Strategies to Facilitate an Optimum Cesarean Delivery Rate

There has been an increasing amount of information published lately on the rising cesarean delivery rate in the United States and consideration of methods and techniques to decrease this rate while promoting the health of mother and infant. The discussion is both national and local. The cesarean section rate is part of the Joint Commission National Quality Measures for Perinatal Care, specifically the cesarean rate for nulliparous women with a term, singleton baby in a vertex position.

The discussion has moved from the professional literature into popular consumer-driven literature with the publication of a Consumer Reports investigation titled “What hospitals don’t want you to know about C-Sections.” Consumer Reports actually published data from individual hospitals and rated the hospitals according to their cesarean rates. The Consumer Reports ratings were based on the cesarean rates for pregnant women who were classified as low-risk. Low risk was defined as women with no previous cesarean and a full-term singleton fetus in vertex position. All parities were included.

As hospitals and other interested parties respond to the Consumer Reports investigation, the obstetrical communities continue to seek the safest route of delivery for mothers and infants. The US Public Health Service set a goal in the Healthy People 2010 document, published in 1998, for a cesarean rate of 15%. The World Health Organization also set a 15% goal in 2010. Warner argues that the absolute cesarean delivery rate should not be used as an obstetrical quality measure but that each healthcare organization should look at the optimization of care processes that will flow into a decreased cesarean rate.

The American Congress of Obstetricians and Gynecologists (ACOG) appears to agree with this approach and published a Joint Obstetric Consensus with the Society for Maternal-Fetal Medicine in March 2014 on the Safe Prevention of the Primary Cesarean Delivery. Efforts to reduce the cesarean section rate have also filtered down to the state level, with materials available to professionals and consumers such as the Wisconsin Association for Perinatal Care Cesarean Reduction Tool Kit.

However, as the investigation from Consumer Reports underlines the differences from hospital to hospital in the same market with the same population, the work to be done to reduce the primary cesarean rate is on the individual unit with working maternity professionals. The ACOG/Society for Maternal-Fetal Medicine (SMFM) Consensus Statement reviews clinical management questions and issues for physicians and gives evidence-based “answers” and suggestions for avoiding primary cesarean deliveries. Table 1 lists the indications commonly given for cesarean section. Table 2 lists interventions suggested to enhance the possibility of vaginal birth. The interventions include some that only physicians can perform such as external cephalic version and operative vaginal delivery. However, some interventions are clearly a partnership among laboring woman, physician or midwife, and bedside nurse. Given the busy nature of many maternity units, the idea of a bedside nurse is an intervention not seen in all settings.

Simpson reviewed the updated evidence about labor management in a recent article in the nursing literature. She points out, as many obstetricians also stress,

Table 1. Indications commonly given for cesarean section

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<thead>
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<th>Indication</th>
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<td>Labor dystocia</td>
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<td>Abnormal or indeterminate fetal heart rate tracing</td>
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<td>Fetal malpresentation</td>
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<td>Multiple gestation</td>
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<td>Suspected fetal macrosomia</td>
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<td>Herpes simplex infection</td>
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that American women are older, have greater body mass indexes, are more likely to have comorbidities, and are more likely to use epidural anesthesia than the women who gave birth in the past. Has labor changed because of these differences in the laboring population? Yes, the supposedly normal labor curve, popularly known as the Friedman curve, is outdated and not applicable to the modern laboring population.

In this environment, how can labor and delivery nurses promote vaginal birth while maintaining a safer labor and delivery experience for mother and infant? An understanding of the contemporary labor curve is the first step in supporting a physiologic labor. Education begins in the outpatient setting by physicians, midwives, and nurses. Encouraging women to stay home when appropriate until labor is established defines labor and creates a beginning to the process and can help avoid induction. This is difficult for nurses and midwives staffing the obstetrical triage unit. Women in latent and early labor are reluctant to be discharged home when they feel that they are in pain and they are ready to be in labor. Nurses with a compassionate attitude can help educate a woman in early labor that home is the best place for early labor and reassure her that a latent stage is safe and normal. A home setting is comfortable with access to the shower and the tub, nourishment of a woman’s choosing, the ability to ambulate as needed, and often multiple support people. Being in the home setting for early labor can help normalize labor.

On the labor and delivery unit, the bedside nurse often performs the hands-on management of labor, interprets fetal monitoring, and communicates with the provider regarding the labor progress. The nurse’s interpretation and presentation of this information can influence the provider’s perception of the labor and the woman’s comfort and confidence in the labor progress. Recently published information reveals that modern labor curves do not match the widely used Friedman curve and may be substantially slower, especially with epidural anesthesia. Bedside and charge nurses with an understanding of the modern labor curve can be judicious in their communication with busy providers who may be managing multiple patients, surgical procedures, and clinic duties. In teaching facilities, nurses are instrumental in reinforcing with obstetrical residents the normality and safety of the modern labor curve.

Longer second stages are also included in the definition of normal labor. The support of spontaneous bearing down efforts and the abandonment of coached “count to 10” pushing methods are within the scope of the nurse to encourage with women in labor, colleagues, and providers.

An understanding of fetal heart rate tracings is basic knowledge for the labor and delivery unit nurse. A category I tracing does not need intervention; however, most fetal heart rate tracings are category II or indeterminate. Category II tracings cover a wide range of patterns and should be closely watched by the nurse. Conservative nursing measures such as position changes can often improve these patterns. Some of the nursing interventions widely used are not supported by the evidence. These include intravenous fluid boluses, supplemental oxygen, and tocolysis. The careful use of these interventions while recognizing that the intervention may not be effective is valuable for the nurse to understand and to communicate to the attending provider.

Previous indications for cesarean section without labor that were recommended by some providers are being reevaluated. Suspected fetal macrosomia, twin gestation, and a patient history of herpes simplex virus should not be considered absolute reasons for cesarean section. Nurses will be providing care for these patients and can help normalize these labors and anticipate and encourage vaginal delivery.

The ACOG/SMFM Consensus Statement notes that increasing the laboring woman’s access to nonmedical interventions in labor can reduce cesarean section rates. Nonmedical interventions are often suggested and facilitated by the bedside RN. These interventions can include ambulation, hydrotherapy, continuous labor support, nutritional intake, and just plain encouragement and cheerleading. The ACOG/SMFM Consensus Statement points out that continuous labor support is an evidence-based and effective means of reducing the cesarean section rate and improving patient’s satisfaction. The Statement concedes that there is no harm in this intervention and it is probably underutilized. Unit and hospital managers can recognize that while this intervention has immediate cost, the longer range costs are decreased with less use of technological resources.

As the cesarean section rate increases in the United States, clinicians are paying close attention to strategies
to increase the rate of vaginal birth while maintaining a safe environment for laboring women and fetuses. Many of the interventions that promote vaginal birth can be initiated and supported by the nurse at the bedside. Nurses can familiarize themselves with current literature, including modern labor curves and second-stage management, and help reach the optimal cesarean birth rate that supports safe birth. Simpson succinctly points out, “Patience is underrated as a patient safety strategy.”

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References
5. Consumer Reports. What hospitals don’t want you to know about c-sections. Consumer Reports. May 2014.