JILL ARNOLD, Co-founder, National Accreta Foundation

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Jill Arnold can recall exactly when she decided to learn more about cesarean birth.

At 37-weeks pregnant, she had undergone an ultrasound indicating her baby would be ten pounds. At nearly 6 feet tall, Jill wasn't surprised that her baby would be big, but the response from the hospital surprised her.

"A midwife called me out of the blue a few days later to tell me that I needed to schedule a cesarean because my baby was too big to birth," Jill recounts.

At the time, Jill asked questions. 'How big is too big to birth? What is the cutoff for baby weight for natural birth versus cesarean? Was the test accurate?' But the questions weren't answered.

"That night, I used my university library access to read whatever research I could find and learned that third-trimester estimates of fetal weight are notoriously inaccurate.

From that point forward, the hospital's goal seemed to be to backfill my record with test after test that might indicate I was high-risk and therefore in need of a cesarean, none of which were grounded in evidence."[1]

Knowing that she was healthy enough to deliver naturally, Jill understood that any invasive surgery, such as a cesarean, also had risks. The short-term risks could include blood loss, infection, venous thrombosis, and even death.[2] Long-term risks included uterine scar rupture, abnormal placentation, increased risk of hemorrhage, even a hysterectomy if complications piled up.[3]

Jill's experience led her to become a notable patient advocate in the world of maternal health. What started with a patient blog on the increase in unnecessary cesareans became a platform. The publication Consumer Reports asked to license her hospital-level cesarean rate data in 2012 after inviting her to speak at the Safe Patient Project Summit in Yonkers, New York.

"It's gone so far beyond just wanting parents to know they have options and to understand that the cesarean rate is way higher than it should be, which might or might not affect them personally. Overuse and underuse of cesarean birth is a patient safety issue, both in the short term and long term," explains Jill.

The increasing number of doctors recommending a cesarean has become the new normal for expectant mothers across the globe. In the United States, nearly one-third of women will give birth via cesarean. In Turkey and throughout Latin America, the average rate of cesareans exceeds 40% of all births. Developed countries such as Canada, Germany, and the United Kingdom have rates that exceed 25%.[4]

The World Health Organization (WHO) says the rates are too high, and that many cesareans are performed unnecessarily. According to the WHO, the ideal rate for cesarean sections should be between 10-15%. More recently, experts from the University of Utah and Providence St. Joseph Health say that the average rates of cesarean should be between 15-20%. Experts like Dr. David Lagrew, the Executive Medical Director of Women's and Children Services at Providence St. Joseph Health, agree that a new, more standardized approach is needed.

"We need to be more structured and disciplined in how we approach labor. For example, when should we intervene? We must do it in a standardized approach while still keeping the patient's preferences in mind," Dr. Lagrew explains.

In the early to mid 1990s, Dr. Lagrew was part of a pilot program in a part of the U.S. where the most cesareans were performed. The program safely reduced a 31.8% cesarean rate by half in just four years by implemening the following guidelines:

- did not admit people too early in labor,
- did not give cesareans too early,
- worked with nurses to learn and implement new labor techniques,
- implemented new methods for coping with pain in labor – not just pharmacological,
- and got midwives and doulas more involved in a hospital setting.

Despite the success, Dr. Lagrew and other experts have seen the cesarean rate in the United States and other countries continue to rise despite the downstream risks. The rapid rise has lead the World Health Organization to send out multiple alerts over the last three years, advising the public that "although it can save lives, cesarean section is often performed without medical need, putting women and their babies at-risk of short- and long-term health problems."[5] Just this year, the WHO warned that women are not being given enough time to give birth naturally resulting in unnecessary interventions.[6]

Dr. Lagrew says it's the staff that determines whether a given hospital will have high or low rates of cesarean sections. "This comes down to leadership. Someone has to lead the staff into this. It's usually easy to find a nursing champion, but it's harder to find a physician. There are fewer of them in a hospital but they are also doing so much, it can seem like another burden," explains Dr. Lagrew.

To help solve this complex issue, Dr. Lagrew and Jill Arnold joined a cross-section of global medical experts in the development of a new Actionable Patient Safety Solution (APSS).

"When the team came together, we didn't want to reinvent the wheel. Instead, we wanted to promote and propagate the standards from major institutions that have already proven to be best practices, said Dr. Lagrew. "The result is that the APSS falls in alignment with the standards from every major institution including the American College of Obstetrics and Gynecologists, the American College of Nurse Midwives and more. If you are using our APSS then you're using and abiding by international guidelines."

And as for Jill, her journey into maternal health activism coincided with her new role as a mom. Less than two weeks after being told she needed a cesarean, she was admitted to the hospital in labor. Five hours later, with help from her doula and the support of a labor and delivery nurse who Jill says was truly motivated for her to give birth vaginally, she welcomed her healthy baby daughter in the world.

[1] Patients' View Institute - PVI. (n.d.). *Jill Arnold's Story: Turning Childbirth into a Career of Studying C-Section Rates*. [online] Available at: https://gopvi.org/blog/jill-arnolds-story-turning-childbirth-into-a-career-of-studying-c-section-rates. [2] Clark, S., Belfort, M., Dildy, G., Herbst, M., Meyers, J. and Hankins, G. (2008). Maternal death in the 21st century: causes, prevention, and relationship to cesarean delivery. *American Journal of Obstetrics and Gynecology*, 199(1), pp.36.e1-36.e5. [3] Tihtonen, N. (2014). [Long-term effects of uterine cesarean section scar]. *PubMed.gov - US National Library of Medicine National Institutes of Health*, (Duodecim;130(5):461-8.). [4] Oecd.org. (2018). *OECD Health Statistics 2017 - OECD*. [online] Available at: http://www.oecd.org/els/health-systems/health-data.htm. [5] Deccan Chronicle. (2018). Women being pushed into unnecessary C-sections, warns WHO. [online] Available at: https://www.deccanchronicle.com/lifestyle/health-and-wellbeing/190218/women-being-pushed-into-unnecessary-c-sections-warns-who.html. [6] Who.int. (2015). *WHO | Caesarean sections should only be performed when medically necessary*. [online] Available at: http://www.who.int/mediacentre/news/releases/2015/caesarean-sections/en/ [Accessed 30 Mar. 2018].