How I Learned to Love Midwifery and Stop Worrying About Episiotomy

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In 1996, the Chair of the Medical Advisory Committee of Children's and Women's Hospital called to let me know that he had received a petition from a group of my family practice department members calling for my impeachment. Their position was that it was a conflict of interest for the chair of a family practice department to be supportive of midwives. "Not to worry," he said. "We plan to ignore it."

This was two years before midwifery became regulated. I had been working on the British Columbia Midwifery Implementation Committee and, soon after that, became a member of a research group studying the safety of home birth in British Columbia.[1] I had formed a group of family physicians who would attend midwife births and be available in their clinics so that preregulation legal issues could be covered.

The members of my department were divided regarding midwifery. Some were fully engaged in collaborating with the developing midwifery group, enjoying the pioneering aspect and the mutual sharing and learning. A few were vocal in their opposition to the "new" discipline: "I am a woman. I have had babies. I can do all a midwife can do and so much more. Why would any pregnant woman choose a midwife when she could have me?" In fact, a few members, on learning that one of their patients decided to go to a midwife to give birth, would discharge the patient from the practice. Fortunately, this was very rare, and most department members accepted the "new kid on the block."

At least, the midwives were tolerated–until the government of British Columbia established a midwifery fee schedule that many family doctors thought diminished their contribution to maternity care. Unfortunately,

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the midwifery financial package was rolled out by the province in a way that almost guaranteed confusion and conflict. Physicians had not been prepared to appreciate the difference between being paid for a "course of care" and being paid piecemeal on a fee-for-service basis for providing prenatal, intrapartum, and postpartum care. Nor did doctors take into account that when midwives attend births, hospital-paid nurses are not utilized. Consequently, doctors (like me) who could see the full picture had a hard time with their colleagues, who at the time felt their own maternity care efforts to be undervalued. For some physicians who provide maternity care, the issue remains unresolved. In the view of others, new models of collaborative care are developing.

The Maternity Care Discussion Group

One organization that encourages collaboration is the Maternity Care Discussion Group, which I established more than 25 years ago. It is the only multidisciplinary maternity care discussion group worldwide. Open and collegial discussions take place among obstetricians, midwives, family physicians, maternity nurses, and others engaged with births. On a typical day, several discussions covering clinical, research, policy, and self-help issues are held. It is rare for me these days to moderate the discussions, as the almost 2,000 members have long ago learned how to dialogue respectfully. Research studies on normal birth are posted, discussed, and criticized. Midwives tell me that this group is the only group with which they can engage in important discussions across maternity care disciplines.

What was I doing messing about with midwives?

In 1964, while I was a third-year student at the Stanford University School of Medicine, I received a 6-month international child health fellowship to study pediatrics at a children's hospital in Addis Ababa, Ethiopia. There I was treated as a fully trained doctor, given a license to practice medicine, and charged with responsibilities far in excess of normal for a student at my level. Greatly involved in my practice and research, I successfully petitioned the dean of the Stanford University School of Medicine to allow me to stay in Ethiopia another year and graduate with the following class.

Midwives were to play a major role in my life as a physician and researcher. When I was taking my turn on duty at night in hospital, working alone with one nurse and 50 sick children, it often got very quiet after the children were "put to bed." I was required to remain on site for the night, but the pediatric hospital was connected to the general hospital, and at these times I would sometimes go through the tunnel connecting the two hospitals and enter the maternity suite, where the midwives would teach me how to "catch" babies.

I was well-trained in pediatrics, but because I had not yet taken the conventional obstetrics and gynecology student rotation at Stanford, what the midwives taught me I saw as normal. The absence of routine episiotomy, the lack of technological interference, and the use of techniques of natural pain relief just seemed right to me. As I had not yet been exposed to what would later be called the medicalization or industrialization of childbirth, I was open to birth as a normal physiological process.

Obstetrics Comes Back to Bite Me

I returned to Stanford University in 1965. On the first day of one of my few remaining clerkships before graduation–an obstetrics and gynecology rotation at Stanford University Hospital–I was just doing what felt right, using the approach that I had learned from the midwives in Ethiopia. I was attending births with supervision and had completed a couple when I felt the firm hand of the Chair of Obstetrics and Gynecology on my shoulder. "Come into my office, Mr. Klein," he hissed. Never having met him before and unable to discern the reason for this invitation, I followed him to his office. After a long silence, he said, "On my service, every woman will receive an episiotomy. And if she does not get one before the birth, she will get one after." The second part of his statement must have been a joke. At least, I hoped it was a joke. He then said, "If you want to practice primitive medicine, you will have to go to the county hospital."

My crime? I was delivering babies without episiotomy (and usually without tears), just as the Ethiopian midwives had taught me. I never thought I was doing anything abnormal, but I was indeed exiled to the county hospital. In the USA, county

hospitals were and are generally free medicine for poor people. The residents run the show, and attending physicians are rarely on scene.

Carrying a sealed envelope and with some trepidation, I presented myself to the chief resident in obstetrics and gynecology. I didn't know what was in the envelope; I presumed it was nothing positive. The chief resident glanced at the letter in the envelope, looked up from his desk, and asked, "So what do you want to do while you are here?" I remember mumbling something such as, "I'd like to deliver babies and study obstetrics and gynecology," to which he asked "Anything else?"

My reply was perhaps prophetic in light of what was to become of me later. "How about me looking after the babies after I deliver them?" Because of my experiences in Ethiopia, it seemed a natural thing to request.

The chief resident was not troubled by my reply, merely stating, "You will have to talk about that with the chief of pediatrics."

Everything was organized in silos. So I presented myself to Chief of Pediatrics Gordon Williams, a respected physician who later became one of the heads of pediatrics at Stanford University Hospital. After I presented my proposal, he said, "Mr. Klein, that's a great idea. Why don't you do that?"

In retrospect, I had no name for what I was doing. I had never seen a family doctor or a general practitioner (GP) during my education at Stanford. Academic family medicine in either the USA or Canada was not invented until the early 1970s. Most GPs took a rotating internship and just started practicing.

Because of the flexibility of the staff at the county hospital, I had a wonderful experience, delivering babies and caring for them in my own general practice program in maternal and child health. I had no frame of reference for general or family practice, so after medical school, I trained as a pediatrician and later as a neonatal care specialist in the USA and Canada. I even ran neonatal intensive care units (ICUs) for years before finally discovering that I belonged in family practice and maternity care.

Episiotomy Surfaces Again

By the late 1970s, we were developing our maternity care practice in Montreal. Given my experience with Ethiopian midwives and my exile to the county hospital for not doing routine episiotomies, it is not surprising that I would question the routine use of episiotomy. I was head of the family practice departments at the Jewish General Hospital and the Herzl Family Practice Centre, where my staff and I trained family practice residents. I had established a small group of family doctors attending births, the first such group at this hospital in 15 years. As midwifery was not yet regulated, we had informal relationships with a few Montreal midwives who were pioneering midwifery before its regulation in Quebec. We did some co-management with a few Montreal midwives, and we and the midwives learned from each other.

The four of us family doctors at the Herzl Family Practice Centre simply did not do routine episiotomies. However, I wanted to go deeper into the history of the procedure. I began reading the main obstetric textbooks of the day. I read each edition of Williams Textbook of Obstetrics published from the 1920s to the 1980s and was astonished to find that not a single word of the short paragraph on the subject of episiotomy had been changed since Joseph B. DeLee advocated the routine use of episiotomy in 1920.[2]

Stimulated mostly by European RCTs that showed routine episiotomy to be of no benefit, I thought seriously about subjecting episiotomy to formal study. I thought it necessary to do a North American trial, as the international trials were all midwifery trials and employed a different type of episiotomy than that used as the North American standard. This made it easy for North American obstetricians to reject the results of these trials as irrelevant. I discussed the situation with Murray Enkin, who was both a friend and one of my mentors. Dr. Enkin's work is seen as the beginning of evidence-based practice in obstetrics, and he was one of the three authors of Effective Care in Pregnancy and Childbirth, which became the bible on how to conduct proper obstetric studies.

I applied for funding for the episiotomy trial to the then Medical Research Council of Canada, which

rejected the proposal as irrelevant. Their obstetric consultants could not understand why the procedure even merited study, as they believed that the benefit of routine episiotomy was well established. (This was my first experience with how conventional wisdom can undercut any studies that contest it. Thus began a long process of getting funded and ultimately published by an establishment that was determined to prevent change.

Our proposed randomized controlled trial (RCT) would involve three hospitals in Montreal and a unique feature: the measurement of pelvic floor functioning by electromyographic perineometry (kegelometry). This procedure results in a permanent record of the strength and pattern of pelvic muscle contraction, adding an additional scientific aspect that would allow us to see how it affects the pelvic floor and perineum (Figure 1). No other trial included this measurement, which I consciously included because I knew that if successful, the results would be more difficult to ignore. Having rejected my application for funding of the episiotomy trial, so I applied to Health Canada. While I was waiting to hear from Health Canada, life intervened.

My Wife Has a Series of Strokes

While my wife, Bonnie, and I were on a summer vacation in Vermont in 1987, she suddenly suffered a series of brainstem strokes due to a congenital malformation. After her emergency surgery, Bonnie was a quadriplegic, on a respirator, and "locked in." She was able to communicate only with eye blinks. I did not know if Bonnie would recover or what deficits she would have if she did recover. While she was in the intensive care unit, I was phoned by an administrator from Health Canada. I had forgotten that I had even applied to Health Canada for funding for a study of episiotomy, and conducting an RCT was the last thing on my mind; I was no longer even interested in the study.

"Why have you not responded to the reviewers?" asked the administrator. I explained my current circumstances. I also told her I thought there was no way I could ever convince the reviewers of the benefits of the study; these reviewers were overwhelmingly negative and expressed bizarre and misogynist views. "Answer the reviewers," she said.

It finally dawned on me that she was saying that Health Canada was prepared to dismiss the reviewers' inappropriate assessments. Health Canada staff knew the study to be needed and were prepared to fund it despite the negative opinions of the reviewers. So I had a great old time telling the reviewers exactly what I thought of their comments and reviews. This was deeply therapeutic for me at a time when I was preoccupied with Bonnie's health. Health Canada gave me everything I asked for.

After the RCT was concluded, the pattern of my struggles to have it published were similar to that of my struggles to get it funded. Many reviewers for the major journals were so inappropriate and abusive in their assessments that in the end it became necessary to make direct contact with the editors, showing them the unacceptable, biased comments of the reviewers. (As I struggled to get the study funded and published, I learned not to take things personally. If you are contesting an apparent reality, don't expect to be loved. A book that I found helpful in this regard was Thomas Kuhn's The Structure of Scientific Revolutions.3) Finally, one editor was so embarrassed that he sent the paper out to be reviewed again and eventually published three papers on our episiotomy study and related issues.[4–6]

The trial showed that routine episiotomy caused the very trauma it was supposed to prevent. The trial's results are credited with contributing to a large reduction in episiotomies in North America. Before our study, episiotomy rates in Canada and the USA were about 65%, and the rate of severe laceration to the perineum into or through the rectum was approximately 4.5%. After the trial, national episiotomy rates fell as low as 12%, and the rate of severe tearing dropped to 1.5%.

Episiotomy As a Window Into Thinking About the Whole System

Like those who believed the world was flat and the sun revolved around the earth, believers in routine episiotomy considered its use to be based on "normal science." Coming from a discipline that saw birth as inherently abnormal, obstetricians fully accepted routine episiotomy as normal, even

essential.

Thomas Kuhn defined "revolutionary science"–as opposed to "normal science"–as the study of "anomalies," or the failure of the accepted paradigm to explain or take into account observed phenomena. In the 1970s and 1980s, beliefs about childbirth were coming under intense scrutiny. Worldwide, many people had come to believe that routine episiotomy did not make sense, but the procedure needed formal study. In the early 1980s, as I struggled to get the episiotomy trial published and when the dominant medical culture wanted the results buried, I thought about how strongly held beliefs came about and the critical importance of timing. It was at this point that I found it helpful to consider my endeavor in the context of "paradigms" and "paradigm shift," both terms coined by Kuhn.

To understand to the genesis of routine episiotomy, I had been reading about the influence of Joseph B. DeLee, who is considered the "father of episiotomy." I was struck by the way that he put the need for a new way of providing protection for the mother and the fetus together with the needs of his evolving professional discipline. DeLee was actually in the process of developing the field of gynecology (a medical-surgical field) into a new discipline called "obstetrics and gynecology."[1]
DeLee's presidential address to the then American

Gynecological Society in 1920 in Chicago proposed a new way–a combination of outlet forceps use and episiotomy–to save babies and the perineum and pelvic floor. By such manoeuvres, obstetricians would wrestle birth away from "incompetent general practitioners and midwives." With impeccable timing, DeLee exhorted his audience to take up this new approach, claiming that since general practitioners and midwives would have neither the tools (i.e., forceps) nor the inclination to use a surgical technique (i.e., episiotomy), the new discipline of obstetrics and gynecology would gain hegemony.

The outcomes of birth for mothers and babies were indeed a problem in the 1920s, especially in the slums of Chicago, where DeLee had founded the Chicago Lying-In Hospital. Maternal and perinatal deaths were everyday experiences. Society needed a new way of looking at birth, and gynecologists needed a strengthened discipline. To accomplish this, they had to scientifically provide a new way of viewing birth–from seeing birth as a natural phenomenon to seeing it as a process fraught with danger, a danger that would be mitigated by their new discipline. And society was ready for this way of seeing birth. Kuhn would say that the old paradigm was about to be shifted; birth would move from home to hospital and be under the control of obstetricians.

My colleague, Janusz Kaczorowski, and I found that beliefs about episiotomy were firmly grounded in a strongly held paradigm of birth. If one knew how practitioners saw episiotomy, one knew how they viewed birth itself.7 In fact, episiotomy became a window through which to see an entire system. Thus, our timing was "on," and so was a rapidly evolving scientific revolution, with obstetrics and gynecology reluctantly becoming evidence based regarding a whole range of procedures in common use.

Today, only a few holdouts still believe that routine episiotomy is beneficial and deny the improvements in perineal and pelvic floor damage that accrued from the abandonment of routine episiotomy. As Kuhn wrote, "A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents die, and a new generation grows up that is familiar with it." While the new generation of obstetricians know that routine episiotomy is inappropriate, another paradigm shift is in progress.8 Only this time, the conflict is between birth by cesarean section (as just another way to have a baby) and physiological birth and its benefits. This debate is representative of a struggle between two warring paradigms.[9]

Working with the Midwives, Living with Bonnie

January 1, 1998, 00:01, I was on duty, backing up the midwives and midwifery in BC was now legal. As usual, I was taking photos to give to parents later; it was my way of keeping occupied and out of the way.

The baby's head was crowning. I asked midwife Camille Bush if I could go home. I told her I was suddenly irrelevant. "Stick around," she said in an effort to recognize our long association. The birth went well, but the baby was breathing a little fast. I

pretended to be useful.

Bonnie and I have been married for more years since the strokes than before them. I am changed, as are our kids, Seth and Naomi, we think mostly for the better. Bonnie is a creative writer, filmmaker, and disability activist. She is autonomous, walks a few steps with canes, drives a scooter, and, like our kids, is sick of hearing about episiotomy.10–12

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