, p. 313)

Obstetricians continue to be concerned with litigation if they do not use EFM but Lent (1999) in the *Stanford Law Review* demonstrates that rather than protecting obstetricians from litigation, having the permanent EFM record may increase risk because of problems with interpretation. She goes on to note that the large body of literature that supports the use of intermittent auscultation rather than EFM should

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compel the courts to at the very least look at intermittent auscultation as equally acceptable.

ACOG's latest practice bulletin on fetal monitoring (2019) notes that given that the available data show no benefit of EFM over intermittent auscultation for healthy women with no complications, they recommend intermittent auscultation as the standard of care for women with no complications as does the WHO (2018). The Association of Women's Health, Obstetrics, and Neonatal Nursing (2008) recommends intermittent auscultation rather than continuous EFM for healthy women with no complications. Despite these recommendations, and despite the clear and compelling evidence that EFM has no benefits and increases risk for women, EFM remains a standard of care.

Optimal care should include intermittent auscultation for low-risk women. Admission test strips should not be done. If there is a medical indication for EFM, telemetry should be used to permit mobility.

Epidurals

Epidural analgesia provides excellent pain relief but it disrupts labor physiology in a number of ways. Without pain, oxytocin levels drop dramatically, and women require intravenous oxytocin (Pitocin). Pitocin does not pass the blood-brain barrier, therefore women with epidurals do not get an endorphin release and the subsequent decrease in pain perception that comes with high levels of endorphins. In addition, relaxation of the pelvic muscles make rotation and descent of the baby more difficult. As a result, there is increased risk for a number of unintended complications.

The Cochrane systematic review of epidural versus nonepidural or no analgesia for pain management in labor (Anim-Somuah, Smyth, Cyna, & Cuthbert, 2018) confirmed that epidurals relieved labor pain better than other types of pain medication but led to more use of instruments to assist with the birth. Cesarean delivery rates did not differ overall, although there were more cesareans for fetal distress in the epidural group. Women who used epidurals were more likely to have a longer birth

(second stage of labor), needed their labor contractions stimulated with oxytocin, experienced very low blood pressure, were unable to move for a period of time after the birth (motor blockage), had problems with fluid retention, and experienced intrapartum fever.

Goer and Romano (2012) systematic review of the research also found that epidural analgesia decreased the likelihood of a spontaneous vaginal birth. In addition they found that early epidural administration appears to increase the risk of persistent malposition of the baby and this could increase cesarean and instrument vaginal births. Epidurals also increased the risk of maternal fever, which has both direct and indirect consequences, including separation of mother and baby and admission of the baby to the neonatal intensive care nursery for evaluation. Epidurals also increase the risk of early breastfeeding problems. "Fentanyl appears to be the culprit" (Goer & Romano, 2012, p. 286). Delaying pushing appears to decrease the instrumental vaginal birth rates; although they continue to remain high and delayed pushing appears to have no effect on the cesarean rate. Upright positioning in second stage may decrease both instrument and cesarean delivery.

In many hospitals, the only option women have for pain relief is the epidural. Once an epidural is started, there is a cascade of additional interventions: intravenous, continuous EFM, and restrictions on movement. Providing a wide variety of pain coping and comfort measures including tubs, showers, unrestricted movement, and labor support, helps women manage labor without needing an epidural (ACOG, 2019). The availability and use of nonpharmacological comfort measures make it possible to delay receiving the epidural until labor is well established. Delaying the epidural until active labor (6 cm) may decrease the risk of both occiput posterior presentations and epidural fever. Based on the available evidence, if an epidural is required low-dose anesthetic only epidurals are recommended. Side-lying and upright positions may decrease the risk of instrument delivery.

Augmentation

Labor can, and often does, take a long time. Women, especially women who are admitted to hospitals early in labor, are likely to experience pressure to move through labor quickly. Until recently the definition of dystocia did not reflect an understanding of just

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how long spontaneous labor can take. The startling high cesarean rate in the United States prompted the ACOG and the Society for Maternal and Fetal Medicine to do a systematic review of the research in an effort to develop guidelines that might reduce the primary cesarean rate (2014). Their review of the research and recommendations based on those findings have the potential to decrease the incidence of augmentation of labor (and induction of labor) and at the same time decrease the cesarean rate.

The most important recommendations relate to the labor curve. The joint statement recommends that The Consortium on Safe Labor data rather than the Friedman standards should inform labor management. Slow but progressive labor in the first stage of labor should not be an indication for cesarean or for medical augmentation. With a few exceptions, a prolonged latent phase (greater than 20 hours in a first-time mother and greater than 14 hours in multiparous women) should not be an indication for cesarean. As long as mother and baby are doing well, cervical dilation of 6 cm should be the threshold for the active phase of labor. Active phase arrest is defined as women at or beyond 6-cm dilatation with ruptured membranes who fail to progress despite 4 hours of adequate uterine activity, or at least 6 hours of oxytocin administration with inadequate uterine activity and no cervical change.

The report also identifies the importance of labor support and specifically mentions the effect of doulas on birth outcomes including cesarean rates. Continuous labor support, including support provided by doulas, is one of the most effective ways to decrease the cesarean rate. The authors note that this resource is probably underutilized.

We are likely to see a drop in augmentation of labor based on these guidelines although it is also likely that change will take some time.

The medical interventions typically used for augmenting a slow labor are amniotomy, pitocin, or both. There are a number of systematic reviews of both interventions.

Amniotomy has been a standard practice and in some hospitals it is done routinely on all women. In the United States, 20% of women report having their membranes ruptured (Declercq et al., 2013); although that number may be an underestimate because often women are unaware that an amniotomy has been done. There are a number of serious although rare risks associated with

amniotomy, including problems with the umbilical cord and fetal heart rate. In addition, once the membranes rupture there is an increased risk of infection. Amniotomy also increases the risk of persistent occiput posterior fetal positions (Goer & Romano, 2012).

A Cochrane systematic review (Smyth, Markham, & Dowswell, 2013) assessed the use of amniotomy in all labors that started spontaneously. There were 15 studies identified, involving 5,583 women. The evidence showed no shortening of the length of first stage of labor and a possible increase in cesarean surgery. There may be a shorter second stage in first time mothers. The researchers conclude that routine amniotomy is not recommended as part of standard labor management and care. Evidence does not support routinely breaking the waters for women in normally progressing spontaneous labor or even when labors are prolonged. Goer & Romano (2012) in reviewing the research also conclude that routine early amniotomy probably increases the likelihood of cesarean surgery and should not be done routinely.

Thirty percent of women in the United States have their spontaneous labors stimulated with exogenous oxytocin (pitocin) (Declercq et al., 2013). Oxytocin augmentation is not without risk. Exogenous oxytocin disrupts the normal physiology of labor. Since exogenous oxytocin (Pitocin) does not pass the blood-brain barrier there is no endorphin release. The stronger, harder contractions are difficult for the mother to manage, and put additional stress on the uterine muscle. In order to manage the very strong contractions epidural analgesia is often given as soon as the oxytocin is started. Epidural analgesia interferes in its own ways with the physiology of labor and adds additional risks for mother and baby.

Active management of labor includes rupturing membranes and then administering Pitocin to stimulate labor. Brown, Paranjothy, Dowswell, and Thomas (2008) in their systematic review evaluating active management for reducing cesarean in low-risk women found a modest decrease in cesarean in the women who received amniotomy and oxytocin if their labors were delayed. A more recent Cochrane systematic review (Wei et al., 2013) of the active management of labor included 14 trials and

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8,033 women and, again, this review showed a modest reduction in the cesarean rate compared with expectant management. The researchers do point out that the trials did not provide sufficient evidence related to outcomes of maternal (e.g., uterine hyperstimulation) or neonatal (e.g., fetal heart rate problems) morbidities, or women's satisfaction with the experience. They also note that continuous professional support and movement and positioning during labor, both care practices that can stimulate a sluggish labor, were limited in both the intervention and the control groups. Another Cochrane systematic review looked at oxytocin versus no treatment or delayed treatment for slow progress in the first stage of spontaneous labor (Bugg, Siddiqui, & Thornton, 2013). This review found that for women making slow progress in spontaneous labor, treatment with oxytocin as compared with no treatment or delayed oxytocin treatment did not result in any difference in the number of cesarean surgeries performed. There were no adverse effects for mother or baby. The use of oxytocin reduced the time to birth by up to 2 hours. The authors point out this might be important to some women. They note that if the primary goal of this treatment is to reduce cesarean surgery rates, then doctors and midwives may have to look for alternative options.

Goer and Romano (2012) identify that early admission in latent labor increases the risk of all interventions and ultimately increases the risk of cesarean. Optimal care, they suggest, should include encouraging women to delay admission to the hospital until they are in active labor (now considered 6 cm dilated). A supportive environment goes a long way to moving a slow labor along. Non-medical interventions such as support, ambulation, rest, and oral intake can also move a slow labor along. There is some evidence that breast stimulation, which stimulates oxytocin release as well as ambulation, can resolve slow progress (Goer & Romano, 2012). It makes sense to use these simple interventions before initiating riskier medical interventions. ACOG (2019) and WHO (2018) agree.

EPISIOTOMY

Seventeen percent of the women in the *Listening to Mothers III* study reported having an episiotomy and ACOG (2016) reports a 12% episiotomy rate. While this represents a significant reduction from the rate of 35% in the *Listening to Mothers I* study (2002), and a dramatic drop

from the nearly 100% episiotomy rate 50 years ago, the rate is still higher than it should be. A systematic review of episiotomy in 2005 suggests that the episiotomy rate could be 10% (Hartmann et al., 2005) and that is the rate that WHO set in 1996. More recently, there is discussion that the rate should be 5% (Leapfrog Group, 2015).

The Cochrane systematic review of selective versus routine use of episiotomy for vaginal birth (Jiang, Qian, Carroli, & Garner, 2017) found that selective policies, rather than routine use of episiotomy, resulted in fewer women with severe perineal/vaginal trauma. Both short- and long-term findings provide no indication of harm for restrictive policies.

WHO (2018) does not recommend the use of liberal or routine episiotomy and recommends physiologic pushing, perineal massage, warm compresses, and “hands on” guarding the perineum as ways to protect the pelvic floor during pushing.

Goer and Romano (2012) in their systematic review of episiotomy found that episiotomy causes more pain than spontaneous tears, causes more healing complications than spontaneous tears, and that episiotomy has no effect on neonatal outcomes. Very importantly, episiotomy does not preserve pelvic floor functioning and may indeed contribute to urinary and anal incontinence.

Optimal care in second stage includes encouraging nonsupine positions, changing positions, spontaneous bearing down in response to an urge to push, discouraging prolonged breath holding, and waiting for a spontaneous urge to push for women with epidurals before actively pushing (ACOG, 2019; Curl, 2019; WHO, 2018).

SUMMARY

There is abundant evidence that the routine use of these interventions has the potential to, and often does, disrupt the normal physiology of labor, and as a consequence, increases the risk of complications. To keep birth as safe and healthy as possible, women should eat and drink in labor, have the baby's heart rate assessed with intermittent auscultation, have access to a wide variety of ways to relieve pain in order to avoid the routine use of epidurals, and give birth in environments where there is an appreciation for the time that labor takes.

A focus on the care practices that facilitate the normal physiologic processes (letting labor start on its own, movement and positioning, labor support,

spontaneous pushing in nonsupine positions, and keeping mother and baby together) and saving interventions for when they are medically indicated has the potential to improve outcomes, and make labor and birth safer, healthier, and more positive for mothers and babies.

IMPLICATIONS

Childbirth Education

It is clear that the routine use of these interventions disrupts the normal physiologic process of labor and birth. It is also clear that the number of interventions increase with early admission to the hospital. This is what women need to know:

- Eating and drinking in labor is not dangerous and, if desired, is beneficial. There is usually no need for intravenous fluids.
- EFM does not make labor safer for the baby and increases the mother's risk of having an unnecessary cesarean.
- Epidurals provide excellent pain relief but that relief comes at a cost. Some of the risks of epidural analgesia can be lessened by delaying the epidural, by continuing to move and change position, and by reducing or eliminating the use of opioids in the epidural.
- Augmentation to speed up a slow labor is rarely necessary. Labor can, and usually does take a long time. Patience, movement and position change, excellent labor support, and eating and drinking are all that most women need to keep labor moving. It also helps to stay at home until active labor (6 cm).
- Episiotomy is harmful and its use should be restricted.

Having a deep understanding and confidence in the normal physiologic process of labor and birth and confidence in her own ability to give birth makes it easier for a woman to let go of the belief that technology, and routine interventions, makes birth safer for mothers and babies. Providing women with “the facts,” including the research, isn't usually enough to change values and beliefs. Storytelling is a powerful way to make that happen. Just as importantly, the childbirth educator, the nurse, and the midwife and physician need to send a clear, consistent message to women. We can't tell women that they have all it takes to give birth simply and then tell them that routine interventions “just in case” make birth safer. The evidence clearly says something quite different.

CHOICE OF HEALTH-CARE PROVIDER AND PLACE OF BIRTH

Women should carefully research options related to care provider and place of birth. There are ethical implications if we either withhold information or lead women to believe that they can have a safe, healthy birth in settings and with providers that routinely interfere in the normal, physiologic process of labor and birth. A high rate of complications and a high cesarean rate should raise red flags for all of us that physiologic birth is not being promoted, supported, or protected.

There is increasing evidence that midwives are most likely to provide optimal care that includes all six Healthy Birth practices, including avoiding interventions unless they are medically indicated (Carlson et al., 2019; Lancet, 2014) and that hospitals that have midwives and an interprofessional model for providing maternity care are also more likely to provide care for women that avoids routine interventions and promotes evidence-based care during labor and birth (Neal et al., 2018). Out of hospital birth settings are most likely to provide optimal, nonintervention intensive care (Goer & Romano, 2012).

EVIDENCE-BASED HOSPITAL POLICIES

Optimal maternity care has at its core a few simple practices (Amis, 2019; Crenshaw, 2019; Curl, 2019; Green & Hotelling, 2019; Ondeck, 2019), including avoiding routine interventions. Hospital policies need to reflect the evidence that identifies those core practices. *The Blueprint for Advancing High Quality Maternity Care through Physiologic Childbearing* (2018) provides specific guidelines for hospital as well as health-care providers.

Change will require the reeducation of many nurses, physicians, and administrators. At the very heart of that education—in fact, what may change the tide—is knowledge of the normal physiologic processes and knowledge of the care practices that facilitate the process including avoiding the routine use of interventions.

Nurses and childbirth educators need to advocate for patients, and empower the women they care for and teach to refuse routine interventions. In a shared decision-making model, women are provided with information including a thorough discussion of the normal physiology of labor and birth and then the benefits and risks of individual interventions based on best evidence. There is a discussion of what is important to the individual woman and then

discussion of the options, alternatives, and challenges. Women make an informed decision that is then supported by the provider and the hospital. Key to the success of this model is the extensive, open, honest discussion (Hersh, Megregian, & Emeis, 2014). Childbirth classes provide the opportunity for honest, back-and-forth discussion. Women are encouraged to explore their own feelings and make birth plans that reflect their preferences. This same extensive, honest “talking it through” needs to happen with her provider before the birth. If there is no agreement the woman needs to consider the option of changing her provider. The nurse who meets the woman in labor also needs to be willing to have the discussion, and support the woman’s choices even if they are contrary to usual care in the institution or if the woman’s choices are not ones that she herself would make. This is an opportunity for nurses to advocate for women and in doing so begin to shake up the system.

CONCLUSION

Optimal care is care that promotes, supports, and protects the normal physiologic processes of labor and birth. Safe, healthy, and positive labor and birth are facilitated by avoiding interventions unless there is a clear medical indication.

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DISCLOSURE

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