



Cesarean Date:  
3-25-09



# Elective Cesarean Section

Why Women  
Choose It and  
What Nurses  
Need to Know

Historically, cesarean sections have been performed for specific medical indications to ensure the safety of the mother and the baby.

Currently, the definition of elective cesarean section, or cesarean delivery on maternal request, is a mode of delivery requested by a woman when there's no medical indication. The American College of Obstetricians and Gynecologists (ACOG, 2008) and the National Institutes of Health (NIH, 2006) suggest that there's an increase in the number of maternal requests for cesarean section, which is contributing to the increase in the overall cesarean section rate. However, other evidence demonstrates a low occurrence of maternal requests for this mode of birth (Declercq, Sakala, Corry, & Applebaum, 2006; Gossman, Joesch, & Tanfer, 2006). A reason for the difference may be that the number of requests is greater than the actual number of procedures carried out.

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The inability to track elective cesarean sections accurately makes it difficult to confirm whether rates are actually increasing (Weaver, Statham, & Richards, 2007).

With the national cesarean section rate at its highest level than ever before, elective cesarean sections must be examined so that all professional health care groups can agree on whether a woman's request should be granted. This article discusses the factors and implications related to elective cesarean section based on a multidisciplinary literature review. A resolution will be presented that enables effective collaboration between patients and providers in making future health care decisions. It also provides interventions for nurses to use with patients requesting elective cesarean sections.

## Prevalence of C-Section

Both domestically and internationally, the recommended cesarean section rate for safe maternal and neonatal outcomes is 15 percent (Pan American Health Organization, 2002; U.S. Department of Health and Human Services, 2000), a recommendation that has remained constant since 1985. According to the National Center for Health Statistics (Hamilton, Martin, & Ventura, 2007), the rate of cesarean sections in the United States has risen to an all-time high of 31.1 percent in 2006, which is approximately a 3 percent increase from 2005. Determining what proportion of this increase is attributable to elective cesarean

tening to Mothers II survey conducted in January and February of 2006 by Childbirth Connection, a not-for-profit organization that advocates for childbearing women, asked mothers who had cesarean deliveries if they requested the procedure. The results showed that "one mother out of 252 participants with an initial (primary) cesarean reported having had a planned cesarean at her own request with no medical reason" (Declercq et al., 2006). An international estimate of the elective cesarean section rate is much higher, between 4 percent and 18 percent (Lobel & DeLuca, 2007; Wiklund, Edman, & Andolf, 2007).

## Economic Costs

According to the U.S. Agency for Healthcare Research and Quality (AHRQ), in 2005 the average cost of a hospital cesarean delivery with no complications was \$12,544. With complications, the cost increases to \$15,960 (AHRQ, n.d.). These costs include basic hospital charges and do not include expenses related to complications such as infant admission to the neonatal intensive care unit (NICU) and maternal hospital readmission. For that same year, the charge for an in-hospital vaginal delivery was \$6,973, while a delivery with complications rose to \$8,963. When the costs are compared, a cesarean delivery is almost twice the amount of a vaginal delivery.

If the neonate needs to be admitted into the NICU after birth, the average cost ranged from \$1,000 to \$2,500 per day (March of Dimes, 2008). The length of stay in the NICU is dependent on the illness and the neonate's speed of recovery, but can average from weeks to months.

## Risks

Cesarean delivery is associated with an increased risk of maternal and neonatal morbidity and mortality, infection, pain, poor birth experience, delayed contact with the baby, increased length of stay and hospital readmission (Villar et al., 2006). After a cesarean delivery, each subsequent pregnancy has an increased risk of placenta previa, placenta accreta, placental abruption, and rupture of the uterus and, therefore, a repeat cesarean section is preferred by obstetricians (Abushama & Ahmed, 2004; Menacker, Declercq, & Macdorman, 2005). Neonates born by cesarean delivery face an increased risk of respiratory problems, which can lead to asthma in childhood and adulthood (Lobel & DeLuca, 2007). Other risks to the neonate include accidental surgical cuts, and problems with breastfeeding (Childbirth Connection, 2006).

## What the Literature Reveals

We conducted a comprehensive search to review literature on elective cesarean section, primary cesarean section, cesarean section in general and comparison data between vaginal birth and surgical birth. PubMed was our primary search database, and using its controlled vocabulary option (MeSH), we searched

### Bottom Line

- Elective cesarean sections are on the rise with multiple factors as the cause.
- There are conflicting recommendations for this issue among medical practitioners.
- Nurses have a vital role to play in educating women on the risks and benefits of all delivery types.

section is difficult. The absence of this information is evident in both National Hospital Discharge Surveys and in birth certificates, from which national birth data are obtained. A recent study tracking the trend in maternal requested cesarean delivery from 1991 to 2004 concluded that the estimate for such delivery was 5.03 percent for women who delivered by primary cesarean delivery over the entire period (Gossman et al., 2006). The Lis-

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the following key MeSH terms: “cesarean section,” “surgical procedures, elective” and “ethics, clinical or ethics, medical.” Of the 116 articles we found using this search, 30 were found to be most relevant and timely. An Internet search using the Google search engine yielded the Web sites of professional health care and governmental organizations, as well as national statistical data on cesarean delivery rates.

### Historic and Current Indications for C-Section

The origins of the cesarean section are documented throughout history by many early societies such as Grecian, Hindu, Egyptian, Roman and Chinese. The cesarean section was originally a postmortem procedure performed on the mother in accordance with the societal rule that mothers had to be buried separately from their fetuses. The fetus was usually not delivered alive, but those who performed the operation realized that the fetus' chance of survival increased with earlier extraction from the dead mother (Lurie, 2005). Current medical indications for cesarean section are listed in Box 1.

### Reasons Women Elect C-Section

There are several reasons why women choose to have elective cesarean sections (see Box 2). Psychological issues regarding maternal and fetal outcomes are a central theme in this decision-making process. For example, some women choose cesarean section because of their concern for fetal death and/or injury during traditional vaginal birth. Cesarean sections

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are sometimes thought to be more technologically advanced, and thus provide a better guarantee of positive birth outcomes (Weaver et al., 2007). Furthermore, fear over the possible reoccurrence of previous adverse birth experiences with vaginal delivery can be another motivation for electing a cesarean section. The possibility of having to undergo an emergency cesarean section during the vaginal delivery process is another reason women elect cesarean section up front (Armson, 2007). This is a valid concern as the morbidity and mortality rates are highest for women who undergo emergency cesarean delivery.

Additionally, some women request a cesarean section to avoid potential physical consequences after vaginal delivery, such as possible urinary and anal incontinence and pelvic organ prolapse. According to the NIH (2006), there is little significant

#### Box 1

#### Medical Indications for Cesarean Section

- Failure of labor to progress
- Pelvic abnormalities
- Problems with the placenta, such as previa and accreta
- HIV and active herpes simplex
- Multiple gestation pregnancy
- Previous cesarean birth
- Macrosomia
- Nonreassuring fetal heart rate
- Malpresentation of fetus

Source: ACOG (2005)

## Box 2

### Reasons Why Women Choose Elective C-Sections

- Convenience for patient and provider
- Fear of potential physical consequences, such as pelvic organ prolapse and urinary and anal incontinence
- Previous adverse birth experience
- Fear of fetal death during birth
- Fear of needing an emergency c-section

evidence to associate these concerns with any particular mode of delivery, but the lack of public awareness about this information could be a contributing factor in maternal requests for cesarean section. Other motives for elective cesarean section include fear of pain associated with vaginal delivery, preservation of sexual function, convenience of scheduled delivery and provider availability (Weaver et al., 2007).

## Physical and Psychological Consequences of C-Section

Fetal and maternal safety is a central concern in the delivery procedure. One noteworthy benefit of surgical delivery is that the rate of birth injuries among neonates is 50 percent lower with cesarean delivery than for vaginal delivery (Abushama & Ahmed, 2004). Furthermore, cesarean delivery provides considerable protection against perineal laceration and fistulae (Villar et al., 2006) and for the first six months postpartum is associated with a lower risk of urinary and fecal incontinence, and urinary tract infections postpartum (Weber, 2007).

The rates of maternal mortality are low for both cesarean and vaginal deliveries. However, surgical delivery is associated with a mortality rate of up to seven times more than vaginal delivery. In addition, the rate of maternal morbidity is 5 to 10 times more for cesarean than for vaginal delivery, with complications such as infection, venous thromboembolus and hemorrhage (Liu et al., 2007). These women also experienced a longer and more difficult postpartum recovery process, including more exhaustion and lack of sleep (Thompson, Roberts, Currie, & Ellwood, 2002). Furthermore, women reported fertility issues in their subsequent pregnancy attempts (Lobel & DeLuca, 2007).

Readmission rates for cesareans are much higher than those for vaginal deliveries. In examining maternal rehospitalization related to methods of delivery, a study done in Washington State found that readmission rates for cesarean versus vaginal delivery were 17 and 10, respectively, per 1,000 births (Wax, Cartin, Pinette & Blackstone, 2004). The most common reasons for readmission were uterine infections, wound complications and blood clots. A study performed by Thompson et al. (2002) found similar results in which post-cesarean mothers were more likely to be readmitted to the hospital within eight weeks of delivery.

Risks for the neonate are also prominent with cesarean section, with a mortality rate of three times more than with vaginal births (Lobel & DeLuca, 2007). The more common neonatal morbidities with cesarean section include respiratory problems, persistent pulmonary hypertension and delayed neurological adaptation. The inability of the neonate to adapt to the external environment can often result in a higher probability of being admitted to the NICU (Villar et al., 2006). In fact, neonates born by planned cesarean section are almost twice as likely to be admitted to the NICU compared with those delivered vaginally (Kolas, Saugstad, Daltveit, Nilsen, & Oian, 2006). Also, primary cesarean birth is associated with increased risks of preterm labor, stillbirth and low-birthweight neonates in subsequent pregnancies (Armson, 2007).

Care providers must also take into consideration the psychological effects of delivery on the mothers. Women who deliver vaginally tend to perceive their birth experience as more positive than women who deliver by cesarean section (Lobel & DeLuca, 2007). The negative birth experience of elective cesarean experienced by some mothers has been shown to adversely influence maternal-neonatal bonding (Porter, Van Teijlingen, Chi Ying Yip, & Bhattacharya, 2007). This can be attributed to feelings of anxiety and powerlessness during surgical delivery related to lack of support and/or control over the birth process (Por-



ter et al.). Women may feel negatively about cesarean sections if they weren't provided with realistic expectations of a cesarean delivery prior to birth (Lobel & DeLuca).

### Limitations in the Literature

One limitation to performing a literature review on a controversial subject such as elective cesarean section is that with vast amounts of research come conflicting results. We considered the number of studies available as well as the quality and validity of those studies. For example, although most studies conclude that the prevalence of urinary incontinence considerably increases after vaginal birth as compared with cesarean section, some articles state these rates are not clinically significant. Furthermore, as the majority of studies confirm the difference in maternal morbidity and mortality between vaginal and cesarean delivery, a retrospective cohort study conducted by Liu et al. (2007) found significant differences between the two modes of delivery that should be taken into consideration.

### Physicians' Perspectives

In November of 2003, ACOG issued a policy statement approving elective cesarean sections upon demand. ACOG (2003) cites the principle of autonomy in taking the position that providers may ethically perform a cesarean section on healthy women with no medical indication as long as the physician feels it's in the patient's best interest. This approach gives a significant amount of latitude to obstetricians, and, therefore, it's important that they examine their beliefs and ensure that the final decision is a collaborative effort.

International physician groups do not agree with ACOG's position statement and many physicians feel that patient autonomy should not outweigh concern for the ethical principles of beneficence and nonmaleficence. The official position of the International Federation of Gynecology and Obstetrics (FIGO), which includes 113 member societies worldwide, is that "surgical intervention without a medical rationale falls outside of the bounds of best professional practice" (International Federation of Gynecology and Obstetrics, 2007). FIGO asserts that elec-

Other motives for elective cesarean section include fear of pain associated with vaginal delivery, preservation of sexual function, convenience of scheduled delivery and provider availability

#### Box 3

#### Goals of ACNM's REDUCE Campaign

- Use research to demonstrate that elective cesarean section is not as safe as vaginal birth and that repeat cesarean section does not protect against urinary and fecal incontinence in later life
- Encourage providers to discuss all risks and benefits of both modes of delivery so that women can be fully informed
- Empower women to educate themselves about the birthing process by suggesting they read "What Every Woman Should Know about Cesarean Section" (available at [www.child-birthconnection.org](http://www.child-birthconnection.org))

Source: <http://www.acnm.org>

tive cesarean section should only be performed when medically and psychologically indicated to enhance the well-being of the mother and baby and improve outcomes. Although the patient's wishes are taken into consideration, FIGO's main focus remains on patient safety and preventing harm. FIGO presents a more conservative approach to the issue, encompassing a more global perspective in accordance with the World Health Organization recommendations to decrease cesarean section rates worldwide.

### Midwives' Perspectives

The American College of Nurse-Midwives (ACNM) does not support the practice of elective cesarean section, citing a lack of scientific evidence to justify it. Midwives are involved in both traumatic and uncomplicated vaginal deliveries and care for postpartum cesarean section mothers. Thus, they're aware of the consequences of both modes of birth (Berg, 2005). In response to the increasing cesarean section rate, ACNM has launched a campaign called REDUCE (Research and Education to Decrease Unnecessary Cesarean Sections) to raise awareness and lower the number of unnecessary cesarean sections performed in this country (see Box 3). The campaign is intended to encourage women to thoughtfully research their options for care in order to educate and empower themselves to make informed decisions (ACNM, 2006a). The ACNM (2006b) believes that women must have a clear understanding of risks and benefits and that cesarean section benefits are "overstated and the risks underreported" by providers. They attribute the rising cesarean section rate to a misinterpretation of evidence by care providers and by a lack of "respect for short-term and long-term risks of a major abdominal surgery" (ACNM, 2006c).

## Ethical Implications

At the heart of the issue of elective cesarean section is the ethical consideration of whether patient autonomy outweighs the provider's responsibility to do no harm. Autonomy requires the provider to assist the woman in integrating her own priorities, values and fears while not imposing his or her own beliefs into the decision-making process. This provider-patient interaction is guided by the rules of informed consent. For consent to be valid, per Zeidenstein, the three crucial parts of "information, comprehension and voluntariness" must be present in the decision-making process (2005, p. 5). Researchers have stated great concern that providers fail to ensure that all three elements are present before a final choice is made (Gamble & Creedy, 2001). Research on women who elect cesarean section indicates that they're not fully involved in the decision-making process and are not provided with adequate information on what to expect post-operatively (Lobel & DeLuca, 2007). Incomplete disclosure perhaps reflects a paternalistic model of care wherein information is presented in such a way as to sway the decision in the provider's favor.

Ethically, the argument for elective cesarean section should be evaluated on a case-by-case basis. While patient autonomy is essential, it cannot be a sole rationale for elective cesarean section. The ethical debate presents a slippery slope that both the patient and provider must carefully tread. Individuals could argue that if women can choose cesarean section as their mode of delivery, then anyone should have the right to undergo any elective surgery, such as limb amputation. Reliance on autonomy alone, theoretically, could present dangerous consequences if adopted as the status quo.

## Legal Implications

Of particular concern in obstetrics is the high rate of malpractice suits, which leads to higher insurance rates for providers. Of all providers in the medical field, obstetricians experience the highest litigation rate. Malpractice insurance for obstetricians can be so expensive that it has caused some to pursue other specialties (Lobel & DeLuca, 2007). Planned surgical delivery is becoming an increasingly favorable option to providers, as lawsuits surrounding emergency cesarean sections after unsuccessful vaginal delivery are more common than for planned cesareans. This follows the current trend of caregivers practicing "defensive medicine," thus reducing their risk of being sued (Childbirth Connection, 2007). Furthermore, dissatisfaction with the birthing process is associated with a higher tendency to sue and so obstetricians are more likely to perform elective cesarean sections on those who desire them to prevent possible legal repercussions (Lobel & DeLuca). Weaver et al. (2007) questioned 785 obstetricians and found that 67 percent of providers believed that fear of litigation is associated with the rising cesarean section rate. Obstetricians must not be swayed by fear of patients taking legal action as a motivator to grant a maternal request for cesarean delivery; instead, they

should thoughtfully assess individual cases in helping patients decide which mode of birth is most appropriate.

## Implications for Patients

While elective cesarean section empowers the mother by providing decision-making control and convenience, emphasis in the literature is placed on the negative implications of this mode of delivery. Patients make the choice for medically unnecessary surgery believing they will avoid common sequelae associated with vaginal birth, when instead they may be putting themselves at risk for immediate and long-term surgical consequences. This knowledge deficit may be due to providers not supplying their patients with complete information.

Although cesarean sections are believed to be safer now than ever before, they're still considered major abdominal surgery. The longer recovery time required after a cesarean section necessitates the mother to focus on her healing, potentially limiting her ability to care for and bond with her newborn (Lobel & DeLuca, 2007). This, along with other complications, not only has psychological effects on the mother but also affects the family's financial stability due to unexpected medical costs and delay in returning to full functionality.

Elective cesarean section also has implications for family planning. The mother's choice for mode of delivery for subsequent pregnancies is limited due to doctors preferring a repeat cesarean after the primary one has been performed (Cahill & Macones, 2007). Each subsequent cesarean section increases the risk for complications, including hysterectomy. Thus, those hoping to have several children might find themselves unexpectedly forced to change their plan. Therefore, it's crucial that women take this implication into consideration when deciding on mode of delivery.

## Implications for Health Care

In addition to the implications of elective cesarean sections on patients, these nonmedically indicated surgeries are also having a considerable effect on the health care system. With the most common cause of hospitalization in the United States being a woman giving birth (Kazandjian, Chaulk, Ogunbo, & Wicker, 2007), avoidable cesarean deliveries are adding a significant burden to the weight of health care costs, causing major implications for the rapidly rising cost of health care. Cesarean sections can lead to a longer length of stay, divert resources and increase readmission rates postoperatively (Simpson & Thorman, 2005; Thompson et al., 2002). The costs of a sharp increase in elective surgical birth and the possible related sequelae have the potential to jeopardize the economic stability of funding agencies, families and individuals.

## What Can Nurses Do?

As part of the health care team, the nurse should support a lengthy discussion between the provider and the woman to in-

clude a complete description of the advantages, disadvantages, misperceptions and complications of their delivery options. All variables associated with the request for elective cesarean section should be explored, including previous negative experiences and fears, followed by the provision of sufficient information to alleviate unwarranted apprehensions. It's the obligation of the obstetrician to ensure that the patient understands pertinent information relative to her specific situation, ensuring that her rights are being meaningfully protected while she makes an informed voluntary decision. Of particular importance, the woman needs to be informed of the potential long-term consequences of choosing an elective cesarean section, such as no significant benefit to pelvic or sexual health and likelihood of cesarean birth with subsequent pregnancies. Written materials can be provided so that the woman can discuss all the information with her partner and/or family.

After the mode of delivery has been decided, follow-up counseling should be instituted as a therapeutic means of helping the woman further confront and work through her concerns. A recent study done in Norway found that providing a counseling intervention to pregnant women with severe anxiety over childbirth had a significant effect on changing these women's decisions on mode of delivery from cesarean to vaginal birth (Weaver et al., 2007).

From a nursing perspective, the prenatal nurse should assess the mother's familiarity with the different modes of birth to determine if additional information and resources should be recommended. The labor and delivery nurse should assess whether fully informed consent has been obtained, including the knowledge of long-term consequences, and should advocate for the patient when necessary. Lastly, the nurse's role in every stage of pregnancy is to continuously educate the mother about expectations and explore her feelings about her experience. It's also important for nurses to stay current with the literature on elective cesarean section as well as other topics in perinatal nursing.

## Conclusion

Today, cesarean sections in the United States are at an all-time high. This increase is due to the changing attitudes of both caregivers and pregnant women in addition to legal and ethical issues. Although cesarean sections have become increasingly normalized in society, they are associated with significant potential complications to the mother and the baby. Health care providers must explore women's motives behind elective cesarean section and use a combination of both ethics and evidence-based practice to guide them in assisting patients with decision-making. To obtain stronger evidence to justify elective cesarean section, more studies should be conducted comparing it with other modes of birth to determine overall risks, benefits and long-term effects. **NWH**



<http://nwhTalk.awhonn.org>

## Get the Facts

ACNM

<http://www.midwife.org>

ACOG

<http://www.acog.org>

Childbirth Connection

<http://www.childbirthconnection.org>



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