Cutting The Cord

Preface

We are accustomed to having our children born in a hospital, a birthing center or some safely sanitized location.
Worldwide however the vast majority of children, even in our enlightened era, continue to be born at home and frequently in non-sanitary conditions. My initial intention was to write only about my own family's experiences with both home and hospital birthing. I have decided to include some current details about the worldwide scourge that is the disease Maternal and Neonatal Tetanus (MNT) because it is potentially a "home birthing complication."
As members of Kiwanis International, Cathy and I are involved in the global effort to eliminate the tragic occurrence of Maternal and Neonatal Tetanus.
It is estimated that Neonatal Tetanus kills an infant every nine minutes.

This paper entitled, "Cutting The Cord", could be a very short one. Perhaps two paragraphs or so describing the process of separating a newborn from its placenta. It is a short procedure. In the clinical setting, common in modern hospitals, there will be a sterilized pair of specially designed scissors to perform the cutting. The tips of the instrument are completely blunt and there is a semicircular opening in one blade into which the umbilical cord fits and the sharp opposing blade closes down onto it cutting it cleanly without any slipping or sliding because of that special design. With these sterilized sharp scissors, dedicated only for that one purpose, the umbilical cord is easily cut with a sort of crunching sound. A disposable

clamp then is placed onto the short remainder of the cord close to the infant which will ultimately heal to form his navel.

Additionally some people are now having the remaining blood from that cut cord saved in a test tube and sent to be frozen at a special Cord Blood Bank. An individual's stem cells from their cord blood could be medically useful to them in the future.

I ask you now to visualize a newborn child lying here in front of you. He is crying and screaming in excruciating pain. He has a cotton ball taped over each eye because even the light is painful to him. Nothing anyone can do will comfort him or save him from his death within around 7 days of birth. His mother cannot even hold him because of the pain. Sounds are also painful and just touching him causes pain. He has prolonged convulsions that are strong enough to break his bones. The condition that causes this agony and impending death has been around forever. It is Tetanus and it comes from a bacteria commonly found in the soil worldwide. In the world at large there are many births which naturally occur in places where there are no hospitals or clinics. In some of these places the local cultural practices are influenced by folklore and superstitions. The people are very suspicious of new concepts. Germ theory and sanitation are outsider’s

ways and may be threatening to them. For that reason there are more likely to be complications from the acts of childbirth and cutting the cord. Any unsanitary sharp instrument handy is likely to be used to cut the cord. Most times there will be no problem. In the burgeoning populations of many third world communities, offspring are conceived, carried and delivered with tragically limited understanding.

Because of this, infections and diseases occur to them with much greater frequency. They live without the kinds of sanitation and medical attention that we consider necessary and normal. Obstetrical and neonatal complications will portend probable fatal consequences to mother and/or infant with no recourse.

As a former operating room technician in the U.S. Navy I have had experiences assisting in many caesarean section and delivery room births. Even though over time it became a routine process, I always felt it was a privilege to be present and to participate in the miracle that is birthing.

Years later in my own family I have been able to be present for the birth of four of our five children. Even though I was familiar with the process, it is another thing entirely when it is your own family. The physicians did allow me to perform the cord cutting each time. I don't know who cut the cord for

our youngest daughter Lynelle, who was adopted from and born in Seoul, South Korea.

Normally there are very few complications reported from this process of cord cutting in a modern clinical practice. However, Maternal and Neonatal Tetanus has been a significant risk of birthing historically and it still is in countries where there has been no vaccine or even the understanding of the need of one. Tetanus vaccine is given in developed countries as a preventative. If you or I step on a “rusty” nail we will probably get a Tetanus booster shot.

These inexpensive vaccines are now being made available in those regions where the local birthing practices are not going to change anytime soon. A major campaign is in progress through the Kiwanis Internationalorganization. We are in partnership with the “on the ground” resources of UNICEF. The goal is to eradicate Maternal and Neonatal Tetanus (MNT).

Three doses of the vaccine itself costs less than two dollars and is given to the woman over a period of time. The immunity the woman acquires will be transferred to her child if she becomes a mother. Gaining cooperation and compliance for these inoculations is sometimes difficult for many of these

very rural populations. Additionally, individuals will also need to have Tetanus boosters later after their prenatal immunity wears off. According to the World Health Organization the campaign is working.

Increasing numbers of countries are reporting that MNT is being wiped out through these efforts.

The medical community is classically trained to recognize the five cardinal signs of infection. The first four signs are from antiquity and are named from the Latin. Rubor, calor, dolor and tumor. An additional sign, the loss of function, is a 20th century addition to the classical four symptoms. Rubor is redness. Dolor is for pain. Calor is heat. Tumor is swelling. What is the most common tumor known to man? Most people will immediately think it is some form of cancer. The dreaded C word is usually connected to some form of tumor.

So the question translates into what is the most common swelling known to man. Of course pregnancy is this most common tumor.

While pregnancy does share a lot of the classical signs of infection, it should not be confused as being an illness. It is a medical condition, yes, but not sick. Prudence does dictate that adequate prenatal and postnatal screening, counseling and blood tests be done. But these are not done

because a pregnant woman is ill. For the most part they are healthy and so are their babies. Medical evaluations are important for assessing the presence and the progress of a mother's pregnancy as well as their little one's development. We are fortunate in our modern culture to have access to some level of this care.

Early in our marriage most of the people we knew, who were our age, were starting their families. We jokingly blamed those pregnancies on all of the women using the same drinking fountain at church. We got used to the discussions about all things pregnant. Among these were hospitals, breast feeding, maternity wear, prenatal vitamins, thumb sucking, weaning, sharing maternity fashions, diapers, diaper rashes, ointments, immunizations and others with a lot of varying opinions.

We are a medically oriented family as my wife, Cathy, has a Bachelor of Science in Nursing and is a Registered Nurse. I am a licensed General Dentist and prior to my career in Dentistry I served in the U.S. Navy and was trained to be a Hospital Corpsman with additional specialty training as an Operating Room and Delivery Room Technician. I also practiced in California as a Licensed Vocational Nurse for the summer of 1972 before coming to Illinois to attend Dental College.

Our first child, Jeremy was born at Christ Hospital in Oak Lawn and we attended Lamaze classes in preparation. “Natural” childbirth seemed to be a good idea and we thought we would follow all the best practices that we could. It was sometime after our first child was born that we began to hear something new in the “pregnant” discussions among our friends, home birthing. It seemed to me like a “fringe” thing that you might associate with rural or underserved communities (hippies if you will). Perhaps places where hospitals were far away and difficult to get to. We were living in the Chicago area, a place where we have a choice of many well regarded hospitals. Who would even consider having a baby at home and why? I mean really, it is so messy. It should be in a clinical environment with all the latest equipment and technology available, shouldn’t it?

I was really surprised when I heard that Cathy’s close friend was seriously thinking about having a home birth. The first thing I thought was that they were trying to save money. At our young married stage in life we were all wanting to save money. Her friend’s husband worked in construction. Not a bad income from that, but they were not millionaires. I figured when Grandma and Grandpa hear about this scheme, not to have their grand baby at a hospital, they would pop for the “normal” hospital

birthing expenses. I mean, come on now, having a child in today's high-tech, modern, advanced medical/surgical environment has to be the best for mother and baby. And we do all want the best.

As things transpired, Cathy's good friend delivered a healthy baby boy at home. Everything worked out just fine and it was the beginning of a trend, that is at least with my wife and some of her friends.

Very soon we became pregnant again and now the issue became personal and close to home. Of course our first child born was a hospital birth. Cathy had some minor issues with how things went in labor and delivery. I didn't concern myself too much with them because, all in all, we had no big problems. I expected that we would now proceed as before and that we would repeat with a "normal" hospital birth.

Cathy really liked what her friend said about her home birth experience. In short order she wanted us to have a home birth for our developing baby.

It was very awkward for me to contemplate not doing the normal, expected, modern hospital, everything there just in case, kind of birth.

The obstetrical practice that was blazing this "new" trail offered a

seminar for families considering and having questions about home birthing. I was willing to go with Cathy to one of their events where we could be informed and be able to ask questions.

The biggest and most obvious question I wanted answered was what in the world would you do if things go badly at home and you decide that you need to perform a C-section. You are not going to perform surgery on my wife in our bedroom, are you?

They had a very good answer and surprisingly it totally resonated with some of my own personal experiences with cesarean births when I was in the Navy.

As an Operating Room Technician I have been involved with Cesarean-sections and regular deliveries at two different Navy Hospitals.

The answer to my question regarding what if my wife suddenly needs an operating room delivery while we are doing a home birth was essentially the same as if she was having a hospital delivery. That is, when a patient in the hospital is determined to be needing an emergency C-section, the operating room supervisor is paged or notified by telephone. The operating room to be used is identified and the appropriate staff persons are also notified. The sterilized sheets, instruments, doctors gowns and gloves and

anesthetics to be used begin to be located and placed in the selected operating room. This usually takes 25 minutes or more to get it all together, staff, equipment and supplies. Twenty five minutes! The seminar presenter asked us, “can we get your wife to the hospital operating room in 25 or so minutes from your home?” We decided the answer was yes. An ambulance can come to my house and get Cathy to the hospital in the time that it takes a hospital to set up the operating room and be ready for the procedure.

There were also some very good reasons suggested at the seminar to avoid delivering a baby at a hospital. Hospitals are communicable disease centers. Although there are many procedures and protocols which are mandated to minimize the transmission and cross contamination from infected patients, it is a far from perfect system. Even in research laboratories where there are known and specific pathogens being handled, there are accidents and failures in procedures. A question asked by the presenters at our home birth seminar: “Why is it a good idea to take your healthy wife and baby to the disease center in your community?”

There are “superbugs” developing in our world. Antibiotic resistant organisms are being discovered. For various reasons the overuse of antibiotics has fostered the development of these difficult to kill organisms.

As a result these infections are routinely and necessarily being treated at our hospitals. Some organisms are airborne but most are transmitted by touching. Not all staff persons are washing, gloving or decontaminating themselves properly between patients. For healthy people the hospital is a good place to avoid.

Pregnant women are not typically sick patients. Newborns are not typically sick patients. They both however can be very susceptible to illnesses and complications from accidental contamination that can occur in the hospital.

In a note published by the SAFE PATIENT PROJECT:

Overall, hospitals have been dragging their feet when it comes to protecting patients from deadly superbugs, and these bugs are getting smarter and more deadly.

Hospitals still haven't managed to control the spread of superbugs lurking in their buildings such as MRSA (methicillin-resistant Staphylococcus aureus), the single most common source of hospital infections harming about 94,360 people yearly and 18,650 of them dying (confirmed by the CDC); Additionally the CDC estimates the number of C.diff (clostridium difficile) infections to be 453,000 cases and 29,300 deaths in 2015. With limited treatment options, the focus should be on prevention. As experts have known for decades, consistent hand hygiene by healthcare professionals is the first line of defense. Yet clinicians do it only 30% of the time, says Peter Pronovost, PhD, MD. Another problem in healthcare delivery is improper antibiotic use and repeated use, which creates more opportunity for antibiotic-resistant bacteria to grow.

Most of the communicable diseases that patients can contract in the hospital environment are not present in the home. The medical staff persons present at the home birth are limited to one or two. Therefore cross contamination through staff interactions is limited. Imagine how many patients a day are treated by nurses, doctors and staff in a busy hospital. There are many more opportunities through lax attention by staff people to their prescribed preventative procedures to pass on some contamination. Delivering a baby at home gives you what has been called “Home Court Advantage.” At first blush the clinic or hospital may seem clean and sterile. The truth is that mother and baby will have to come home soon. They will be living in their own home environment and dealing with whatever contamination is there.

From the comfort standpoint having a baby at home allows the mother to get up and walk around if she wishes during her labor. She can shower or soak in her owntub. You can do the whole range of normal activities. There will be no intravenous fluids, intrusive staff or noisy neighboring patients. You can have your favorite pizza immediately afterwards. Your family gets to be there.

Many more questions were answered and other issues were discussed. We came away from that seminar encouraged that home birthing might not be so much of a “fringe” idea.

So how long have we been sending our mothers to the hospital for childbirth? Good estimates place the rate of hospital to home births at 50% in the year 1930. With hospitalization insurance and 3rd party payers nonexistent in those days, would it be safe to assume that most of those hospital births in 1930 were to upper income families? A majority of our middle to lower income mothers experienced home birth.

What have been the reasons for hospitalization. I am thinking that people want the best outcome for their loved ones and therefore all medical conditions get the hospital treatment. Germ theory very much revolutionized patient treatment. More positive outcomes were the result of sterilizing, sanitizing and protecting vulnerable persons from germs. The world is a very germy place. To this day antiseptic soap is a very good seller. It seems like a reasonable idea to kill all the germs. The unintended consequences from these good intentions are being addressed as I speak. One example is that antibacterial soap is being removed from the market. We know that some bacteria are useful.

The net costs for home birthing are substantially less than hospital birthing. The hospital becomes a “backup” resource and costs nothing. Insurance companies however focus on one invoice at a time. The doctor’s fee with midwife charges and all associated office visits and house calls tallied to much more than what insurance carriers see for doctors fees in the hospital setting. After all, it is completely personalized and different from traditional hospital births. It is not as efficient as treating several people at a time in a central location. Our experience with the insurance company after our home births was complicated. The services provided by doctors with home birthing are geographically involved and therefore more expensive. We understood that they would be. On balance however there are no hospital expenses. Labor room, delivery room, nursery and patient room are our home. We have that covered with our monthly house payment.

We challenged and fought with our carrier for months and months trying to point out that there were zero hospital bills. I finally gave up. Cathy would not quit and after a lot more correspondence and many more months our carrier relented and did the right thing.

We were happy to have support from our extended family but we recognize that home birthing is not for everyone.

Our first to be born at home was baby Lisa. Things went as expected and it affirmed our decision to try home birthing. After the first week of life however, she developed some destressing symptoms and we rushed her to the hospital.

As it tragically turned out she had a congenitally malformed heart for which, at that time, there was no treatment. We asked that they cease all interventions and within a day she died. As hard as that still is for us we believe that had she been born in the hospital and then diagnosed with a heart defect she would never have been allowed to come home. The short time that we had with her at home was a gift. The doctors did say that her condition probably would not have been detected until her second week of life as the normal fetal circulation process closed down.

Less than a year later baby Laura was also born at home. This time the experience was not as routine. It truly was a dark and stormy night. Preparations were completed as before but circumstances for the attending doctor and midwife were complicated by the weather. Also it had been suggested that during Cathy's labor it might be helpful for her to soak in a warm tub for a while. As she was in the tub, it became apparent that it was time for the birth. With our telephone cord stretched to its limit, I was trying

to call the doctor at the same time as I helped Cathy out of the tub. I had heard about the "mask of transistion" in my training but for the first time I saw it unmistakably on Cathy. That look tells you the baby is coming. After the tub and in bed moments later, I could see the baby crowning and that it had dark hair. When Cathy heard that I could see the baby's head she could hold back no longer and with the next contraction baby Laura slipped into a waiting towel. The bulb syringe cleared her nose of secretions and she was laid on her much relieved mommy's chest. Not too much later the doctor arrived and skillfully finished the process. Bob Herguth's Sun-Times column in a couple days quoted me saying, "Laura was my biggest extraction ever." At this time Laura is married to an airline pilot and lives in Northern Idaho with 3 of our wonderful grandchildren.

Our final homebirth went more as planned. Cathy stayed out of the tub this time, but we added a warm little tub to emerse the newborn. That went very well and our son Joshua to this day loves his Jacuzi's.

It is special to us that our children can drive by a certain house on Sayer Avenue in Burbank, Illinois and say that is where Lisa, Laura and Joshua were born.