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ABSTRACT

This dissertation is a medical ethnography of a nurse-midwifery hospital-based maternity service in an urban American hospital. The research study incorporates on-site observation, interviews, and data collection. The recent transformation of American hospital childbirth is described. Epiduralized birth has become the norm, representing a standardization of the cascade of interventions so often referred to by critics of the system of hospital birth in the United States. The routine use of the epidural has led to a Gleichschaltung of birth where the centrality of the epidural makes necessary a unitary, complex, totalistic set of interventions all of which make up an entirety of interventions that cannot be separated from each other. The policy implications for this fundamental change in American birth are discussed. The history of childbirth and midwifery in the United States is also discussed as well as the culture of the profession of nurse-midwifery. The scientific literature regarding the physiology and ecology of birth, as well as the safety of medications used in epiduralized birth (particularly bupivacaine and pitocin) is analyzed. Finally, the closure of the maternity service observed throughout this ethnographic research is discussed in light of regionalization and centralization of childbirth.

Keywords:

Childbirth; American Nurse-Midwifery; Epiduralized Birth; Gleichschaltung of Birth; Epidural; Augmentation of Labor; Regionalization and Centralization of Childbirth; Medical Ethnography

TURNING THE BOARD BLUE: AMERICA'S EPIDURALIZED SYSTEM OF
BIRTH. A MEDICAL ETHNOGRAPHY

by

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Dissertation
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List of Acronyms

ACA	Affordable Care Act
ACNM	American College of Nurse-Midwives
ACOG	American College of Obstetrics and Gynecologists
AFI	Amniotic Fluid Index
AMP	Albany Midwifery Practice
AMCB	American Midwifery Certification Board
CDC	Center for Disease Control
CNM	Certified Nurse-Midwife
CM	Certified Midwife
CPM	Certified Professional Midwife
DEM	Direct Entry Midwife
EDA	Epidural Administration
EFM	External Fetal Monitoring
IFHP	The International Federation of Health Plans
GBS	Gram Beta Strep
GDP	Gross Domestic Product
HHC	Health and Hospital Corporation
IMR	Infant Mortality Rate
IUGR	Intrauterine Growth Retardation
L&D	Labor and Delivery

MANA	Midwives Alliance of North America
NACPM	National Association of Certified Professional Midwives
NBAS	Brazelton Neonatal Assessment Scale
NCHS	National Center for Health Statistics
NCT	National Childbirth Trust
NHS	National Health Service
NICU	Neonatal Intensive Care Unit
OECD	The Organization for Economic Co-operation and Development
RCM	Royal College of Midwives
VBAC	Vaginal Birth After Cesarean
VIL	Obstetrical Indication List
WHO	World Health Organization

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Preface

I am at once a likely person to write this dissertation and at the same time it is quite unlikely for me to do so. For years I have had one foot in the world of anthropology and the other in women's health and midwifery. Long before this, however, I had been involved in the second wave of the women's movement in the 1970s and part of that involvement included a commitment to change in the area of women's health. At the same time, unlike some of the midwives quoted in this dissertation, I did not become a nurse in order to become a nurse-midwife. I went into nursing as it seemed a secure profession and that is what I needed at the time in my life.

I quickly decided I wanted to make a commitment to women's health, leading me to become first a Women's Health Nurse Practitioner and later a Nurse-Midwife. My clinical work has been at a community health center, Planned Parenthood, a free-standing birth center and a private homebirth practice. A constant in my life has been a commitment to women's health.

When I decided to begin my studies toward a doctorate, I chose a route contrary to that of my colleagues. I was not interested in a nursing doctorate and chose anthropology. I was advised by both nursing colleagues as well as a few colleagues in anthropology that this ethnography could not be done. It took quite a long time but I have proven them all wrong.

As I discuss throughout this dissertation, I bear witness to an amazing transformation in the American way of birth. It is appropriate that I write of this amazing transformation in birth during our modern age because I am old enough to attest to the impact of these changes. Through my own experience I can give voice to the transformations of American childbirth, as well as an

explanation of why this ethnography and childbirth defines a part of my life. As ethnographers we bring our own history, our biases and understandings to our work. We are our experiences and we inevitably bring those experiences with us in everything we do in life, particularly in the case of insider research.

My mother, Elizabeth (Ibby) Moriarity, was born at home in St. Louis, Missouri in 1915, her mother's third child. My grandmother, Wilhelmenia (Minnie) Budde Moriarity was most likely attended by a general practitioner (GP) but she was also likely surrounded by the women in her family – her mother, her sister and sister-in-laws - who in turn would have watched carefully over the actions of the GP. She possibly availed herself of the use of nitrous oxide to help manage the pain of childbirth. She delivered in the privacy and comfort of her own bed. Enough was understood about aseptic technique to have greatly decreased the scourge of puerperal fever. With the development of instrumental delivery, childbirth for my grandmother would have been seen as relatively safe, although still entailing some risk. By this, I do not suggest a romantic view of birth during this era. For poor women and women without support, childbirth still represented a circumstance of dire consequences. Dangerous, illegal abortions were rampant. For my grandmother, childbirth still posed a danger of death although to a much less extent than one hundred years earlier. Childbirth was more seen as something to endure and she ultimately delivered five children. Considering herself done with childbearing, her solution for birth control was to demand separate beds – a demand to which my grandfather reluctantly acquiesced and was a family joke for years.

By 1945, the year my mother delivered her first child, the situation had drastically changed. The war had created a severe scarcity of physicians and the place of birth had moved

rapidly into the hospital. In the hospitals, beds were scarce. World War II figured greatly in how midwifery and childbirth are today culturally and structurally crafted throughout the Western world. It was truly a transformative moment for birth in many countries, with each country arriving at culturally and socially specific public policies to deal with the demands for health care both on the war front and at home.

My mother delivered my eldest brother, her first child, in a hospital ward while my father was still in the military. By her account, it was a highly unpleasant experience. She never talked about the birth itself, as that was not her way. What she did describe to me years later was a dehumanizing, routinized care. “I was in the hospital for five days in a room with perhaps ten other women. We were not allowed out of bed during the entire time. What I remember most was the pain of a full bladder in the morning. It was excruciating. I can still hear the sound of the cart rolling down the hall, a cart from which hung bedpans. The sound of those bedpans clanging against the cart was the sound I was waiting for. It meant relief. It was just awful.”

My mother went on to have ten children and one miscarriage in thirteen years. By her last birth, the country had seen an expansion of hospitals as a result of federal money in the form of Hill-Barton grants. So it was that with that last birth, my mother had a private room. “I thought I had died and gone to heaven”, she said to me. When I asked her if she remembered my birth, she just waved her hand and said, “Oh Maureen. They all just blend together.” After her last baby, her form of birth control was to pace the hallway praying her rosary over and over again in the hopes that my father would ultimately fall asleep. It is no accident that my first work as a Women’s Health Nurse Practitioner was at Planned Parenthood, helping women avoid unwanted pregnancy. It is also no accident that I chose to have one child. For me, birth was a

fact of life. I look at family pictures and know what year it is by the number of children in the picture, who is the youngest, and whether my mother is pregnant. For my own pregnancy, I took a very pragmatic, no nonsense approach. Birth was a healthy state and it never occurred to me that anything could go wrong. I did not see a doctor until well into my second trimester. After all, I was healthy and birth was just a normal state. I felt no need to read books about pregnancy. Yet I also knew that I wanted my birth to be a special experience. I wanted to be in the moment and truly experience the event. I hoped to get through the birth without any pain medicine.

At the same time, I was hearing horror stories from friends. It was 1980. Through the labor stories of other women, I heard about the Friedman's curve, frequent cervix checks and the use of pitocin to move labor along, doctors and nurses ramping up the titration of the hormone resulting in excruciating pain.¹ It seemed that an unusual number of my pregnant friends were having cesarean sections. No one in my family had ever had a cesarean – not my mother, not my sisters, not my cousins. This was outside my experience of what I had seen of childbirth. It is no wonder that with my anxiety I got “stuck at five” and yes, had to have pitocin for a short period of time to jump-start my labor. However, my young family practitioner was not aggressive in her approach and I only received pitocin for a brief period of time. I was laboring against the clock, as determined by Friedman's Curve. The doctor admitted later that she had been sure I would end up with a cesarean.

What I experienced changed my life. It was unexpected. No one had told me of the moment that occurs when this baby to whom you have given birth looks into your eyes. When my son heard my voice his eyes grew wide, focused on mine, and I swear I read his mind. “There

¹ This was the day before IV pumps. Nurses counted “drips” in order to titrate infusion rates. I had one friend who told a story of a doctor coming in saying, “We need to speed things up here and he proceeded to just open up the IV.

you are,” he said to me. “Where have you been?” His mouth began to make sucking motions. I feel in love. There were no shining lights. It was not a spiritual moment. There were no waves of grace gravitating from my son. It was just pure love. It was the relationship. The altered state during transition and the physiologic amnesia that occurs where you forget just how painful the birth had been – it is true. Not for all women perhaps but certainly that is what I experienced.

In the end, my experience was so profound I wanted other women to have the opportunity to experience that moment. It is also why so many nurse-midwives that I have interviewed were called to midwifery. My desire was to give every woman the experience that I had – that every birth is special; every baby is special and deserves love and a mother that has fallen in love with her baby. It is a value I share with the nurse-midwives I have studied. However, so many women come from circumstances that make that experience difficult to obtain.

I am a pragmatic like so many nurse-midwives. Yes, birth is physiologic and works best when undisturbed if possible. I respect birth but I am too aware of the curve balls that birth can send our way to have complete trust in birth. While this dissertation criticizes the intensification of technology as an element of American childbirth, I do not mean to suggest that I am anti-technology. I appreciate technology for the lives that can be saved when used appropriately. At the same time, I do not “trust birth,” a slogan recently taken up by some birth activists. I believe that birth deserves to be respected and the mother treated with dignity.

I had doubts about carrying out this research. The process has been a long one and has been quite a marathon. I had doubts that other students who are first generation PhD can understand. There were long periods of time when I felt that I had overstepped my place in life. Only someone who has felt and thought that self-limitation can understand the pull to draw back

from what you are doing. However, I was all too aware of the importance of the project as well as the lack of recent theoretical contributions to the subject of normal birth and the American system of childbirth. That kept me inspired.

If a researcher truly believes in the work they are doing, there must be a commitment. To recognize that commitment involves coming to an understanding of why this project is significant to others and at the same time to have a self-awareness of why it is important to oneself. A certain degree of self-reflection is imperative. How else can I write and speak with any degree of authoritative voice? Childbirth has consistently been my area of interest throughout my doctoral studies, particularly the American system of birth. I have written extensively about the professional culture of American nurse-midwifery and the role the profession plays in the American maternity system of care. During my studies I have written a book chapter and presented at numerous conferences. However, I was hesitant to make nurse-midwifery the focus of my dissertation work. As a nurse-midwife myself, I was unsure if I had the ability to carry out a research study within my own profession given the methodological and ethical issues that ensued with my insider status. Ironically however, it was my status as an insider, with my professional connections, that provided my ability to carry out this research.

In my research I have drawn on medical research, public policy, history, sociology, and anthropology. So within which discipline does this research reside? Can we place it within the boundaries of a single academic discipline? While laying claim to medical anthropology, my research is quite transdisciplinary. This dissertation also falls firmly within the tradition of ethnography. Participatory observation is the fundamental basis upon which anthropology

defines itself in relation to other disciplines, even as we make use of other methods, both qualitative and quantitative (Frankel and Devers 2000). I will let the reader choose to place my work where they will.

Introduction

This dissertation is based on an ethnographic study of the clinical practice of nurse-midwives² in an American hospital maternity unit at what I call “Community Hospital.” The research was carried out during the years 2010 and 2011. Community Hospital is a small hospital in a medium size city in the United States.³ The name of the hospital remains anonymous, as well as the name of the nurse-midwives who graciously brought me into their circle, allowing me to observe them as they practiced their art and science of midwifery, while also opening up their hearts to me throughout hours of interviews. They did so out of love for their profession of nurse-midwifery and to further their mission to improve the care received by mothers and children in this country. I was continually amazed by their dedication and service to the mothers for whom they gave care even as they face a highly technical system of birth in which they are forced to negotiate between the demands of the system of birth and their personal beliefs. Maintaining anonymity during this account of my observations will enable me to be more unguarded while protecting the midwives with whom I engaged in research.

This maternity setting was unique in that the nurse-midwife service provided 24/7 coverage (nurse-midwives were on site twenty-four hours, seven days a week), the only hospital in the city to provide such a service. They were philosophically committed to physiologic, non-interventive birth - discouraging elective induction of labor and encouraging vaginal birth after

² A small percentage of midwives certified by the American Midwifery Certification Board (AMCB), the certification arm of the American College of Nurse Midwives (ACNM), are not called Certified Nurse-Midwives (CNM) but rather legally practice as Certified Midwives (CM). In my previous writings (May 1996, 1998, 1999, 2000, 2007, 2009; May and Davis-Floyd 2006) I have discussed how the ACNM by statute came to certify in several states the CM. I find the use of the acronym CNM/CM to be unwieldy and so for the purpose of ease to the reader, I use the term Certified Nurse-Midwife (CNM) to include Certified Midwives (CM). In the United States there also exist direct entry midwives (DEM) and Certified Professional Midwives (CPM), who are apprenticed trained in homebirth and have their own history separate from nurse-midwifery, although there is increasing intersection between the two professions. For the purpose of this dissertation I will not delve into the distinctness yet intersection of these two professions except where it illuminates the changes in philosophy and clinical practice by CNMs.

³ “Community Hospital” is a fictitious name for the hospital in which I carried out my research. I can merely state that it was in a medium sized city somewhere in the United States.

cesarean (VBAC). They were proud of what they claimed was an 18% cesarean rate as compared to a national rate of approximately 33%. Water births were available for mothers. However, despite the philosophical beliefs of the nurse-midwives, most mothers chose to avail themselves of highly technical births.

The increased use of nurse-midwives in the United States maternity care system is a key reform for improving health care outcomes of mothers and babies (Gabay and Wolfe 1995a, 1995b; Pew Health Professions Commission 1999). Outcome studies have shown that, when all known variables are controlled for - i.e. socio-economic status and pregnancy risk factors - clinical outcomes of nurse-midwives are equal or superior to that of obstetricians. In other words, a healthy woman with a normal pregnancy attended to by a nurse-midwife throughout pregnancy, including labor and delivery, is more likely to give birth to a full term baby, a baby that is healthy and of normal weight, is more likely to have a normal vaginal delivery, a shorter labor, fewer cesareans, better success at breast feeding, and to have fewer complications (MacDorman and Singh 1998; Rosenblatt et. al. 1997). Furthermore, significant cost savings are associated with nurse-midwifery care and are thought to be due to 1) decreased use of technological interventions such as continuous electronic fetal monitoring, fewer inductions or augmentation of labor, less reliance on epidurals; 2) fewer cesareans; 3) shorter hospital stays and 4) lower payroll costs (Rosenblatt et. at. 1997; Gabay and Wolfe 1987; 1995b).

What accounts for these findings in the outcomes of nurse-midwifery care? What is it about the way that nurse-midwives provide care that results in better outcomes, even when nurse-midwives and obstetricians work in the same clinical setting? These outcome studies merely show that there is a difference in obstetrical and nurse-midwife care but do not explain the phenomenon. I believe that the significant difference revealed by these studies results from

factors that are intangible and difficult to quantify. An imbedded, qualitative approach unique to ethnographic methodology was well suited in an attempt to answer these questions. So much of what is done by nurse-midwives on the clinical level mirrors obstetrical practice and yet it is very different. I set out initially in my research to observe and identify clinical activities and factors that perhaps account for positive outcomes in nurse-midwifery care.

As is common in ethnographic studies, my focus shifted throughout this study. There have been numerous books by academics and activists alike analyzing and critiquing the American way of birth. I did not intend to add to this abundance of work. However, I found that it was impossible to study nurse-midwives out of context of the system of birth in which they negotiate their clinical practice. I also discovered that the critical research in the area of American childbirth is outdated. In this dissertation I aim to provide further understanding as to the extent to which the birth process has been distorted through the progressive intensification of technology. I also hope to provide an understanding of nurse-midwifery as it strives to bring an element of dignity and care to what has become a dehumanized process as well as to expand the profession's position within the American health care system.

What I observed during my fieldwork is a profound change in our system of childbirth that has occurred over several decades, a change of enormous consequence. I was trained as a nurse-midwife in hospital settings but my clinical practice has been in homebirth and birth center. Significant changes have occurred in the seventeen years since I last engaged in hospital birth. The overwhelming use of epidurals⁴ for pain relief, and the inevitable augmentation of labor with pitocin that usually accompanies it, has cemented a mechanized and routinized system

⁴ The epidural is a form of spinal analgesia that involves the administration of a local anesthetic (usually bupivacaine) and a low dose opiate via a catheter that is placed into the epidural space of the spinal column resulting in blocking nerve impulses to the uterus and pelvic region.

of childbirth that is now conceived of as normal.

This epiduralized birth as I call it, a way of birth that was the norm at Community Hospital, and appears to be the norm in most hospitals given anecdotal evidence, is the end result of a progressive use of technology and interventions in the process of birth. For at least three decades, academics and social critiques have used the term “cascade of interventions” to describe a phenomenon we have seen in the American labor and delivery units where one intervention leads to another. This term was accurate in the 1970s and 1980s with the advent of the increasing use of augmentation of labor and external fetal monitoring in response to the adoption of the Friedman’s Curve⁵ by the obstetrical profession. However, what I witnessed in my observations is that we have moved beyond the cascade of interventions, an outdated term that continues to be used by academics and social critics of our system of maternity care.⁶ What I observed was an entirety of interventions, with the epidural at its center – what I call the centrality of the epidural, the epiduralized birth.⁷

The cascade of interventions has been standardized into a complex entirety of interventions, all of which work in alignment with the other, making up a complete whole – a Gleichschaltung⁸ of birth if you will. This is the state of epiduralized birth. Each intervention works together, each one playing an essential, inseparable role in relation to the other. This uniform, totalistic way of birth serves as a complete procedure. If we view normality in the

⁵ Friedman’s Curve refers to a graph, developed by the obstetrician Emanuel Friedman, which provided a visual guide for what he considered to be a normal length of each stage of labor. Based on a small study group of approximately 100 mothers, the graph established a time line for normal labor. It quickly came to be used on labor units as the basis for management of labor resulting in more frequent augmentation of labor.

⁶ A search for “cascade of labor in birth” using Google Scholar resulted in 42,000 hits. When limiting the search to 2014, I received 14,000 hits. As recently as 2012, I heard the notable epidemiologist Eugene Declercq use the term “cascade of interventions” in an academic presentation.

⁷ I cannot lay claim to the term “epiduralized birth.” It was used by one of the midwives I interviewed at Community Hospital.

⁸ The word, Gleichschaltung, although having taken on a political meaning during fascist Germany, actually refers to a mechanical state where all pieces work in concert with the other so that the whole operates in unison. As I will discuss further, this is the state of the epiduralized birth with each intervention serving to create a uniformity of birth.

sense of the meaning of hegemony as practices that have come to be taken for granted in the context of power relations (Van Hollen 2003:15), then I have to say that our system of epiduralized birth can be viewed as occurring within a hegemonic medical system that has redefined the very meaning of human birth.

Throughout this dissertation, I use several terms to describe the transformed system of birth that I observed. Epiduralized birth is a term that I use to describe the entirety of interventions that are made inevitable with the centrality of the epidural. Odent (2002) uses the term, *industrialized birth*, referring to the intensification of technology seen in birth throughout the developed world. Walsh (2006b) refers to assembly-line birth and Fordism to describe highly technical birth. All three terms are close in meaning and I use them all. At the same time, the terms are slightly distinct from the other. Industrialized birth, in the sense used by Odent, refers to the manipulation of the ecology of birth. Assembly-line birth is used by Walsh to describe the factory like conditions of maternity care where birth is routinized, standardized and managed. The epiduralized birth as I describe it in this dissertation makes both industrialized birth and the assembly line of birth possible.

I went back through my old books trying to find where the term *cascade of interventions* originated. I asked the question on a number of midwifery list serves. The closest I came to identifying the origins of the term was Suzanne Arms' (1975[1981]) book *Immaculate Deception*. Interestingly, she does not use the term cascade of interventions. Instead, she describes a merry-go-round of interventions.

Of course not every doctor nor every hospital is so technologically dependent as to subject all normal births to all interferences. The point is that generally one intervention leads to another in a kind of merry-go-round that not only increases risk to the baby, but also strips the birth mother of control of her own birth (Arms 1975[1981]:109).

I wonder if Arms considered the possibility that her term merry-go-round of interventions would in fact become the case for the vast majority of births – a complex of interventions that all fit together as a unitary whole as opposed to a cascade. I also wonder if Arms’ belief that women are “deceived” and “coerced” into a way of giving birth – “an autonomous world of authoritarian rule to which *all* patients must conform if they are to regain their health and return to society (Arms 1975[1981]:63)” - would ring true for many women today who are demanding the very interventions that she saw as a reflection of patriarchy and male control over birth. This view of birth as a reflection of patriarchy and male domination over birth was taken up in academic literature. The fact that women are active agents in decision-making does not contradict the concept that women are also active agents in reproducing patriarchy. However, an emphasis on patriarchy in an analysis of epiduralized birth tends to deemphasize the extent to which mothers are involved in the industrialized birth that we see in today’s labor and delivery units – an industrialized birth that we can problematize and critique while recognizing that it holds an appeal for many women, for many different reasons.

In my description of epiduralized birth and the description I present of mothers demanding induction and epidurals, I can only hypothesize what the access to this technology must represent for the women who received care at Community Hospital, 95% of whom were on Medicaid and most African American. What I see is that the hegemony of modern medicine can look quite different through the eyes of poor women who have vivid historical memories of crushing and dangerous health care disparities. These were women who have vivid memories of being denied epidurals while women of means had ready access. The problem, as I see it, is that the mothers who are engaged in making decisions for their care are not provided complete information that the very technology they see as bringing equality has not been proven to be safe

and based on some studies may be dangerous to both their baby as well as to themselves. Additionally, given the reality of daily life for most mothers, including those at Community Hospital, the desire for interventions such as inductions can be quite rational. It is an irony that the physiologic birth advocated for by nurse-midwives has become a privilege for many mothers. Work, transportation, and the lack of social support – these are examples of real factors that play into the decision making of today’s mothers many of whom adamantly demand induction of labor.

From my observations, women in general do not see themselves as being held “hostage” by their fetus as described by Bridges in her 2011 ethnography, *Reproducing Race. An Ethnography of Pregnancy as a Site of Racialization*. That is not how women appear to experience their relationship to birth technology. Bridges herself describes the excitement with which mothers approached ultrasounds. Each and every ultrasound represents proof that their baby is healthy and alive. The tragedy is that the proof of a baby’s health that has traditionally been held in the mother-baby-connection is lost - the feel of the baby’s rhythms, knowing when it is asleep, feeling its vigorous kicking when it is awake, having the awareness that the baby responds to noises around it, placing one’s hand over your belly and feeling the baby move in response. These mother/fetus interactions no longer represent enough proof that a baby is alive and well. We no longer trust our own body to tell us that the baby in fact exists. For this we rely on an ultrasound picture.

Epiduralized birth represents a crisis in our relationship to the self and the transcendental aspects of life, a modern crisis in the very meaning of life - a conflict described by Charles Taylor in *A Secular Life*. Taylor (2007) describes this crisis of self as a lack of “fullness” in the secular world that we all struggle to rediscover. “We have moved,” says Taylor, “from a world

in which the place of fullness was understood as unproblematically outside of or ‘beyond’ human life, to a conflicted age in which this construal is challenged by others which place it (in a wide range of different ways) ‘within’ human life (Taylor 2007:15).” Life was simpler when construed through the certainty of Christian doctrine. Birth was God’s will and we bowed to it.

The question for us now is this: How do we as modern humans experience the emerging of new life into this world? For some romanticists, birth is a moment when a baby is born coming out “into vibes full of crystal clear life force (Gaskin 1975:252).” For others, it is a Kodak or, more recently, a Twitter or iPhone moment, a time of joy and yet an event to share with the world, to feel important and special as an individual in this world for just that one moment; a moment to stand out from the crowd rather than experience and be in the moment. For others, birth is oppression – “oppressive power structures set up by nature and reinforced by man (Firestone 1970:23).”

I wonder if the mothers I observed, so many availing themselves of every birth intervention available including the ever increasingly use of in vitro fertilization, would consider herself either a radical feminist or the philosophical daughter of a radical feminist? For most, the technology is available; why not use it? As one midwife confided to me. “Both of my daughters had epidurals with their birth. Their attitude was, ‘Why *would* anyone want to feel pain?’ ”

I also wonder if the young mothers I observed recognize that their embrace of dehumanizing technology, technology that promises a birth that need not be felt nor experienced in any way that is remotely natural or existential, flows from the radical feminism of Shulamith Firestone. Firestone was after all the one who first suggested that “natural is not necessarily a ‘human’ value’ (1970:18)” and eschewed the very physicality of birth. “Artificial reproduction” presented the possibility of true equality of the sexes. Through technology, it would be possible

for men to carry the “burden” of childbirth. It was through technology that women would be liberated from the fundamental oppression created by our biological status as breeders.

“Pregnancy is barbaric,” Firestone asserted. “Pregnancy is the temporary deformation of the body of the individual for the sake of the species (1970:188).” I wonder if Firestone, before her death, ever considered that the very technology she advocated as liberating had brought about the “age of the fetus” (Bridges 2011): an alienating, mechanized separation of the maternal-fetal unit.

One midwife said to me, “The fundamental problem is that we have taken what is a 24/7 human process and have tried to turn it into a nine to five business.” Cohen and Esner said essentially the same thing decades ago.

Problems arise... when we interfere with Nature’s plan, when we egotistically believe that we have a design that surpasses the original, and when we believe that our technology can produce a birth process superior to Nature’s own. When we become so confident [sic] as to believe that we can reproduce and redesign such a complex event as birth, we are assuming that we can, indeed, play God. ... We believe that birth requires teamwork among mother, uterus, and baby, and that all three know instinctively how to work together to complete the process...(1983:1, 3).

Thirty years have passed since these words were given to us in the seminal book *Silent Knife* and during that time we have seen increasing intensity in the use of technology and an “epidemic” of cesarean sections, a word used by numerous writers. Yet despite all the research and activism, the pace of the use of technology in birth has continued unabated. It is very possible that we have engaged in an enormous human scientific experiment over the past forty years and the stakes are quite high. As prophetically stated by Cohen and Esner (1983:3) in their book, “We see a fascination with technology that may someday actually destroy the blueprints for natural birth.”

Doing Institutional Research

As is often the case in ethnography, my research evolved into realms I would not have anticipated. Initially, I designed my research to observe the characteristics of maternity care provided by nurse-midwives. It slowly shifted to include my observations on how childbirth is carried out in a hospital setting by these nurse-midwives. I soon realized that the clinical practice I observed represented enormous changes that have occurred in labor and delivery. In my interviews, midwives insisted that the epiduralized birth environment I observed was not unusual. The course of this dissertation was changed by the realization that I was observing a childbirth system very different from what existed even two decades ago. I had to look at the impact of the intensification of technology on both mother and infant, observations that are later described.

Community Hospital was of interest as a research site for a variety of reasons. I have previously described that the maternity service was a full-scope nurse-midwifery service. The service was a relatively small unit, utilizing a team approach in both the prenatal and labor delivery unit and only providing care for pregnancies deemed low risk, normal. The nurse-midwives at Community Hospital were proud of their excellent outcomes despite serving a high-risk population. Their population was not high-risk for medical reasons as the service aggressively transferred out pregnant women with medical conditions considered high-risk. Rather, their clientele were overwhelmingly poor and women of color, many of who live in difficult circumstances. The service received 95% of its reimbursement through Medicaid. All of these characteristics made the maternity service at Community Hospital an interesting setting for the observation of nurse-midwifery in a hospital setting. By observing the care provided by nurse-midwives, I was hoping to gain insight into the clinical practice of a profession that is

making inroads into the American maternity system of care.

It is difficult for ethnographers to carry out our unique methodology within institutions and this is particularly true in health care settings. IRB considerations and criteria make observation-based research difficult to carry out in a way that protects the rights of subjects in health care settings while obtaining enough data to give an ethnography a degree of validity. This is especially the case in the world of obstetrics. Beyond the ethical considerations, many obstetricians are leery of the inclusion of the gaze of the ethnographer into the maternity setting.

My research question was to look at how nurse-midwives carry out care that results in positive outcomes with cost efficiency. From that research question flowed a research design and a set of IRB protocols that essentially determined what I could and could not do. I did not realize at the time how important the “could not do” part of my IRB proposal would be. Finding a site and working through two IRB committees created plenty of obstacles.

Starting from my research question, my research design included data collection, clinical observations, interviews, as well as the use of archival information and observation at professional meetings. A further source of data that I had not predicted, but nonetheless has become quite significant in this dissertation, was medical research. This came about as a result of my critique of the epiduralized births that I observed.

Over the course of a year I observed and/or interviewed 125 individuals, which included seven nurse-midwives and the Chief of Obstetrics. Written consent was obtained, as required by the Syracuse University IRB and the Hospital IRB. The Hospital’s research committee placed limitations on my research and I accepted a major compromise in order to gain access to the research site. I could not look at the patients’ charts. Additionally, my interviews with patients had to be limited to asking their opinion about the care they received from the nurse-midwives.

The hospital's IRB was adamant about this. As one hospital research committee member stated, "I am not going to let this research project turn into a fishing operation." I had no idea as to what this meant and I was not about to ask, feeling that I was not in a position to question what the hospital IRB demanded. I accepted the limitations placed on me by the hospital.

I did not realize how significant this compromise would be in that I ultimately have been unable to speak with authority as to the thoughts and motivations of mothers with whom I came into contact. It is a major limitation of this ethnography. Epiduralized birth takes place in the context of social institutions and the provider is only one player in our system of birth. However, the IRBs I worked with were concerned about protection of subjects and in the case of the hospital institution that particularly pertained to patients. In order to obtain permission to study nurse-midwifery, I would need to agree to limit my access to an important part of the environment that I planned to observe – the mothers who were so central to the institution into which I had immersed myself. I observed their care, I observed their behavior but I cannot speak with any authority as to what they thought or felt about their experience.

I have thought a great deal about this limitation of my research. What if I had pushed harder for more access to the mothers with longer and broader interviews? It would have risked access to the research site. The fact is I wanted the site badly. I had spent years trying to find a research site and I felt that this might be my one and only opportunity to carry out this research.

I now realize that to a certain extent I wanted to limit my interactions with the mothers at Community Hospital. I was aware that the patients served by the maternity service were almost entirely African American. A creditable claim to represent the mothers' point of view would have required a very different approach from the one taken. It would have required an involvement in their lives throughout their pregnancies, culminating in birth. Instead, building

on my extensive personal experience with midwifery, I chose to focus on the relationship of the midwives to their patients and to their work place.

During my observations I took note of common characteristics among the midwives that I had expected – the care and concern provided to clients, the time given for education and individualized care; the fight by some of the midwives to provide the patience and time needed for patients to successfully give birth vaginally. I will go into these professional characteristics later in this dissertation. They all go to the heart of the culture of nurse-midwifery. I had expected that many mothers would express satisfaction with the care given to them. I was surprised by what I can only describe as overwhelming satisfaction. Comments from mothers were effusive in their gratitude and satisfaction in the care received. “Things were excellent. Everything was perfect.” “Everyone has been so nice and kind.” “I am so happy with my birth.” As I interviewed patients I came to recognize a fixed, rote nature to their comments.

It is possible that the comments I received from women following their birth were not entirely reliable. It was often difficult for me to find a time to speak with the mothers postpartum in privacy, with nurses coming in and out of the room. At the same time, in many cases the mother did not know me and may not have felt comfortable giving criticism, despite my assurance of confidentiality. There were moments when these short interviews felt uncomfortable. The similarity of their responses does raise a question as to the reliability of the process I used in eliciting feedback from the patients regarding the care provided by the midwives. Due to my protocols, I did not establish a familiarity or a reciprocal relationship with the mothers.

Another important group that I had left out of my research protocol were the labor and delivery staff nurses. I came to appreciate how important the role of the staff nurse is to how the

epiduralized environment is carried out. The labor and delivery nurse plays a central role in encouraging birth practices that make their work easier, including encouraging epidurals and discouraging breastfeeding. It also became clear that the nurse-midwives were frustrated by having to compromise their own belief in physiologic birth by accepting the right of the patient to choose what kind of birth she wanted as well as accommodating the staff nurses. I observed these things but, again, my protocols did not call for me to interview staff nurses and to subsequently understand or explain their perspectives.

I found that I ultimately strayed away from my original proposal and while doing so had to be conscious of my activities so as to stay within the confines set by my two IRBs. The modern ritual of preparation of the ethnographic project involves developing an elaborate research design, arriving at a list of interview questions, an observation guide – all of this done before the ethnographer has stepped into the research site. I quickly had to adapt my plan of research to the realities of the institutional environment in which I found myself. The first five to six months were spent observing the prenatal care provided by nurse-midwives. I tried to choose observation days so as to observe as many of the nurse-midwives as possible. Prenatal visits lasted approximately fifteen minutes with a brief three to five minutes between each encounter as the nurse-midwife charted. It was during these brief few moments that I would slip into the room of the next patient, talk to her about my research, and obtain written consent to observe. I quickly understood that it was imperative for my survival as a researcher that I not “hold up” the midwife - I could not let my presence interfere with the flow of activity.

In the labor and delivery unit I felt it was important that I not be one more stimulus that might disrupt labor. I did not remain in the labor room continuously but chose to shadow the midwife and occasionally quietly entered the room to observe what was going on. I had learned

early on that my continuous presence made the staff nurse anxious. I also realized that I had to limit my days of observation due to the reality of fatigue that comes with shift work. I had to pick and choose day and night shifts to work with different midwives. This meant that I often did not have the opportunity to interview the mother whose birth I had observed, another major limitation and one that I could have rectified. I have previously discussed the awkwardness of my postpartum interviews with mothers. I had not developed a relationship with them.

These were all trade-offs – some made with awareness, some recognized as such only after my fieldwork was completed and I reflected on my work. Most were necessary to gain access to the research site and to maintain my position once there. I learned that ethnography requires a high degree of flexibility. This corresponds to the medical ecology approach to medical anthropology, which is flexible in its methodological approach. With a pragmatic approach to methodology, medical ecology is able to tailor its methods for each research problem, utilizing appropriate methods for analyzing interrelated factors that are at play when an imbalance has occurred in an ecologic system resulting in ill health and maladaptation. Odent's description of disrupted birth and intensification of birth technology represents just such an ecological maladaptation.

Ethnography is increasingly a family of approaches and this is particularly true of medical anthropology. I placed this research within the tradition of medical anthropology and was influenced by the framework put forth by McElroy and Townsend (2004:8) who define their framework within an ecologic model, what they call medical ecology. It draws on three established disciplines – anthropology, ecology and medicine - and a “meshing” of these disciplines to “create a framework for problems that differs from the usual approaches of clinical investigations.” I have used all three of these disciplines in this dissertation.

Ethnographic methodology faces an academic world where research increasingly involves the crossing of traditional academic boundaries, what Horlick-Jones and Sime (2004) refer to as “border-work.” Cross-disciplinary work, both in research design as well as teamwork among researchers from various academic disciplines, is increasingly recognized as necessary to address progressively complicated problems presented by the modern world. Horlick-Jones and Sime (2004:444) also refer to this trend as transdisciplinarity. The process of crossing borders, drawing from various disciplines and methodologies, has become a necessary evolution in the production of knowledge as well as meeting the need “to develop such cross-disciplinary understandings so as to embody the active ways in which people make sense of their worlds... (Horlick-James and Sime 2004:442).”

I also agree with Marcus (2009) that the design of an ethnographic research project needs to be flexible, more of a “process” as opposed to a fixed static protocol. Marcus describes the ethnographic project as employing artistic methods as one would see in art and design. Ethnography, in Marcus’ vision would be “rethought as a design process”... that would “encompass and preserve classic fieldwork perhaps still as a core modality (Marcus 2009:26,27).”

It is in this sense as described by Marcus (2009) that my research project evolved to such an extent, reflecting the new realities of anthropology in the modern world. The modern world, with its components that are varied and in constant motion, cannot be studied with a fixed protocol as one would find in a laboratory. While I have never agreed with Geertz (1973), that there is no single, absolute reality to be discovered through the interpretive process, I have come to see that the ethnographic process does involve a great deal of interpretation.

Doing Insider Research

Ethnography is confronting a global village and this raises implications for insider research. As a trained nurse-midwife, my status can be described as that of an insider. The issue of insider research is a methodological issue that many ethnographers grapple with. The issue, or I should say the accusation, of bias is faced by all researchers but in particular insider researchers. The question for me was, “Am I too close to the subject of my research?” “Can I get the story right?” Ironically, it was my desire to get the story right, my very passion and concern about maternity care, that helped drive this research. The reader of this dissertation will feel my passion. I readily admit that I was disturbed by the epiduralized birth that I observed. I felt in the core of my being the frustration felt by nurse-midwives as they carried out births that were contrary to their values. While I have strived to make my observations as neutral as possible, I am comfortable with the fact that I have incorporated objectivity with my passion. Perhaps the entire concept of insider researcher and the concern surrounding bias is an invention. In the end, isn't it possible that all ethnographers become an insider, even if they begin their research as an outsider? As Rosaldo (1993[1989]:168) questions in his discussion of the “myth of detachment,” can there truly be such a thing as value free inquiry in social science?

If anything, my position as a researcher is close to that of virtual anthropologist as described by Weston (2000). I am a nurse-midwife and yet the midwifery community tends to look askance at my decision to study anthropology as opposed to obtaining a clinical nursing PhD. Some anthropologists, in turn, tend to look at my lengthy part-time study as proof that I am not a real anthropologist. I am the other in both communities and so I completely understand Weston when she describes her position.

The virtual anthropologist is the colleague produced as the Native Ethnographer. Fixed as the one who sets out to study “her own,” she *attracts, disturbs, disorders* (italics)

mine). She may have acquitted herself with highest honors during her professional training. She may have spent long hours in the field, carefully researching a topic central to the intellectual history of the discipline. ... she may have gone through all the motions expected to bring about professional legitimacy, and, with it, access to what resources the profession has to offer ... yet her work will remain suspect...

...The virtual anthropologist... is irredeemably Other, but not as the result of anything so blatant as an operation of exclusion based on race, sex, class, ethnicity, nationality, or sexuality.... Instead, oppression operates obliquely to incarcerate her within a hybrid category. It is as the Native Ethnographer that the virtual anthropologist finds her work judged less than legitimate, always one step removed from “the real stuff” (Weston 2000:137-138).

I too am a hybrid. However, I have come to believe that it is the very place as a hybrid, a nurse-midwife and a medical ethnographer, that has made it possible for me to write what I believe is a credible description of maternity care at Community Hospital.

Summary of Chapters

As I have described in this introduction and will also become clear in the following chapters, there has occurred a fundamental change in the American system of childbirth. In Chapter One, *The Social and Cultural History of American Childbirth and Midwifery*, I further discuss these changes in the ways we approach birth.

The intensive use of technology during childbirth is a concern that spans across nations. A British professional journal expressed the sentiment that “there are growing concerns throughout the world about the state of maternity care (Hunter et. al. 2008:132).” Technology has its place and saves lives during childbirth. Due to health disparities worldwide, the very technology that is intensively used in our maternity units to the detriment of mothers and babies is inaccessible to the many thousands of mothers and infants who suffer due to the lack of the same technology. When used judiciously modern obstetrical practices save lives. For example, a mother can be saved from fatal postpartum hemorrhage by a single 1cc vial of pitocin. When a

cesarean is needed to save a mother or baby, access to a medical clinic where the mother is able to have a safe, medically necessary cesarean makes the difference between life and death. These medical interventions are unavailable in too many parts of the world. Yet even in the United States, where it is believed that our intensive use of technology can bring about improved clinical outcomes, we see extreme variations in maternal and infant outcomes depending on race, income and access to social support. The cost of childbirth to our society is at least three times that of other wealthy countries and yet in some of our poor communities our infant and maternal outcomes mirror that of some underdeveloped countries. Health care policy reports have made recommendations for greater utilization of nurse-midwives as one step in pulling back maternity related health care costs while actually making headway on quality measures. I discuss the public policy issues surrounding American childbirth and nurse-midwifery in more detail in Chapter Two of this dissertation, *Doing More But Accomplishing Less*.

In my observation of the information provided to mothers as they made decisions regarding their care during labor and delivery, I came to see the extent to which that information was scanty. This led me to question what the scientific evidence shows as to the safety of the interventions carried out in epiduralized birth. I summarize some of this scientific evidence in Chapter Three, *Epiduralized Birth – An Examination of the Evidence*.

In Chapter Four I discuss the theoretical discussions that have taken place within academia to explain the phenomenon of the highly technicalized nature of birth in our maternity system. All have limitations in helping us to understand what has occurred in our maternity care institutions. What we are seeing is not solely patriarchy or the male take-over of birth. Nor is it merely the movement of the place of birth from home to hospital and the transformation of birth into a medical case rather than a social event. We are not dealing simply with authoritative

knowledge where women acquiesce and give up decision making to those in power. The industrialization of birth has not been merely the result of organizational rationalization. Nor can cultural hegemony in the Gramscian sense, while perhaps the most helpful explanation in my opinion, completely explain the compelling attraction of industrialized birth. Nor are we merely dealing entirely with obstetrical monopoly as I have seen too many women walk away from the option of a nonmedicalized birth: So it is all of these and yet more.

Odent compares industrialized birth to the state of much of our industrialized society where the manipulation of the earth has led to an imbalance that threatens our entire environment. My research has been informed by his ecological view of birth without discarding the important theoretical presentations that have preceded it. The technological imperative to progressively use more intensive interventions, the over use and inappropriate use of medical technology, has created a situation where iatrogenic events occur with greater frequency, increasingly threatening the mortality and morbidity of mothers and newborns as well as interfering with the maternal-infant relationship that is so crucial to human society.

Chapters Five, Six and Seven are the substantive chapters where I describe my observations at Community Hospital. Chapter Five, *Turning the Board Blue*, describes the standardization and routinization of care made possible by the overwhelming use of epiduralized birth. Chapter Six, *Nurse-Midwifery: A View From Community Hospital*, discusses the values and belief system of the nurse-midwives who worked at Community Hospital. Finally, Chapter Seven, *The Closure of Maternity Care at Community Hospital*, discusses the various factors involved in the final closure of this maternity service, particularly the financial factors behind centralization and regionalization of maternity care. Finally, in my conclusion, I summarize my

research and provide possible policy recommendations for reform of the American system of childbirth.

As will become clear in the following chapters, a fundamental change in the American system of childbirth will involve major policy decision-making. Significant questions facing policy makers include: Is it appropriate for obstetricians to be the primary care provider in the case of normal birth? Is it possible for nurse-midwives to promote physiological birth without the ability to practice as truly independent practitioners with hospital admitting privileges? Do large obstetrical units result in improved maternal and neonatal outcomes? How can birth providers promote physiologic birth in the face of increased use of, and the demand for, technology? Are birthing women given adequate information during informed consent regarding the side effects of epidurals and pitocin? As the cost of birth and the increase of cesareans continue to rise, these policy questions will inevitably come to the forefront. My dissertation sheds some light on these issues.

Chapter One

The Social And Cultural Hisstory Of American Childbirth and Nurse-Midwifery

Our Motto: VIVANT! *Let them live!*
Hattie Hemschemeyer

The above motto first appeared in the Bulletin of the College of Nurse Midwifery in 1955 (Volume 1, Issue 2) and was coined by Hattie Hemschemeyer, the first President of the ACNM. It's meaning is twofold. It reflects the understanding of nurse-midwives from the beginning that their struggle to survive would not be easy. It also reflects the commitment of the profession to the safety of mother and children – that they should live. The history of midwifery and childbirth in the United States are intertwined; American nurse-midwifery can only be understood in this context. A profession unlike most other Western midwife professions, American nurse-midwifery was created in the 1920s as a replacement to the traditional midwife attending births in ethnic communities.

The term “traditional midwife” is complex. In traditional societies, it normally refers to the empirically trained, community-based midwife who holds a position of authority by virtue of her standing in her community. By comparison, the professional midwife refers to the institutionally trained, government-credentialed midwife that predominates in developed countries. In the rapidly changing social milieu of the United States at the turn of the twentieth century, in some ethnic communities the distinction between traditional and professional was one that could not be easily made.

Throughout the first half of the twentieth century, traditional midwives were for the most part entirely eliminated through state regulation at the behest of the newly organized, aggressive obstetrical community along with well-meaning public health reformers associated with the

Progressive Movement of the early twentieth century. This drive to eliminate the traditional midwife in the United States also took place within the historical backdrop of the professional battle within American medicine between the so called regular and irregular physicians, a professional rivalry that mirrors that of the present day rivalry of American nurse-midwifery and direct-entry midwifery.⁹

A movement to reform medicine radically changed the character of American medicine at the turn of the twentieth century. This was a reform movement backed by wealthy, influential individuals and legitimized by the Carnegie Foundation's Flexner Report of 1910, a report routinely cited as a critical turning point for modern medicine in the United States. American medicine at the turn of the twentieth century was highly eclectic in its standards of practice and approach to health care, supported by a popular health care movement and democratic sentiment among the populace. Proprietary medical schools also promoted eclecticism in health care. These medical schools continued to operate even as more prestigious university-based schools of medicine gained political influence. Within these university-based medical schools, a more standardized, unitary form of medical thought was promoted (Starr 1992).

As a result of the medical reform movement, university-based medical education prevailed at the expense of an eclectic medicine. Also, medical education and clinical practice became situated within the developing modern hospital institution as the focus of practice, as opposed to traditional community-based medical practice. Medical practice statutes granting physicians a broad, almost unlimited, scope of practice were implemented throughout the country, a development of special significance for the future of American midwifery. Medical

⁹ Direct-entry midwives, previously referred to as lay midwives, are empirically trained homebirth midwives in the United States that emerged from the homebirth social movement of the 1960s and 1970s.

specialties flourished in the context of clinical practices that focused on a biomedical model, a development that fit nicely with the developing modern hospital system (Starr 1982).

The growing interface and interactions of biomedical medicine, also referred to as cosmopolitan medicine, with indigenous, traditional forms of health care has been of growing interest to anthropology. Cross-cultural studies of various systems of childbirth focus on how modernity follows and impacts upon the traditional (Jordan 1993[1978]; Davis-Floyd 1992). At its inception nurse-midwifery embraced modernity in the form of scientific obstetrics, rejecting traditional notions of childbirth and midwifery as unsafe and unprogressive. More recently, due to factors both internal and external to the profession, nurse-midwifery has increasingly incorporated traditional notions of childbirth into its clinical practice. How American nurse-midwives proceed to negotiate modern obstetrics with traditional practice goes to the heart of its professional culture and its ability to provide positive clinical outcomes, while also providing alternatives for mothers.

As nurse-midwives have continued to make inroads into the American system of childbirth, they find themselves in the paradoxical situation of having to negotiate contradictory care processes as they care for women in the hospital. They work for the most part in an institution, modern labor and delivery units, which are organized around the obstetrical model of care, a model that has come to embrace technology as the basis of clinical practice. Nurse-midwives must manipulate and conciliate this model in order to practice their own model of care, the midwifery model of care. Their model is one that holds core values that are quite traditional. For example, the midwifery model of care perceives pregnancy as a normal, physiologic process that works best when it is undisturbed, with the least intervention possible. The midwifery model of care also recognizes the mother and fetus as a unit as opposed to obstetrics, which tends

to separate the maternal fetal unit in its approach to care. This difficult situation has placed nurse-midwifery in a tenuous situation vis-à-vis obstetrics within the American system of childbirth. As I will describe in further chapters, the nurse-midwives I observed at Community Hospital found it quite difficult to hold to their core values in the face of consumer demand for greater use of technology and obstetrical hegemony and control of the labor and delivery unit.

The American System of Childbirth

The history of American nurse-midwifery must be placed in the context of the transformation of childbirth practices that have occurred over several centuries but most dramatically during the twentieth century. These changes include:

- The inclusion of physicians in normal birth - physicians carrying out deliveries in the home rather than traditional midwives.
- The transformation of childbirth from primarily a social event to a medical event.
- The movement of the setting of childbirth from the home into the hospital.
- The demise of traditional midwifery in the United States.
- The growing use of technology during pregnancy and childbirth.
- The development of a mechanized view of the process of childbirth.

The incorporation of anesthesiology into labor and delivery units accelerated the transformation from medicalized birth to epiduralized birth. Also, the development of perinatology and maternal-fetal medicine as subspecialties, with a focus on the fetus and tendency to categorize pregnancies as high-risk, further separated the maternal fetal unit philosophically and in practice. Similar transformations have occurred in European countries but have been particularly pronounced in the American context.

Childbirth in colonial America reflected the system of childbirth existing in England, our motherland at the time. Midwifery had no formal means of training and was not an organized profession. Most British midwives practiced at the behest of their community. Some were apprentice trained by their mother. Others were elderly women recognized for their experience. This was in contrast to some European countries, for example France, the Netherlands, and Germany, where midwifery was an organized profession starting in the 1600s and formal schools of midwifery were established in large cities. In these countries midwives were organized and in many towns and cities were regulated by municipalities.

The medical profession on the continent differed from England with the existence of formal schools as well as rules limiting entrance into the profession and regulation of practice. The midwifery profession had official organizations. A system of cooperation between midwifery and medicine evolved as a consequence. In England, during the mid-1800s, midwifery chose to professionalize and accept regulation in response to the potential encroachment of physicians into childbirth. As a result, midwifery in England did not suffer the demise of its profession as occurred in the United States (Towler and Bramall 1986; Wertz and Wertz 1989[1977]).

This is not to suggest that modern midwifery in European countries is a completely autonomous, independent profession. This varies within the context of the childbirth system of each country as it has evolved. The point is that in most European countries, midwifery has existed continuously and adapted without the profession experiencing an interruption as occurred in the United States with the demise of traditional midwifery.

The system of childbirth in colonial America mirrored that of England. Childbirth was female centered and social networks provided necessary social support for laboring women. These networks were based on a system of reciprocity, particularly in rural areas, and were

necessary for survival. The ritualistic and physiologically adaptive custom of a two-week to month long “lying-in” period, where family and friends cared for the new mother, was a central event of this “social birth (Wertz and Wertz 1989[1977]).”

Leavitt (1986) provides a corresponding analysis of social birth as central to childbirth practices in early American history and shows from primary documents that childbirth was central to women’s lives. However, she emphasizes that women were focused to a great extent on the dangers inherent to childbirth and were eager to take advantage of technological changes with their perceived benefits. Leavitt goes on to emphasize the role of women as agents of change in adopting technological changes.

Starting in the 1700s, upper-class women began to request the presence of physicians at birth. Physicians in large American cities, many of who had trained in European medical schools, increasingly established obstetrical practices. Their claim to scientific knowledge, the possibility of access to pain relief and technological intervention (i.e. the use of forceps), gave a perception of safety and progress. Midwives, on the other hand, represented “tradition and conservatism” for these women (Leavitt 1986:9). Women of means, both upper and middle class, increasingly relied on physicians to attend birth throughout the 1800s. At the same time, Leavitt (1986) emphasizes that during this period of time the presence of physicians at homebirth did not drastically change the social customs surrounding birth. The fundamental characteristics of social birth remained even as women began to choose physicians to enter the home and deliver their baby. Decisions were made in consultation with the woman and her family. By the end of the 1800s, it was unusual for native-born women to call on midwives for care.

Midwives were at a disadvantage for a variety of social and cultural factors:

- Native-born women increasingly saw midwives as uneducated, representing tradition and conservatism.¹⁰
- Medicine in the United States was an unregulated, competitive and crowded profession. Physicians, therefore, were eager to enter into the arena of birth. There was much to gain and few disincentives for them to do so.
- American physicians, practicing with an entrepreneurial spirit in the form of a business model for medicine, aggressively entered the market for childbirth cases, despite the lengthy hours required. It was perceived as an entrée to becoming a family's permanent physician and therefore good business practice.
- Midwives were unregulated and unorganized.
- Without formal training or regulation, the traditional midwife had historically relied on her reputation of safety: a reputation passed on over years throughout social networks in communities. The mobility and instability of American cities and rural communities steadily broke down the networks upon which social birth depended and within which traditional midwifery had been based.

Most historians of American midwifery's struggle for survival have focused on the campaign to eliminate the traditional midwife led by organized medicine at the turn of the century that ultimately regulated midwifery out of existence (Donegan 1978, 1984; Donnison 1977; Litoff 1978, 1982, 1986). At the turn of the twentieth century, with excessive maternal and infant mortality rates of growing concern among the public, traditional midwifery was eliminated through a public opinion campaign orchestrated by organized medicine linking midwifery with maternal and infant mortality. Well-meaning public health reformers and public health nurses supported this campaign and traditional midwifery was eliminated through legislation and regulatory changes. Litoff (1986) cites a dramatic decline in midwife-attended births throughout the early twentieth century.

In 1910 midwives attended fifty percent of births in the United States. By tradition these births occurred in the home. By 1930, a mere twenty years later, 15% of births were attended by

¹⁰ This tension between modernity and tradition is still at play and not only in the United States. In the social media of the Netherlands, anti-homebirth critics refer to midwives as "Neo-Puritans."

midwives. This decrease in midwife-attended births occurred at the same time that the medical profession was successful at gaining a monopoly on the American health care system, eliminating all opponents including the so-called irregular physicians and midwives. Physicians at the turn of the twentieth century were able to obtain exclusive domain over the health care system through broad scope-of-practice statutes and regulations (Safriet 2002). Medicine's legal ability to define its clinical practice in global, undifferentiated terms, accounts for what McElroy and Townsend (2004) call a unitary health care system in the United States.¹¹ This takeover of the entire American health care system by the medical profession had profound implications for the American childbirth system.

Other historical accounts provide a slightly different emphasis on the factors responsible for this transformation. Ehrenreich and English (1973; 1979) and Donnison (1977) focus on the phenomenon of the entrance of male physicians into the birthing room, a space that had traditionally been women's domain. Ehrenreich and English refer to a "male takeover" of childbirth (1979:98). Leavitt (1986) on the other hand paints a more complex picture of this historical transformation, placing less importance on the encroachment of male physicians into the social event of childbirth and presenting the birthing woman as an agent of change.

As long as birth remained a home-based event, which it did well into the twentieth century, women continued actively to participate in the determination of confinement practices. . . . My research shows... [that] until women moved to the hospital to deliver their babies in the twentieth century, women friends, neighbors, and relatives continued to offer birthing women psychological support and practical help and that these female-centered activities dominated most American births, whether or not they were attended by male physicians (Leavitt 1986:87).

¹¹ A unitary health care system is a unique characteristic of the American health care system. In many other countries systems of health care coexist parallel to each other and individuals access a health care system of knowledge based on their own assessment of what kind of care is required. For example, homeopathy continues to exist throughout much of Europe alongside biomedicine. Traditional Chinese medicine with its empirically based knowledge systems of medicines continues to be utilized even as the Chinese population also embraces biomedicine. In India, the ancient system of Ayurvedic medicine continues to be practiced and biomedicine is filtered in people's lives with their continued acceptance of traditional healing. (McElroy and Townsend 2004; Monte 1993)

The professional battle within medicine occurring simultaneous to the attack on traditional midwifery gives credibility to Leavitt's historical perspective. Irregular medical schools were open to women. While it is not entirely clear the extent to which women availed themselves of these female physicians, Leavitt (1986:115) states:

The female network drawn around the birthing bed and the importance of women physicians in bringing the two worlds of medicine and domesticity together illustrate that gender was an important factor in American obstetric history. Female tradition and female activity specifically and consciously dominated childbirth practices throughout the home birth period. To birthing women, the sex of their birth attendants remained important because women could offer support and aid that men, who moved in a separate world, could not. Male medicine, even as it expanded its technical contributions, could not intrude upon the female nature of birth significantly as long as birth remained a domestic home-centered event. When male medicine entered the birthing rooms of America in the eighteenth and nineteenth centuries, it entered on tiptoe. ... They were attending the parturient at her beckoning and in a world very much of her making. ... Although women gradually accepted more and more of what medicine had to offer, indeed, accepted the promises of scientific advances, they retained their ability to pick and choose among the medical options in the period before birth moved into medical institutions in the twentieth century.

While both are historically linked to the rise of modern medicine, the elimination of the traditional midwife and the shift of birth from home to hospital are distinct from each other, occurred independently, and involved different historical and social factors. The shift from midwifery to physician-attended births began during a time when homebirth was still the norm. At the time of the organized attack against traditional midwives in the early twentieth century, midwifery had long ceased to exist within many communities. Furthermore, midwife attended births in many communities declined long before hospitals became the locus of maternity care.

Physician attended homebirth was common throughout the 1800's and early 1900's in many localities: "The shift from midwives to doctors...started among women in the urban middle classes. While the Philadelphia city directory in 1815 listed twenty-one women and twenty-three men as practicing midwifery, four years later the numbers had changed to thirteen

women and forty-two men, and by 1824 only six women remained (Starr 1982:49-50).” Litoff (1978:68) provides more evidence of this historical trend when she states: “... reports issued for Maine for the years 1911-1913 indicated that the midwife rarely served as the attendant at birth. In 1913, Dr. H.J. Everett of Portland Maine reported that “. 5 percent of all births in the state were attended by midwives.” This shift from midwife to physician was indeed profound when one considers, as cited earlier, that between the years 1900 and 1930, “the percentage of midwife attended births declined from 50 to 15 percent (Litoff 1978:58).”

This decline occurred despite the fact that midwifery in the United States was granted a momentary respite with the European immigration in the early twentieth century. With these immigrants came trained midwives, some of whom were institutionally trained, who served their mostly urban communities. As immigration declined, so to did traditional midwifery. Susie (1988: 7,8) describes this historical phenomenon.

A Philadelphia doctor in 1917 blamed unrestricted immigration for the continuing “midwife problem,” which the practice of midwifery had come to be called by its detractors. He described the immigrants as people ... who came here with definite and fixed ideas in favor of the midwife rather than the doctor. What we really have here is the interchange between two very different health care systems.

The introduction of immigration-restriction laws in 1921 and 1924 enhanced the physician’s practice over the midwife’s. There was no longer the periodic influx of old-world cousins, who, by example if not by harangue, reaffirmed European customs and language in the neighborhoods and homes of their new-world relations. And as each generation came of age, the desire to be Americanized was less clouded by ethnic tradition and loyalties. Of course, the midwife was one of these traditions and hospital birth was the American way ... These American-dream aspirations, coupled with the decreasing birthrate of the twenties and thirties, gradually put the northern ethnic midwife out of business. By the 1930’s, 80 percent of all midwives in the United States were located in the South.

In summary, the social shift from midwife to doctor began in the eighteenth and nineteenth century in native-born communities. A brief revival of midwifery occurred at the turn of the twentieth century as a result of the large European migration at the time. The anti-midwife

campaign that effectively eliminated traditional midwifery was primarily aimed at these new arrivals.

While much scholarship on the elimination of the American midwife has focused on European immigrant midwives, the picture of American midwifery during this critical period of transformation, the turn of the twentieth century, is actually complex and more investigation is uncovering the extent to which this is the case. American midwives have not been a monolithic group. The elimination of midwifery has been uneven and involved distinctive social factors throughout various communities and immigrant populations. For example, traditional midwifery continued among African-American communities in southern states well into the 1960s and these midwives were a major unifying and leadership force within their communities. Southern African-American midwives continued to practice due to Jim Crow policies of the region where there were few black physicians, white physicians did not treat African-American patients, and hospitals were closed to African-Americans (Fraser 1998). These midwives were regulated out of existence in the 1960s and 1970s.

Smith (2005) has documented the role of the Sanba (Japanese-American midwife) serving generations of Japanese Americans on the West coast and in Hawaii until World War II. These midwives, many of who were trained and licensed in Japan, “saw themselves as entrepreneurs and professionals (Smith 2005: 4)” and “played a central role in the creation of Japanese American communities (Smith 2005:6).” Smith documents the existence of active organization on the part of these midwives.

The picture is uneven with regards to traditional midwifery among Native-Americans. Among the Iroquois tribes of Upstate New York, a traditional, indigenous midwifery has continued uninterrupted to this day on their reservations. In contrast, among Western tribes -

where entire communities were eliminated, uprooted and disrupted during the nineteenth century war against the Native-American uprising - an indigenous midwifery does not appear to have survived. The Indian Health Service serves the needs of most western, Native-American pregnant women. At the same time, a traditional, indigenous midwifery has continued uninterrupted among religious communities, particularly the Amish and Mennonite communities (Personal interviews). These examples demonstrate the complexity of American midwifery and the extent to which there is still much to uncover regarding the history of American midwives.

The historical transformation of childbirth moving from home to hospital birth among mainstream America occurred relatively later and was more phenomenal in its swiftness as compared to the elimination of the midwife.

The number of hospital-delivered births increased rapidly after 1910. Although few reliable statistics exist for the early years of the twentieth century, a 1916 survey, conducted by the New York City Department of Health indicated that 19.1 percent of all births in the borough of Manhattan occurred in hospitals. Presumably, this rate was much higher than that occurring in less populated cities and towns. The Children's Bureau reported in 1921 that hospital confinements occurred much more frequently in cities than in rural areas.... In 1935, the year that the first national statistics on hospital deliveries were published, 36.9 percent of all births were reported to have taken place in hospitals.

The campaign on behalf of hospital delivery gathered momentum during the 1930's... By 1940, over one half of all births were attended by physicians in hospitals. (Litoff 1978:72)

Wertz and Wertz (1989[1977]:133) describe this social transformation as more dramatic.

While less than 5 percent of women had delivered in hospitals in 1900, the numbers increased and became a flood in the 1920's. As Rose Kennedy remarked, the "fashion changed." Urban life made the hospital the necessary resort of many poor women, but middle-and upper-class women also chose hospitals. By 1921 more than half the births in Minneapolis-St. Paul, Spokane, San Francisco, Hartford, the District of Columbia, and Springfield, Massachusetts, took place in hospitals, as did between 30 and 50 percent of the births in a dozen other cities, including Philadelphia, Newark, and Cincinnati. Urban areas with a smaller percentage of hospital births had larger immigrant populations, which preferred midwives, but, as midwives ceased to practice, hospital births increased. In Cleveland hospital deliveries jumped from 22 percent in 1920 to 55 percent in 1930

and 76 percent in 1937. By 1939 half of all women and 75 percent of all urban women were delivering in hospitals. In rural areas where midwives and general practitioners had long attended home births, the automobile's increasing availability enabled women to travel considerable distances to hospitals even after labor began.

This transformation of childbirth from home to hospital was uneven among communities. In some regions and ethnic communities, for example in the South, homebirth was not unusual until quite recently and in some marginalized communities, i.e. the Amish and Mennonites, remains quite common. However, by the end of World War II hospital birth had become the norm for most American women.

This dramatic transformation of our health care system occurred in the midst of profound social change, which included the rise of the American hospital system as the pivotal social institution around which health care became organized. The powerful triad of the hospital industry, commercial insurance, along with medicine with its broad scope of practice, all came to control health as an economic commodity (Donegan 1978; Litoff 1978; Ginzberg 1990; Starr 1982). This institutionalization of health care was contemporaneous to social changes in family structure and in society as a whole (Donnison 1977; Litoff 1978; Starr 1982; Wertz and Wertz 1989[1977]). The transformation of birth into primarily a medical event, and the corresponding movement of birth out of the home and into the hospital, has its foundation in some of these same social changes.

It is simplistic to suggest that hospital birth was forced onto women. As mentioned earlier, structural and cultural changes in American society played a major role in the breakdown of social networks necessary for homebirth. The transformation of hospitals from charitable institutions serving the poor into bright clean institutions provided an appealing alternative to home at the same time that physicians were claiming to provide an infection proof delivery through aseptic technique. The use of twilight sleep for pain relief, a powerful combination of

scopolamine, an amnesiac, and morphine, an analgesic, became a popular demand among women of the upper class further adding to the appeal of institutional birth. The convenience of the hospital provided economic advantages to the physician and the institutional atmosphere of the hospital was consistent with the medicalized view of childbirth promoted by the developing obstetrical specialty. At the same time, childbirth in the hospital, while depersonalized compared to the social support provided by homebirth, remained relatively noninterventive.

Not all scholars see the history of childbirth as involving passivity on the part of women. Riessman (1998:50), in contrast to the emphasis of some earlier scholars, argues that, while childbirth was certainly a “central arena for the struggle over professional dominance,” women historically have not been “simply passive victims of medical ascendancy (1998:47).” With regards to the medicalization of childbirth, she further states, “both physicians and women have contributed to the redefining of women’s experience into medical categories (1998:47).” Women have both gained and lost from this redefinition, and the medicalization of childbirth, Riessman argues, “must be analyzed as the outcome of a complex sociopolitical process in which both physicians and women participated (1998:50).” Riessman’s comment that women played a central role in the ascendancy of the obstetrical model of care corresponds to my observations of women actively demanding interventions at Community Hospital.

I discuss this further in this dissertation where I describe how mothers actively engaged with and manipulated the health care system to obtain the interventions they desired. From my observations, the demand for interventions by many mothers reflects the reality of modern life for women who are increasingly a major, if not the only, source of household income. In the United States there is little social support provided for mothers and pregnancy often involves a financial privation for the family.

Beginning in the 1960s hospitals began to operate on the basis of a business model where, from a budget standpoint, each department is considered to be a self-sufficient business unit that is expected to cover expenses from its own revenue. A confluence of this business model imperative, influenced by the evolving push for specialization within the medical profession, worked against the independent, solo model practiced for decades by the American general practitioner. The new industrial hospital and the medical specialties operating off of new business models, reinforced the growth of a technological imperative that has resulted in the further medicalization of birth so apparent in American hospitals today (Perkins 2004). These changes have been justified in the name of raising standards of care.

The American childbirth system has evolved with its own set of social and culturally distinctive characteristics. This evolution has been the focus of study by social scientists over the last several decades. Their findings illustrate some of the distinctive characteristics of our system of childbirth and illuminate fundamental weaknesses.

Characteristics of the American Childbirth System

1) Cross-cultural analysis of childbirth in North America and Europe shows that the health care system in the United States is distinguished by its private, unregulated nature, with wide disparities in health and access to health care. Access to care and the quality of that care is influenced by one's race, class and employment status (DeVries, Benoit, Tejlinger and Wrede 2001). Large numbers of individuals and families have no health care coverage. The entire health care system is based on a business model, driven by profit. This is also true for the obstetrical system. We pay a high financial cost for a health care system that provides poor comparative outcomes by all health indicators. Despite poor clinical outcomes and a total

national expenditure of \$40 billion, the United States spends more on obstetrical care than any other nation (Perkins 2004)¹²

2) The American childbirth system stands alone among other developed countries with uncomplicated pregnancy falling under the purview of a medical specialty, obstetrics as opposed to midwifery (DeVries 2001; Jordan 1993[1978]). In other developed countries normal pregnancy comes under the purview of the professional midwife. These midwives, as well as American nurse-midwives, are highly educated professionals trained in normal birth and trained to identify when a pregnancy or labor has developed beyond safe parameters, knowing when to call in a specialist, the obstetrician. In the United States, midwives still attend only a minority of vaginal births while in much of Europe midwives attend most normal deliveries (Wagner 2006).

3) Biomedicine in the United State defines pregnancy as a pathological state of being, an ongoing state of potential risk factors and disease, as opposed to a normal, physiologic state (Rothman 1982; Martin 2001[1987]). This conception of pregnancy as pathology, the medical model of childbirth, is fundamental to the idea that labor and birth is something to be managed. Managing labor creates the conditions leading to a cesarean section. Our excessive cesarean rate (greater than thirty percent) is a classic case of an iatrogenic disorder. It is the consequence of attempting to manage what is fundamentally a non-manageable event.

4) All but eliminated at the turn of the century, American midwifery is still in the process of trying to reestablish itself as a viable and recognized profession, fighting for its existence. As a profession, American midwifery remains marginalized, subjugated by the obstetrical profession, and weakened by internal professional politics regarding issues of professional

¹² It will be interesting to see the impact of the Affordable Care Act on access to care. Expanded Medicaid has already brought nearly universal coverage for pregnant women in some states.

certification as well as educational standards and training (May and Davis-Floyd 2006; Goodman 2007).

5) Our high cesarean rate is a direct result of unnecessary medical intervention during labor. Odent (1984, 2002, 2006) has provided a scientific explanation for this correlation. Disturbances in the mother's environment during labor result in the disruption of a delicate hormonal balance. The disruption in the fine tuned physiologic process of human birth causes the phenomenon of prolonged labor, a major diagnosis leading to cesarean section. Prolonged labor is avoided by ensuring that the birthing mother is provided with a private space and a safe, quiet, peaceful, calm birthing environment - one in which the mother is free to labor and birth as she sees fit, even as the health care provider screens for complications in an unobtrusive manner.

There is a correlation between midwifery care and cesarean rates. "The importance of midwives cannot be exaggerated. Regardless of particular obstetrical practices, more women have normal labors and births whenever midwives play a major role in childbirth, whether it be in Ireland, in the Netherlands, or elsewhere (Odent 1984:44)."

6) Pregnancy has become a medical event as opposed to a social event. The focus of care throughout a woman's pregnancy has shifted from social support and care to the medical care that is known as prenatal care. The focus of prenatal care is on testing and risk factor analysis as opposed to providing various social supports (Oakley 1992).

7) The last three decades has seen a growing use of technology during labor and delivery, i.e. external and/or internal fetal monitoring, internal monitoring of contractions, routine intravenous fluids, frequent induction and/or augmentation of labor, and the use of epidurals for pain management. Davis-Floyd (1992) provides an explanation for the popular acceptance of technology by birthing women and the rapidity with which these interventions have become a

routine part of most women's childbirth experience. Pregnancy and birth presents the American woman with a cultural contradiction – a situation in which she must give up control to the power and force of the human body. The use of technology during labor and delivery speaks to a strongly held cultural value that we can protect ourselves from, and overcome the uncertainties presented to us, by life. It is through technology that a woman regains a sense of control as well as a safety net against uncertainties. The rejection of expensive, inappropriate technology during normal birth does not come easily to most American women. Technological births come at a cost, both financial as well as in the form of iatrogenic events.

8) Our childbirth system can be defined as a profit driven health care system. Not all social scientists agree with Davis-Floyd's analysis that American women desire and actively seek out a highly technicalized birth. Perkins (2004) focuses on childbirth as a "perinatal industry," an industry that relies on the flow of reimbursement, which comes with the increased intensification of interventions so central to epiduralized birth.

The Progressive Era – The Origins of American Nurse-Midwifery

To understand the value system of American nurse-midwifery, particularly the value given to care of the underserved as well as respect for the autonomy and self-determination of mothers, it is helpful to focus on the roots of the profession within the Progressive Movement of the early twentieth century.

In 1892, Jane Addams, the renowned Settlement House Leader, progressive reformer, and founder of Chicago's Hull House, wrote a treatise entitled *The Subjective Necessity for Social Settlements*. In most of her writings she discusses the objective conditions of the urban environment that led her to devote her life to progressive activism. Here she discusses the

background of the settlement house movement, particularly the motives of those who participated, - the need of an outlet for their skills and their sense of social mission.

We have in America a fast-growing number of cultivated young people who have no recognized outlet for their active faculties. They hear constantly of the great social maladjustment, but no way is provided for them to change it, and their uselessness hangs about them heavily. Huxley declares that the sense of uselessness is the severest shock which human system can sustain, and that, if persistently sustained, it results in atrophy of function. These young people have had advantages of college, of European travel and economic study, but they are sustaining this shock of inaction (Lasch 1965:38-39).

In Jane Addams' writing there is heard a harbinger of the thoughts and values of early, as well as today's, nurse-midwives. The desire to make a difference in women's lives, to be of use, can be heard from the voice of Mary Breckenridge at the Frontier Service in Kentucky to that of Hattie Hemschemeyer at the Maternity Center Association in New York, as well as in the voices of today's nurse midwives.

The early profession of nurse-midwifery came directly from the efforts of the Progressive Era, as did other new professions such as public health nursing and social work. The values that I have heard repeatedly from today's nurse-midwives echo the words of these early pioneers. Today's nurse-midwives take pride in bringing care to those who need it most - the underserved. Many nurse-midwives choose hospital birth over homebirth not from anti-homebirth bias but from the historical focus of the profession to be where most women are, particularly underserved mothers. They see in the hospital an opportunity to be of use to the needy, despite the difficulty of bringing their midwifery ethos to the obstetrical world. As one nurse-midwife told me, "I am a poverty worker first and a nurse-midwife second." The decision of most nurse-midwives to practice in the hospital also is a result of the barriers to practicing in the home due to legal as well as professional barriers.

The Progressive Era lasted only several decades from the last decades of the nineteenth century through the first several decades of the twentieth century. Similar to the political activism of the 1960s and 1970s, the Progressive Movement was not a single-issue movement. Rather it encompassed a loose coalition bringing together numerous streams of activism, accomplishing reforms that today are taken for granted – sanitation codes, food and drug regulation, housing codes and regulation, education reform including kindergarten and play grounds, public parks, child labor laws, as well as the expansion of voting rights (Trolander 1975). Relegated by some historians to “social maternalism” or a “social work wing” of the movement, the women of the Progressive Era in fact led the effort for many reforms that resulted in “broad-ranging change (Perry 2002:29).”

Many of the women involved in the Progressive movement, particularly in the Settlement House Movement, became what Kahlberg (1975) calls “career reformers.” In contrast to charity that had always been women’s work, the career reformer becomes engaged and committed to change. For the settlement house activists a number of factors entered into their decision to become involved: They were the first generation of college educated women. They left their education with the desire for a career where none was available. They held the desire to lead a useful life beyond marriage. All these factors contributed to their lifetime commitment to social change. It is noted that while many activists did marry and continued to volunteer, many of these career reformers chose to remain single, dedicating their life to their causes. This was true of a number of women who became early leaders in the effort to professionalize midwifery.

The political acumen of the women of the progressive movement is apparent in their numerous accomplishments including child labor laws and Mother’s Pensions, the precursor to Aid to Dependent Children. Their reforms brought infant and maternal health to the forefront of

government priorities, including making prenatal care an accepted expectation for the health of a community. All of this occurred in a time in which women had yet to win suffrage. Many based their cry for reform in terms of maternalism ideology. However, “ other ideologies, including feminism, socialism, and a desire for ‘social justice’ for all workers regardless of sex, also motivated women current within progressivism (Perry 2002:34).”

The political style of the progressives, including that of the settlement house workers, was of incremental reform through persistent education, coalition building and winning over of influential men and women. These reformers did not embrace the strategy and tactics of the radical trade union movement and anarchist movement of the time – tactics they viewed as antagonizing. Respectability, even as they chose an unorthodox lifestyle, was highly valued. This same political strategy is reflected in the thinking of today’s nurse-midwives – in the pragmatism and belief in education, respectability and in taking a long-term, incremental view towards becoming an independent, autonomous profession

Public health nursing grew out of the settlement house movement. Much has been written about the role of public health nursing and the newly created profession of nurse-midwifery in the early twentieth century as having conspired with medicine to eliminate the traditional midwife. However, the aim of many of the settlement house workers was not the elimination of the midwife. Many had hoped to set up midwifery schools in order to bring the traditional midwife into the process of professionalization that was part of the progress envisioned by the progressives. Rather than victims of a conspiracy for their elimination, traditional midwifery can partially be seen as an unforeseen casualty of the drive for modernization, at least with regards to the motivations of the settlement house workers and public health nursing.

Their elimination was a confluence of factors involving the Progressive Era – the push for government regulation in the training and education of professionals, the drive by physicians to protect their profession from competition, and the push toward medical specialization. Obstetrics was one specialization that was only beginning to take off and obstetricians, as well as general practitioners, saw midwifery as a threat to their profession. The era was also the beginning of the rise of the modern hospital, a development viewed positively by reformers. Most significantly, reformers brought attention to the excessively high infant and maternal mortality rates in the United States as compared to other Western nations.

The massive immigration of the early twentieth century placed great strain on the social system of the United States, including our emerging biomedical health care system. Poverty in these immigrant communities contributed to high infant and maternal mortality rates, a fact that became a source of concern for public health reformers and activists from the progressive movement who held strong beliefs in the ability to bring positive change through legal and social reform. Public health nursing and settlement house activists both held a mission to improve the lives of the poor, urban women who lived in horrid conditions. Traditional midwives became a convenient scapegoat in the midst of these social, historical factors. It was assumed that infant and maternal mortality rates would be reduced and birth made safer if normal childbirth occurred in the hospital with obstetrical care.

There were settlement house workers who recognized the role of the environment as a major cause of infant and mortality. These reformers tended to see formal training of traditional midwives as part of a solution to this public health problem. Other reformers held the belief that high infant and maternal mortality rates were, in part, a result of the use of midwives among immigration communities. These reformers believed in the elimination of the midwife,

suggesting the creation of a new professional midwife through the merging of nursing and midwifery.

There is consensus among most contemporary historians that there was no basis in fact for the conclusion that high infant and maternal mortality rates were a result of the utilization of traditional midwives ((Donegan 1978, 1984; Donnison 1977; Leavitt 1983, 1986). Prominent settlement house leaders, however, advocated for the use of a district-nursing model that was developing out of the settlement houses. Lillian Wald, a nurse and head of the Nurses' Settlement in New York, described in detail the district public health nursing provided by the settlements, an activity that had become the "raison d'être of our existence (Wald:1902:572)." Wald (1900) had earlier recommended a three year advanced course of training for these district nurses, whose duties would include providing prenatal care in the home to pregnant women.

Clara Noyes, who was Nursing Superintendent of Bellevue Hospital where a single formal midwifery-training program had a short existence, compared American midwifery to European midwifery. She pointed out that in most European countries, midwives received formal training and were regulated (Noyes 1912). She too was a proponent of combining midwifery and nursing. As Noyes wrote:

If our visiting nurses were also certified midwives, would not the mothers and babies of the less favored classes be infinitely safer in their hands, than in the hands of the majority of midwives? If the nurse could secure the course of training and become registered, her largest field of usefulness would probably be in the district nursing association, as it would probably be the exception when she would practice midwifery independently. (Noyes 1912:470)

Note that in Noyes' recommendations, she implies that the main function of this new midwife would involve activities of the visiting nurse, providing home care to pregnant and postpartum women. The progressive outlook on childbirth was that the preferred site of birth would be the hospital. From the perspective of a settlement house activist, there is logic to this

recommendation; the environment of the immigrant slums was not conducive to a clean, sanitary birth. Some of these newly immigrant women had left behind their social support networks. Hospital birth provided a weeklong leave from the hard life of caring for home and children.

While this debate was taking place among public health reformers, the medical profession was professionalizing, pushing for higher educational standards, standardization of the practice of medicine, specialization, and the elimination of all competitors through the passage of broad scope of medical practice statutes. The irregular physicians and the immigrant traditional midwife were seen by medicine as their competitors. The traditional midwife was seen as a major threat to the development of the obstetrical professional and the movement of childbirth into the expanding hospital system. It was in this way that the aims of the public health reformers of the progressive movement and the medical profession coalesced within the intense political campaign to eliminate the traditional midwife.

Nurse-midwives were not seen as a threat but rather a necessary stopgap while the developing obstetrical profession established itself. During the pre-World War II years, nurse-midwifery began as a small, marginalized profession with several centers of existence including rural Kentucky, urban New York, Santa Fe, New Mexico and Alabama. All began with a slightly different focus of practice but shared the goal of filling the vacuum created by the elimination of the traditional midwife. At the same time, there is no doubt that some of the founders of the profession consciously engaged in the elimination of the traditional midwife.

In New York City, The Maternity Center Association, itself part of the Settlement House Movement, was established to serve poor pregnant women. It was initially seen as a place where prenatal and child-rearing education could be carried out. At the beginning, public health nurses staffed the center, which existed along the lines of the settlement houses of the time. Eventually,

as the traditional midwife was regulated out of existence, the newly conceived nurse-midwife began to work at this center. While these nurse-midwives did at the beginning deliver a few babies in the homes of women who could not afford the hospital, their mission statement clearly stated that they saw the focus of their work to be education and to encourage women to avail themselves of the hospital where they would have a “cleaner,” “safer” birth attended by a physician.

Nurse-Midwifery in the Modern Era

Burst (2010), in a commentary discussing the identity crisis facing contemporary nurse-midwifery, reflects on the origins of the profession within the arena of the public health movement and public health nursing.

It is necessary to understand the context within which nurse-midwifery developed in order to understand the *compromises* [italics mine] made at that time. These compromises still affect us and continue to influence philosophical, interprofessional, and practice issues to this day. Yet, without those initial compromises, nurse-midwifery and midwifery would not be here today.

The early supporters and proponents of midwifery a century ago clearly saw that midwifery, on its own, could not survive as a profession in the United States. The mechanisms for education, recognition, and regulation that enabled midwifery to survive in the European countries did not exist; the medical profession was too strong; and the takeover of midwifery by physicians was too complete.

The concept of nurse-midwifery was first promoted around 1911-1914 during the early years of the hostile debate over the contrived “midwife problem,” but the idea did not come into existence until over a decade later. Nursing and midwifery was a natural marriage of women’s professions. The idea was to teach nurses to do midwifery for normal births. Even opponents of midwifery were supportive of nurse-midwifery as a lesser evil.

The price for the development of nurse-midwifery was the loss of autonomy that midwives previously had had. What was gained was the established nursing profession’s access to the health care system. When nurse-midwifery did start to develop in the 1920s, it was against rancorous opposition and only attached to nursing and under the auspices of medical supervision and control (effects of the latter are beyond the scope of this

commentary).

The actions and words of our foremothers reflect the realities of professional survival at that time. While our foremothers clearly understood that we belong to two different professions, it is equally clear that they sought to establish nurse-midwifery as a nursing specialty (Burst 2010:406).

Note the ambiguity and the pragmatism inherent in Burst's (2010) account of nurse-midwifery's origins. These two survival strategies, comfort with ambiguity – the betwixt and between nature of the profession – as well as the embrace of pragmatism remain evident in the present professional culture of nurse-midwifery. Nursing education is the basis for further training in midwifery in some European countries. However, the tight relationship between nursing and midwifery reflected in the hyphenated title “nurse-midwifery” is uniquely American.

Specific beacons stand out as points of access where nurse-midwives managed to establish maternity services, filling niches ignored by the growing obstetrical profession. As mentioned earlier two primary and earliest centers existed for the education of nurse-midwives - the Hyden, Kentucky based Frontier Service and the Maternity Center Association School of Midwifery in New York City. Both provided birthing services that reflected the needs of their communities. The Frontier Service, serving a poor, rural population, provided both primary care as well as homebirth service. The Maternity Service began as a prenatal service and in the 1970s established a freestanding birth center in response to consumer demand. Neither service exists today, victims of the centralization of maternity care.

Another early, and a long-lasting nurse-midwifery service, existed in Santa Fe, New Mexico. Begun in 1943, two nurse-midwives from the order of Medial Mission Sisters came to Santa Fe, New Mexico at the invitation of the city's Archbishop to provide maternity care to the Hispanic population. This service, “The Santa Fe Catholic Maternity Institute”, had

two prenatal clinics and provided homebirth service. Postpartum care was provided in conjunction with the Health Department (Fell 1945). The Maternity Institute closed in 1969, finally submitting to financial realities that made its continued existence impossible (Cockerham and Keeling 2010).

A nurse-midwifery service that has not received its full due is The Tuskegee Maternity Service associated with Tuskegee University. This service provided education for nurse-midwives and aimed to provide trained midwives for the African American Community in rural, isolated Alabama counties. Opening in 1941, this educational program was short-lived, its existence brought to a premature closure due to the lack of financial resources. Another nurse-midwifery educational program targeting the training of African-American midwives, the Flint-Goodrich School of Nurse-Midwifery in New Orleans, was established in 1942 and survived for only one year. “All of the first five schools were developed in association with midwifery services designed to meet the needs of special populations – people cut off from other sources of care by geography, poverty, language barriers, or cultural and racial isolation... none of these programs [were] associated with the mainstream of American health care (Rooks 1997:59).”

The New York midwives led by Hattie Hemschmyer, similar to the Frontier Nursing Service led by Mary Breckenridge, identified this new professional midwifery as rooted in public health nursing. However, midwives at the Maternity Center Association expressed discomfort and ambivalence with what to call this new profession – should it be called midwifery with all the negative connotations connected with that term? Mary Breckenridge had no such hesitancy in adopting the term nurse-midwifery for the evolving profession. Ultimately, the new profession came to identify itself as nurse-midwifery.

A wealthy reform minded Southern aristocrat, Breckenridge studied nursing in New York and midwifery in Great Britain. Having seen the respect accorded the midwifery profession in Great Britain, she saw nothing wrong with the term. She also saw first hand how “nurse-midwifery” was used in rural Scotland as the basis for providing not only obstetrical care but also primary care to a geographic area very similar to her home in rural Kentucky. In both cases physicians were few and far between.

Returning to Kentucky, she created the Frontier Nursing Service (FNS) in 1925. The FNS established a series of clinics in rural Kentucky staffed by nurse-midwives from England, delivering babies in homes and attending the sick both in the home and at their clinics. For the rural community she served, the term “midwife” did not hold a negative connotation. She saw the tacking on of “nurse” as a symbol of education, modernism, and progress (Breckenridge 1952). As the historical record shows, these nurse-midwives practiced quite independently and had excellent results (Breckenridge 1952). However, they were small in number, the geographic area they served was isolated and did not grow. Their efforts remained unnoticed and were not perceived as a threat to the developing obstetrical profession as the community they served held no interest for obstetricians at the time. This brief experiment lasted longer than other early nurse-midwifery services. Midwifery care to this isolated, rural community survived until the post-World War II era.

The post war years saw a renewed effort by nurse-midwifery to organize and to expand, including a push to find avenues with which to make inroads into hospital employment. A benchmark year (1955) was when Columbia-Presbyterian Sloan Hospital in New York City hired two nurses in an experimental project to allow nurse-midwives to deliver patients. At the same time, a little known experimental project called the “Madera Milestone” represented an

expansion of nurse-midwifery in a rural California hospital, far away from the original urban centers of nurse-midwifery. This nurse-midwifery service provided care to poor women in Fresno, California, a rural California community with little access to obstetrical service. Consisting of eight beds, the service had approximately 300 deliveries each year, one third of the deliveries for the county.

The Madera project marked “a new milestone in the employment of nurse-midwives in this country...” and provided an opportunity to “try a new pattern of maternal and newborn care in a rural county hospital.” If successful, “this experiment could mark another milestone in the unending task of providing and improving maternity care (Baldwin 1961:24-25).” The project lasted for three years from 1960 through 1963. Maternal and neonatal outcomes improved and the project was recognized for the ability to overcome “many cultural and educational barriers to motivate more women to seek prenatal care (Levy et. al. 1971:51).” Despite the success of the Madeira project, it was closed after three years because the “California Medical Association refused to support a permanent change in the State law which would have permitted nurse-midwives to practice as they had during the program (Levy et.al.1971:52-52).” The failure to sustain this maternity project’s entrance to mainstream maternity care could only have reinforced nurse-midwifery’s cultural belief that to survive, the profession must tread softly, avoid conflict and “take put down with that smile (Burst 1978).”

In 1955 the American College of Nurse-Midwives was established. Prior to this development there had existed several associations centered on the two largest nurse-midwifery bases – the Maternity Center and the Frontier Service. Organizing into a single professional association was an important step forward for the young profession. The irony for modern nurse-midwives is that in their cooperation with physicians to eliminate the traditional midwife, as well

as their embrace of the science of obstetrics and entrance to hospital midwifery, they set the conditions for their own marginalization. For decades they remained a small profession of several hundred and it would not be until the early sixties that they were able to begin to carry out a full scope practice of midwifery that included normal delivery. Their presence within the modern obstetrical system of childbirth brought inevitable compromise, including the need to compromise essential elements of their belief in the normalcy of birth.

A look at both the historical record, as well as the individual words of nurse-midwives, shows the crafting of a modern profession steeped in ambiguity and paradoxes from its onset. Through the decades since its inception, nurse-midwives have shifted and re-crafted their identities – shifting their identity in relationship to obstetrics, to nursing, to traditional midwifery, and later to the formation of a new American midwife, the direct-entry midwife.

To summarize the previous discussion in this chapter: The early twentieth century saw a movement to reform medicine, to eliminate not only traditional midwives but also the eclectic health care provided by the irregular physicians. These reforms paved the way for the hegemony of biomedicine, and the development of specialized care, including obstetrics. There was a symbiotic relationship between the modern hospital system and the rise of medical specialties. The development of obstetrics as a specialty, granted virtually unlimited scope of practice through state medical practice acts, was particularly devastating for midwifery (Starr 1982). The campaign to eliminate the traditional midwife was not, however, completely led by organized medicine. Some public health movement leaders, part of the Progressive Movement, contributed to this effort having bought into the belief that excessive infant mortality rates were tied to traditional midwifery. These reformers were instrumental in gaining legislative change that led to the dramatic changes in our childbirth system – the move from the home to the hospital as

well as completing the shift from midwives to physicians as primary care providers for pregnant women. Nurse-midwifery was promoted by public health reformers as a profession built upon public health nursing that would fill in the gaps of pregnancy care among the poor and immigrant classes (Donegan 1978, 1984; Donnison 1977; Leavitt 1983, 1986); Litoff 1986; Safriet 2002).

For the nurse-midwife created during the Progressive Era, these midwives had to wait decades, practicing under the radar within our modern health care system, before they began to work their way into the labor and delivery units of the modern hospital. Graduates of nurse-midwifery schools worked in health department clinics supervising prenatal clinics and visiting nursing or they taught maternity care in nursing schools. The Indian Health Service and the US Military were two sources of jobs where nurse-midwives were able to practice full scope midwifery. Other nurse-midwives chose to work overseas as missionaries. While nurse-midwifery established itself within areas underserved by obstetrics, it did not have to face the quandary of maintaining its basic core principles in the face of a system dominated by obstetrics, with its emphasis on pathology.

It has only been during the past several decades that nurse-midwives have been able to make inroads into maternity care, establishing hospital-based nurse-midwifery services. Rooks (1997) points out that the early educational programs and nurse-midwifery services discussed above were outside of the medical mainstream. It was the commitment to position nurse-midwifery within the American university system that prepared the profession to insert itself into the modern maternity unit.

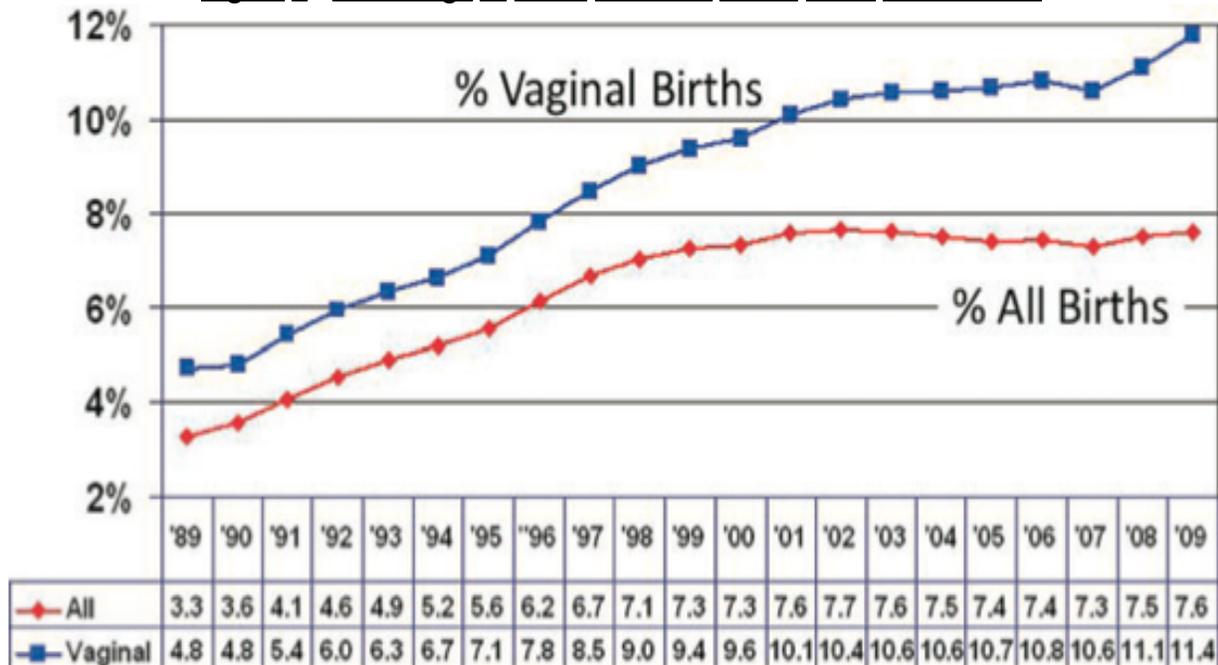
Teasley (1983) discusses the irony behind nurse-midwifery's entrance into hospital labor and delivery services. As long as nurse-midwifery practiced in public health care settings outside the hospital, the profession retained relative autonomy from obstetrics. The expanded

practice of nurse-midwives into labor and delivery units provided increased job opportunity and gave hope that nurse-midwifery will eventually become accepted as primary providers for normal pregnancy. At the same time, the entrance of nurse-midwives into hospitals, where physicians reign, ironically created a marginalization of the profession – a marginalization that they now struggle with once again (Teasley 1983).

Nurse-Midwifery Today

An important reason for making hospital-based nurse-midwifery a focus of inquiry is the growing utilization of nurse-midwives. Over the past three decades the profession has gone through changes in philosophy and in breaking through its marginalization. As CNMs have made inroads into hospital births, the position that Certified Nurse Midwives hold within the health care system has expanded (Schuiling et. al. 2013), as can be seen from the graph below.

Figure 1: Percentage of CNM Attended Births From 1989 – 2009



Source: Declercq (2012:322)

Since 1989, the first year that statistics on birth attendants began to be gathered by the CDC, vaginal births delivered by CNMs have steadily risen from 3% of births in 1989 to 11% in 2009 (Declercq 2012:322). CNMs delivered 11.6% of all vaginal births in the United States in 2010 and 11.7% in 2011. This represents a 20.8% increase of babies delivered by nurse-midwives over the previous ten years (ACNM 2012, 2013a, 2013b; Declercq 2012). These numbers are continuing to rise. The ACNM (2014a) has reported that in 2012 nurse-midwives delivered 11.8% of vaginal births.

While there is wide variation in CNM births among regions and states, the percentage of CNM births has increased in all but three states between 1990 and 2009 (Declercq 2012). States that have the highest rate of CNM births are clustered in the Northeast, the West Coast and New Mexico. For example, CNMs in New Mexico attended 23.9% of all births in 2009 while in Arkansas CNMs attended 0.8% of births, 1.5% in Louisiana and 1.6% in Alabama (Declercq 2012:323). Additionally, there has been a significant increase in CNM births in seven states that had virtually no CNM births in 1990 and yet by 2011 had a rate of CNM attended births around 5% to 6% (Declercq 2012). This increase in CNM deliveries occurred despite a national cesarean rate that remains approximately 33%, although the national cesarean rate has shown a slight decrease in the past several years (Martin, Hamilton and Ventura 2013). Also, Declercq (2012) states that underreporting of CNM deliveries is a problem in a number of states and it is probable that the true number of vaginal births attended by CNMs is actually greater than the official numbers.¹³

¹³ Reporting of provider is recognized as problematic. Some hospitals place the name of the supervising physician on the birth certificate as opposed to the CNM who actually delivered the baby. This was true at Community Hospital, where clerks were unreliable in terms of which attendant they placed on birth certificates. Also, a nationwide uniform birth certificate has yet to be implemented by all states.

The clientele cared for by nurse-midwifery within the obstetrical system is also changing. In 1990, births attended by CNMs were more likely to be Hispanic and black non-Hispanic. There has been a shift in the populations served by CNMs so that in 2011 “births attended by CNMs largely mirrors that of the US birthing population as a whole... (Declercq 2012: 325,326).” Given the crisis within the obstetrical profession with fewer medical school graduates are choosing obstetrics as a specialty, it is reasonable to predict that these trends will continue.

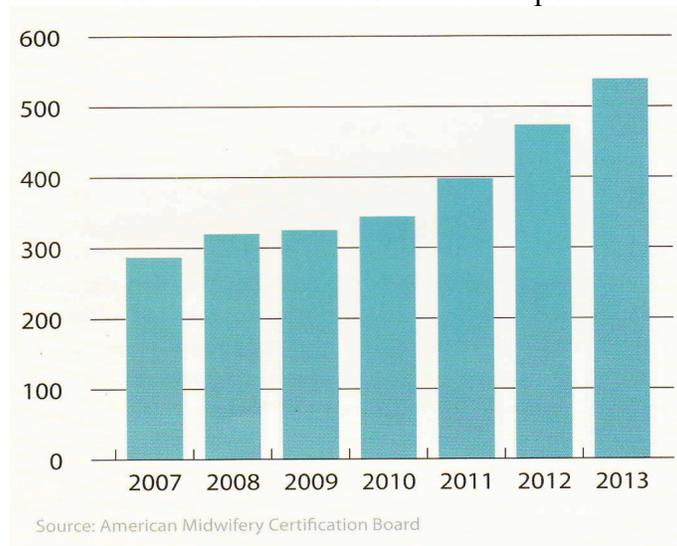
Statistics show that the profession of nurse-midwifery is changing rapidly and its scope of practice within the health care system is expanding. However with regards to birth, nurse-midwifery remains overwhelmingly a hospital-based profession. “In 2012, 94% of CNM/CM-attended births occurred in hospitals...(ACNM 2014a).” While the vast majority of CNM-attended births continue to occur in hospital, there is a small but increasing number of nurse-midwives opting to practice outside of the hospital setting – in 2012, 2.6% of CNMs practiced in a freestanding birth center and 2.5% reported delivering in the home setting (ACNM 2014a). At the same time, larger numbers of CNMs report being involved in the primary care of women.

The entry degree for nurse-midwifery varies from state to state but most require a Master’s degree and 82% of CNMs report having a Master’s degree. 4.8% of CNMs have a doctoral degree (ACNM 2014a). The salary level for CNMs shows an upward trend with a modal¹⁴ salary of \$90,000 – \$99,000 (Schuiling, Sipe and Fullerton 2013). The numbers of CNMs are growing with the ACNM reporting 13,155 CNM/CMs in 2014 (ACNM 2014a). Nurse-midwifery is a growing profession with an increasing number of new graduates entering the profession each year. In 2013, 539 nurse-midwifery graduates were certified, representing an

¹⁴ The mode of a sample, such as the salary of a nurse-midwife, is the number that appears most frequently, as opposed to the average salary.

88% increase from 2007 (ACNM 2013b).

Figure 2: Number of CNM/CM Certified Graduates: 2007-2013
Source: ACNM 2013 Annual Report



The ACNM has identified the need to continue to increase the number of CNMs in response to a growing workforce shortage of maternity care providers. Approximately half of the counties throughout the United States have no obstetrician. It is expected that the demand for maternity care providers will continue to grow with the implementation of the Affordable Care Act as more mothers are able to seek care earlier in pregnancy. The ACNM sees the expansion of the CNM workforce as a strategic goal (American College of Nurse-Midwives 2013b; 2014b).

Barriers to growth of the profession include the high cost of education. Some midwifery students report the cost of their midwifery education to be as high as \$85,000. Nurse-midwifery educational programs face financial pressures, as is the case for all medical related professions) and potential closure. However, distance-learning opportunities have allowed for a continued growth of the profession. Also, the development of bridge educational programs, which accommodate students without a traditional nursing degree to enter into nurse-midwifery programs, has made nurse-midwifery a more attractive option.

ACNM leadership continues to evolve over the issue of the relationship of nurse-midwifery

to the obstetrical profession. “Our foremost advocacy goal is for all CNMs and CMs to be recognized as licensed, independent providers, free from requirements for physician supervision and written collaborative agreements (ACNM 2013b).” At least 21 states now have granted nurse-midwives the right to practice without a written practice agreement¹⁵, an advance from ten years ago. However, even without the statutory requirement for a written practice agreement, the vast majority of hospitals nationwide refuse to grant admitting privileges to independent midwives. ACNM leadership has finally heard the voice of midwives at the grassroots level and recognizes the issue of hospital privileging as a major strategic initiative for the national office. “ACNM Future Focus: Go Out and Be Bold,” a slogan appearing in a recent ACNM publication, represents a major shift in cultural outlook from accommodation to striving for independence (ACNM 2014b).

The history provided in this chapter, as well as the description of present-day nurse-midwifery as it is evolving, provides a background for the significance of nurse-midwifery as a focus of inquiry in the context of childbirth practices in the United States.

¹⁵ Many states by statute do not allow nurse-midwives to practice as an independent practitioner. Rather, in order to practice their profession they are required to have a signed agreement with an obstetrician granting the nurse-midwife permission to practice.

Chapter Two

Doing More But Accomplishing Less

“Birth keeps the lights on in hospitals (Dr. Jeff Thompson 2012).”

This chapter focuses on public policy issues of importance to maternity care in the United States. The United States to a large extent utilizes a specialist, the obstetrician, for normal deliveries, a characteristic of our obstetric system unique to the United States. At the same time, the high cost of our obstetrical care with relatively poor outcomes sets the United States apart from other developed countries. As I discuss the public policy issues in this chapter as well as throughout this dissertation, it is important to keep in mind that childbirth systems are not merely reflections of each country’s cultural beliefs and practice. Systems of childbirth are dynamic processes, influenced by and also transformed by macro factors. Likewise, a country’s childbirth system is influenced by the overall organization of health care and other factors including the social history of a people. This chapter, in particular, will show that the quality and outcomes of maternal and child health cannot be improved by merely increasing technological resources to maternal and infant health care.

The study of the profession of nurse-midwifery is of more than abstract academic interest. It is of significant public policy import. Most individuals involved in health care policy agree that the American system of childbirth is in need of extensive reform. Poor maternal and infant outcomes can be partially explained by the organization of our childbirth system. In the United States, 11 -12% of births are attended by a nurse-midwife or certified professional midwife, although with wide geographical variation. In Western Europe 75% of births are midwife attended (Wagner 2006).

Another fundamental element of the American childbirth system is our profit driven health care system. Perkins (2004) refers to the overall poor perinatal outcomes as our “perinatal paradox”, “doing more and accomplishing less (Perkins 2004:13).” Perkins points to what she describes as a perinatal industry, a system of care that thrives on reimbursement flowing from an ever more intensive use of interventions on mothers and babies.

Whether or not most women wanted it, intensive medical intervention remained part of the birth experience of four million American women (and babies) a year in the 1980s and 1990s. Although different procedures waxed and waned at different times, at least one was always classified as standard procedure. The annual perinatal market basket in the mid-1990 included a million and a half episiotomies, over a million neonatal circumcisions, and close to a million cesarean sections. Put another way, for every 100 live births in the year 2000 there were 84 electronic fetal monitoring procedures, 67 ultrasounds, 26 episiotomies, 23 cesarean sections, 20 labor inductions, 18 labor accelerations, and 67 vacuum or forceps extractions. Birth intervention critics at that time claimed that the emperor was still scantily dressed and that a large gap remained between evidence of the efficacy and intervention practices in perinatal medicine.

With potential consequences for the health of every person in the nation, perinatal medicine – obstetric and pediatric services delivered to women and infants “around birth” – offers an excellent perspective on interactions between the business model of medicine and its practices. Reasonably accurate data are available concerning nearly every birth, providing an all-important population based denominator not available in other specialty areas for determining intervention and outcomes rates as well as disease incidence. Low-birth weight and mortality rates provide outcomes measures across a range of population and geographic scales. While the U.S. infant mortality rate declined continuously after the mid-1930s, its international ranking fell from third in 1950 to twentieth in 1964, plateauing at that level until the 1990s, when it sank to twenty-sixth in 1996. The United State’s low international ranking exposed a “perinatal paradox,” which family medicine professor Roger Rosenblatt defined as “doing more and accomplishing less” (Perkins 2004:12).

Calling perinatal medicine “an industry in its own right,” Perkins (2004:12,13) gives a striking picture of the way in which maternity care has in fact become a cash cow for our health care system. Home with baby is the number one discharge diagnosis for American hospitals. The growing use of unnecessary interventions on both mothers and babies accounts for the rise in perinatal expenditures. In 1980, perinatal expenditures in the United States were \$30 billion

dollars representing \$7,000 on average per birth. This compares to \$40 billion in 1993, an average of \$10,000 per birth. This rise in expenditure, along with our comparatively poor outcomes, does paint a picture of “doing more and accomplishing less.”¹⁶

The irony of this picture provided by Perkins is that many operative procedures increasingly occur at day-surgery settings, many outside of hospitals, as a cost saving measure. At the same time, normal childbirth has increasingly become hospital bound and technology driven. Perkins makes the point that our childbirth system is fundamentally connected to economic organization.

In using perinatal care to exemplify connections between medical intervention and economic organization, I am challenging feminists to take business models seriously and mainstream investigators to take the health of women and children seriously. We cannot fundamentally reform childbirth practices without changing the business model of medicine, and we may not be able to do this without women’s participation (Perkins 2004:13).

Childbirth expenditures in the United States are greater than any other nation. As can be seen by the charts below (Figures 3 and 4), the average cost of a vaginal birth in the United States is estimated to be \$16,530. This cost far exceeds other countries. The estimated average cost of a cesarean birth is \$26,305. The following charts display statistics provided by select countries involved in the International Federation of Health Plans (IFHP). The statistics are limited because they reflect only nation members of the IFHP and do not compare costs of wealthy/developed countries as opposed to developing countries. Also, the countries shown have a variety of arrangements for payment of health care.¹⁷

¹⁶ These figures provided by Perkins (2004) are from the mid 1990’s and are not indexed for inflation. As cesarean sections have increased since her research, as well as routine inductions, these figures are most likely conservative. Their value here in this document is to reinforce the critique of the development of maternity care as a business.

¹⁷ These charts are reproduced from the International Federation of Health Plans, a voluntary organization of a variety of health care insurers in thirty countries and are from the FHP 2012 Comparative Price Report of Medical and Hospital Fees by Country.

Figure 3

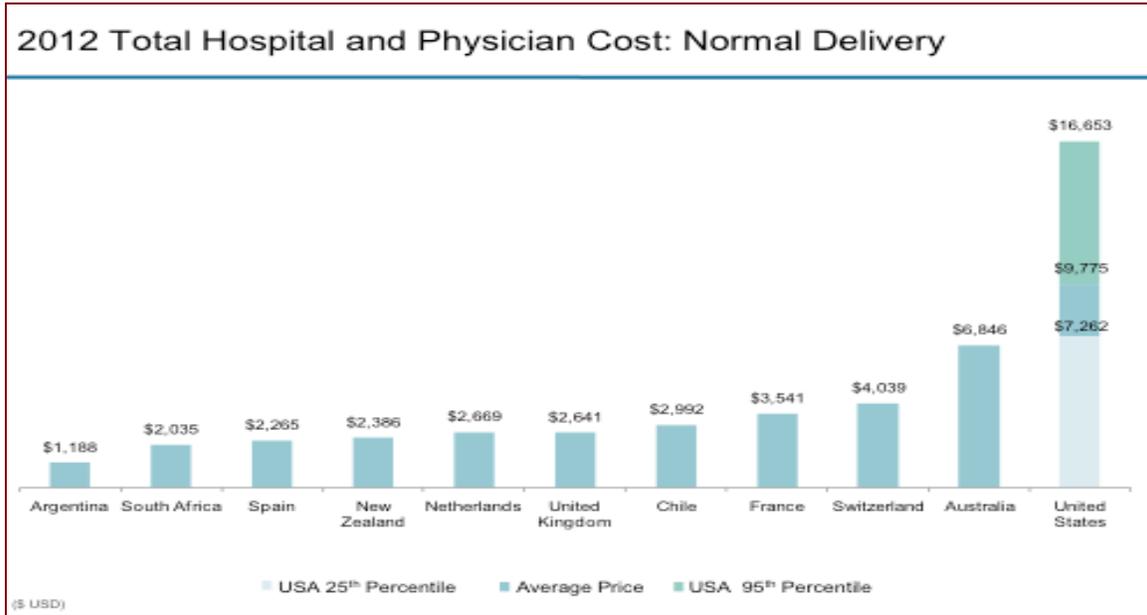
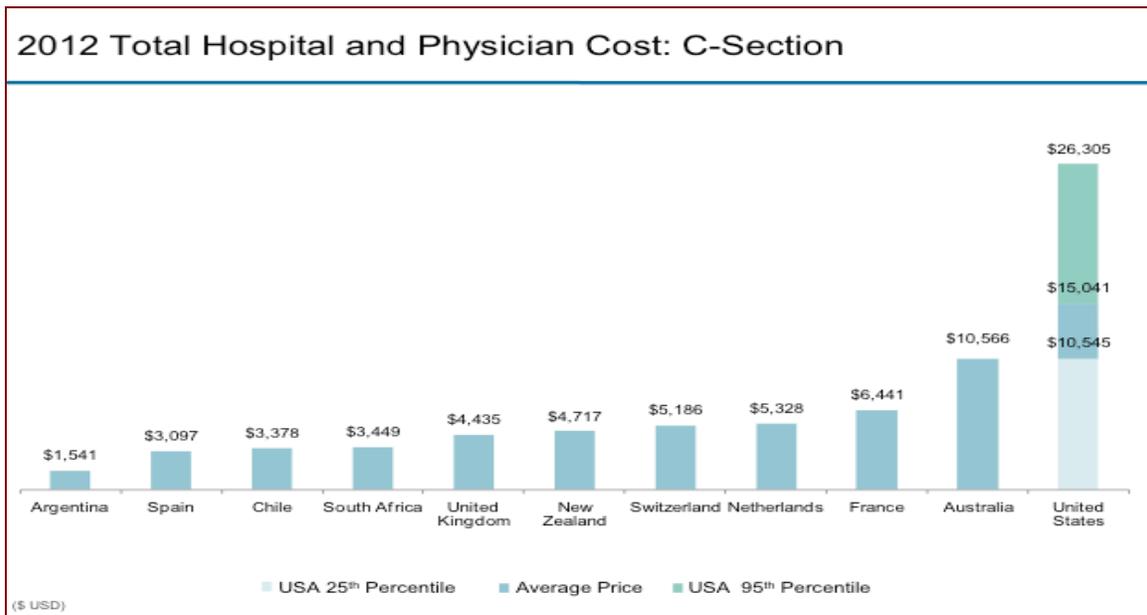


Figure 4



From the next charts, we can also see that payment to physicians for both vaginal and cesarean births also far exceed other countries. In the case of normal, vaginal deliveries, physician fees account for one-third of total cost of birth. For cesarean births, physician fees account for one-fourth of total cost.

Figure 5

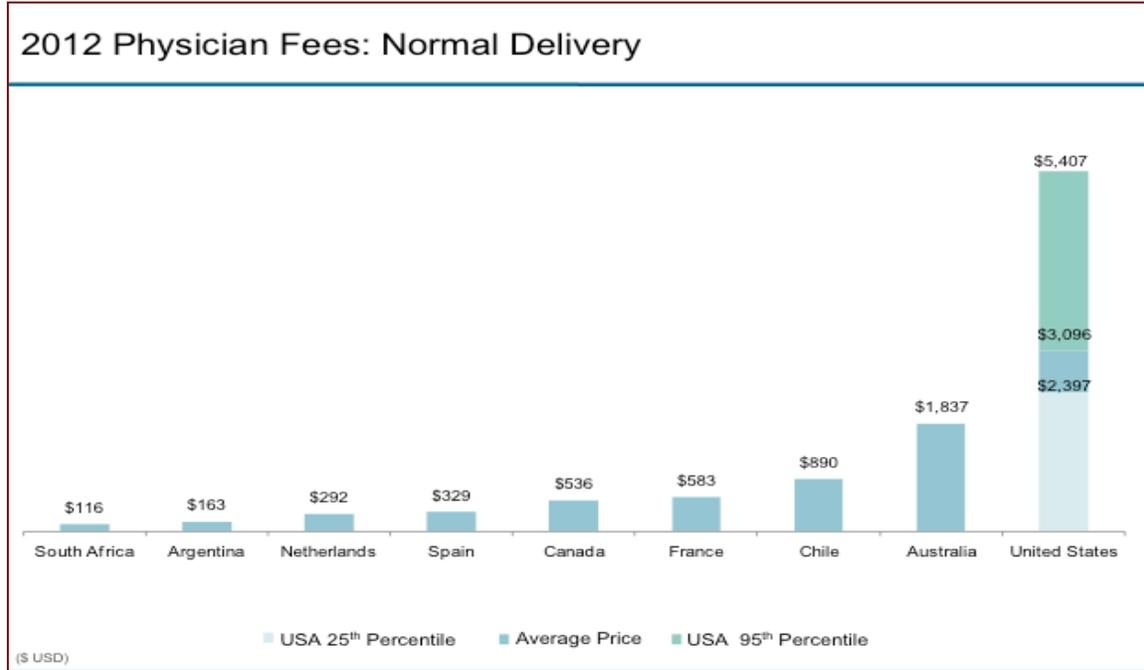
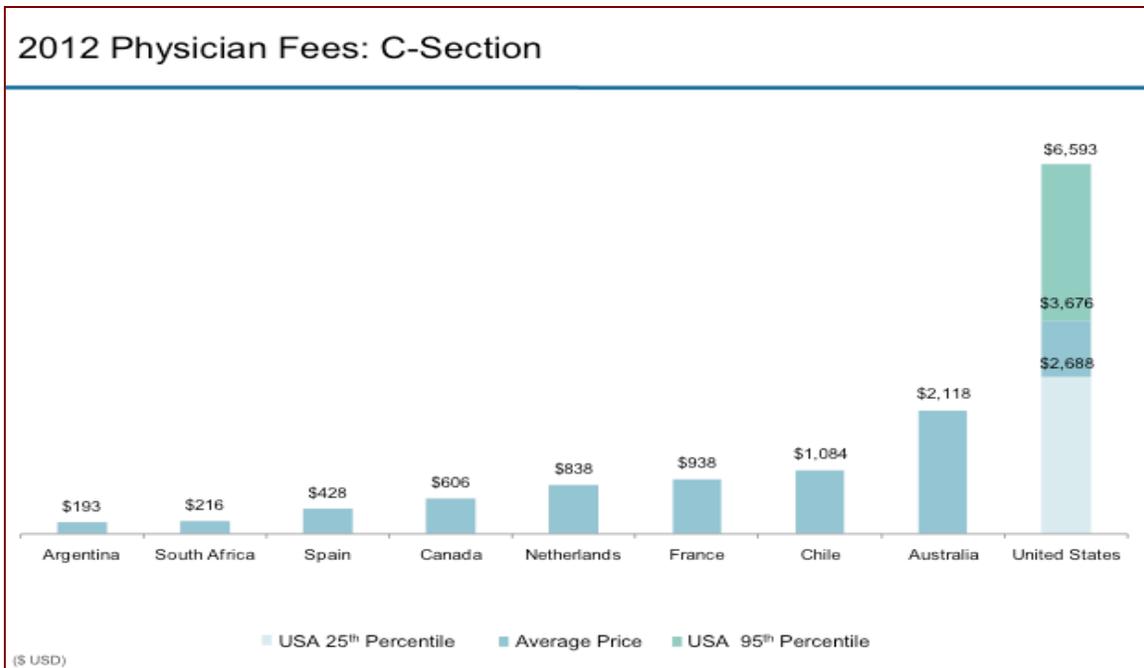


Figure 6



It is difficult to establish comparative analysis of health care costs (IFHP 2012). Costs for the United States reflect data from more than 100 million claims that represent a variety of

negotiated prices from many private and public providers. For some comparative countries, such as Canada, New Zealand, Switzerland and the United Kingdom, data was arrived at through a single governmental regulatory agency and represents payments by one health plan. In the case of France and Argentina, data comes from both public and private sectors and was furnished by a single health plan. “Comparisons across different countries are complicated by differences in sectors, fee schedules, and systems. In addition, for some countries a single plan’s prices are real for that plan but may not be representative of prices paid by other plans in that market (IFHP 2012:3).” These comparisons, therefore, are only estimates of actual costs based on limited information. The comparisons, while imperfect, do provide a general view of the wide cross-country variations in health care costs.

The picture of an expensive U.S. maternity care system becomes more clear when costs are factored by type of insurance, which the graphs seen above do not reveal. For women who have commercial insurance, usually employee based, the total cost of a vaginal birth in 2012 was \$32,093 and for cesarean birth the cost was \$51,125.¹⁸ With Medicaid, the costs of a vaginal birth was \$9,131 and for cesarean \$13,590. There is wide geographic variation in these costs, but what remains consistent throughout the United States is that both commercial insurers and Medicaid in general pay 50% more for cesarean births than for vaginal births. These figures do not capture costs involved in neonatal care, an important factor given the high rate of low birth weight and preterm birth in the United States (Truven Health Analytics 2013).

The high cost of commercially insured birth as compared to the average costs shown in the IFHP charts possibly reflects cost shifting, an industry misnomer which actually means payment shifting, that occurs in the U.S. health care system to accommodate the bad debt associated with patients who are underinsured and uninsured. Part of the cost shifting occurs

¹⁸ This cost represents the dollar amount paid, not the actual total charge.

because Medicaid does not pay the true costs of care, in general contracting with providers to pay 50% less than commercial payers. Because of the uninsured as well as underinsured, which includes Medicaid and individuals with insurance policies that provide poor coverage, there is wide variation in cost.

With births that are covered by commercial insurance plans, 59% of costs are associated with the birth facility and 25% is accounted for by payment to the maternity care provider. The IFHP charts (Figures 6 and 7) show the wide disparity in U.S. physician payment for vaginal and cesarean birth as compared to other countries. These figures also reflect the high cost to our health care system that results from our rising cesarean rate.

According to Childbirth Connections (2011) the combination of facility costs and provider cost can have a significant impact on the charges for birth. The average U.S. charge for a vaginal birth in a freestanding birth center with a midwife attendant is five times less than an uncomplicated vaginal birth occurring in a hospital with a physician attendant. If midwives attended most normal births, the cost savings to our health care system as a result of decreased cesareans would be significant (Rosenblatt et. al.1997; Gabay and Wolfe 1987).

Despite our expensive childbirth system, the quality of our maternity care lags behind other developed nations. The World Health Organization (WHO) has set a cesarean rate benchmark of ten to fifteen percent as an indication of optimum maternal and infant care (Wagner 2006). The American cesarean rate continues to rise annually, although 2010 showed a slight decrease from 2009. The CDC reported a cesarean rate of 32.8% of all births in 2010. The cesarean rate has increased 60% between the years 1996 and 2009. This steady increase in the annual cesarean rate has been consistent over the last several decades and shows no sign of

abatement (Murphy et. al. 2013). There does appear to be a slowing in the trend of rising cesareans, with a reported cesarean rate of 32.8% in 2012 (Childbirth Connection 2012).

Our abnormally high cesarean rate imposes an enormous economic cost on to our health care system. Cesareans have become the most frequently performed operation in American hospitals (Childbirth Connection 2009). In 2008 cesareans accounted for 46% (\$7.3 billion) of total costs for deliveries in the United States (Podulka et.al. 2011). However, economic costs do not take into consideration the issues of maternal and infant morbidity and mortality associated with cesarean section.

A dramatic rise in cesarean births in the hospital has been seen in some less developed countries among the privileged class (Khawaja et. al. 2004). However, it is more meaningful to compare the United States to Western countries with wide access to health care technology. When compared in this way, the United States cesarean rate is higher than eighteen industrialized nations – the Czech Republic, Japan, Hungary, Netherlands, England, Wales, New Zealand, Switzerland, Norway, Spain, Sweden, Greece, Portugal, Italy, Denmark, Scotland, Bavaria, Australia, and Canada (Wagner 2006:244). Wagner does not make clear if this listing is one of ranking.

A study by the WHO looks at trends in cesarean utilization and determinants of that utilization among developed countries (Laurer 2010). This study shows that the capacity of a health care system to provide surgical obstetric care is a significant factor contributing to differences in cesarean rates and the utilization of cesareans in each country. Other determinants of cesarean utilization included the variable of health care system financing. The greater the government contribution to the financing of a country's health care system, the lower the cesarean rate. Furthermore, an increase in the number of hospitals and hospital beds per capita

results in a significant increase in cesarean rates. Income levels had a very small statistical impact on cesarean rates. In other words, rising cesarean rates in the developed world have to do with systemic factors, particularly those involving financial incentives, within each country's health care system.

In the industrialized world a cesarean rate above the WHO recommendation of ten to fifteen percent does not save the lives of mothers or babies. A cesarean section is major surgery resulting in unnecessary risks to both mother and baby when carried out without clinical justification. Increased maternal risks include:

- A threefold increase in maternal death.
- Abdominal adhesions.
- Hemorrhage due to blood vessel laceration.
- Bladder damage.
- Infection sometimes leading to infertility.
- A twofold increase in stillbirth in subsequent pregnancies.
- Increased incidence of detached placenta in subsequent labors.

Risks to the newborn include a two to six percent chance that the baby will be cut during the operation, prematurity due to poor dating of the pregnancy and increased possibility of respiratory distress (Wagner 2006).

Infant Mortality, Perinatal Mortality and Neonatal Mortality as Measures of a Country's Health and Maternity Care System

Perinatal Mortality Rates (22 weeks gestation to week one after birth) and Neonatal Mortality Rates (birth to day 28 after birth) are both measured as one death per 1,000 births. Both are becoming more reliable as a means for cross-comparison of the health of newborns, the

overall health of a country, as well as the state of a country's maternity care. Throughout the world, neonatal mortality rates have some variation in reliability between developed vs. developing countries. However, most policy experts consider the measure of early neonatal deaths (birth to day 7) to be reliable.

Early neonatal mortality, newborn death within 48 hours of birth, accounts for three out of four neonatal deaths; this figure is only slightly higher in developed regions. Neonatal mortality worldwide represents more than half of overall infant mortality and over one third of under-five deaths. There are considerable differences between developed and developing countries (World Health Organization 2006:24). Cross-comparison based on the two measures of perinatal and neonatal mortality tends to be limited due to the lack of consistent reporting based on uniform definitions. The WHO (2006) describes the inherent difficulty in obtaining consistent reporting because of the variations in culture and maternity care systems of each country. For example, my discussions with midwives in the Netherlands reveal that a fetal death at 22 - 23 weeks gestation would not necessarily be considered a perinatal death but rather a miscarriage, also referred to as spontaneous abortion.

Evaluation of reporting of early deaths has shown that we may be underestimating perinatal deaths in many countries. It is likely that the decision whether to classify a delivery long before term as a spontaneous abortion or as a birth, which must be registered, may be affected by the circumstances in which the birth occurred and by the cultural and religious backgrounds of the people making the decision, as described for the past (15). For example, a stillbirth at 22 weeks of gestation must be registered as such: at 21 weeks and six days, registration is not required (WHO 2006:6).

As the World Health Organization becomes more confident on the reliability of newborn statistics, they are placing a greater value on these statistics.

Mortality and morbidity in the perinatal and neonatal period are mainly caused by preventable and treatable conditions. Interventions that benefit mothers by reducing maternal deaths and complications, as well as special attention to the physiological needs

of the newborn baby— resuscitation when necessary, immediate breast-feeding, warmth, hygiene (especially for delivery and cord care) and the prevention, early detection and management of major diseases—will help ensure the survival and health of newborn infants. Safe and clean delivery, early detection and management of sexually transmitted diseases, infections and complications during pregnancy and delivery and taking into account the physiological needs of the newborn baby, are all interventions that should be available, attainable and cost-effective. They all have an immediate beneficial impact on the mother and the unborn and newborn infant. Good maternal nutrition, the prevention and management of anaemia and high-quality antenatal care will reduce the incidence of complications and thereby improve the chances of survival of the mother, the fetus and the newborn infant. The incidence of low birth weight—an important determinant of perinatal survival—may take time to change substantially. Universal access for women to care in pregnancy and childbirth and care of the newborn is required to improve the chances for both mother and baby (World Health Organization 2006:25).

Both the Perinatal and Neonatal Death Rates are sensitive to aspects of obstetrical care and factors related to low birth weight. In developed countries, however, both measures are skewed by the availability of high tech interventions that result in decreasing the perinatal death rate, albeit at increased neonatal morbidity. Alternatively, unreliable reporting in countries with underdeveloped health care systems skews measures. Health care researchers and policy analysts, therefore, consistently refer to infant mortality rate - the number of infant deaths per 1,000 live births within the first year of life - as a significant measure for the overall health and living conditions of communities. The IMR for the United States in 2011 was 6.05, the last year data is available from the CDC (MacDorman et. al 2013).

While this latest IMR rate for the United States represents a slight improvement from the IMR of 7.0 in 2006 (Mishel, Bernstein and Allegretto 2007), the United States' IMR continues to compare poorly to that of other wealthy nations. A 2013 report by the Organization for Economic Co-Operation and Development (OECD) points to the fact that the United States remains an outlier when compared to other countries.

All OECD countries have achieved remarkable progress in reducing infant mortality rates from the levels of 1970, when the average was approaching 30 deaths per 1 000 live births,

to the current average of just over four. Besides Mexico, Chile and Turkey where the rates have converged rapidly towards the OECD average ..., Portugal and Korea have also achieved large reductions in infant mortality rates, moving from countries that were well above the OECD average in 1970 to being well below the OECD average in 2011.

By contrast, in the United States, the reduction in infant mortality has been slower than in most other OECD countries. In 1970, the US rate was well below the OECD average, but it is now well above (Figure 1.7.1). Part of the explanation for the relatively high infant mortality rates in the United States is due to a more complete registration of very premature or low birth weight babies than in other countries... However, this cannot explain why the post-neonatal mortality rate (deaths after one month) is also greater in the United States than in most other OECD countries. There are large differences in infant mortality rates among racial groups in the United States, with black (or African-American) women more likely to give birth to low birth weight infants, and with an infant mortality rate more than double that for white women (11.6 vs. 5.2 in 2010) (NCHS, 2013) [OECD 2013:36].

The incidence of low birth weight at birth and preterm birth is greater in the United States as compared to European countries. Even when infant mortality rates are adjusted to exclude early preterm births, which can often be the result of complications unrelated to maternal health or living conditions, the United States continues to rate poorly in comparison to other wealthy nations (Heisler 2012). Countries with lower infant mortality rates include countries in Western Europe and East Asia. Many of these countries have a GNP well below that of the United States. The United States' 2011 IMR rate of 6.05 was higher than the overall IMR average of 4.0 reported by members of the OECD. Furthermore, the international comparative ranking of the U.S. IMR has continued to fall (OECD 2013). The primary cause of infant mortality in the United States is congenital malformation (20.1%) but is closely followed by low birth weight and preterm birth (16.9%). Both low birth weight and preterm birth are directly related to issues of poverty – i.e. income and access to care (Heisler 2012).

International comparisons of infant mortality rates¹⁹ remain controversial. Some critics of the use of the IMR for comparative purposes point to national variations in how live birth statistics are gathered.²⁰ Heisler (2012) defends the use of IMR for international comparisons. “... Differences in how live births are recorded may affect international IMR comparisons; however, it is unlikely that these recording differences would entirely explain the high U.S. IMR or the variation between the U.S. IMR and those of some European countries... Researchers at the National Center for Health Statistics (NCHS) conclude that for recording differences to completely explain the high U.S. IMR, European countries would have to misreport one-third of their infant deaths... a possibility considered to be improbable by the NCHS. (Heisler 2012:7).”

To a large extent, racial disparities continue to account for the high U.S. IMR. Heisler (2012) provides statistical evidence of these racial disparities in the U.S. infant mortality rate and the role these disparities play in raising the overall U.S. IMR.

... In 2008, the IMR for infants born to black mothers was 12.7, more than double the white IMR of 5.5. This difference has the effect of increasing the U.S. IMR, as births to black mothers make up 16% of U.S. births, but 30.4% of U.S. infant deaths in 2008. In contrast, the U.S. IMR for white infants was 5.53. This rate is closer to the Canadian IMR of 5.6; however, it is still higher than the OECD average of 4.6 and the IMRs of other English-speaking countries... Eliminating these disparities would likely lower the U.S. IMR, but would not likely lower it below the OECD average, or below those countries with the lowest IMRs (those in Scandinavia) [Heisler 2012:8,9].

A greater incidence of multiple births due to reproductive technologies can account to some extent for our increased trend in preterm and low birth weight births. However, the CDC notes that shorter gestations have also increased among singleton births (Hamilton, Martin and Ventura 2009).

¹⁹ The infant mortality rate is determined by the number of infant deaths in the first year of life per 1,000 births.

²⁰ There is no uniform definition for statistical purposes of what constitutes a “live birth.” The World Health Organization is attempting to establish a uniform definition based on gestation age with increasing success but there remains some variation among countries.

The following chart looks at comparative infant mortality rates in relation to GDP per capita and expenditures as a percentage of GDP. I have rated countries included by the IFHP ratings while adding wealthy countries known to have low infant mortality rate, i.e. Japan and Sweden.

Figure 7

GDP Per Capita and Expenditures In Relationship to IMR

Ranking	IMR Rates 2012 (Estimated)	GDP per capita (US\$) (2012)	Health Expenditures As % of GDP (2010)
1	Japan (2.21)	Switzerland 54,600	US 17.9
2	Sweden (2.74)	United States 49,800	France 11.9
3	Italy (3.36)	Netherlands 42,300	Netherlands 11.9
4	France (3.37)	Australia 42,000	Germany 11.6
5	Spain (3.37)	Sweden 41,700	Switzerland 11.5
6	Germany (3.51)	Canada 41,500	Canada 11.3
7	Netherlands (3.73)	Germany 39,100	New Zealand 10.1
8	Switzerland (4.03)	U.K. 36,700	Sweden 9.6
9	Australia (4.55)	Japan 36,200	U.K. 9.6
10	U.K. (4.56)	France 35,500	Italy 9.5
11	New Zealand (4.72)	Spain 30,400	Japan 9.5
12	Canada (4.85)	Italy 30,100	Spain 9.5
13	United States (5.98)	New Zealand 28,800	South Africa 8.9
14	Chile (7.36)	Chile 18,400	Australia 8.7
15	Argentina (10.52)	Argentina 18,200	Argentina 8.1
16	South Africa (42.67)	South Africa 11,300	Chile 8.0

IMR rates from the Henry J. Kaiser Family Foundation. Global Health Facts.
<http://kff.org/global-indicator/infant-mortality-rate/>

GDP per capital 2012 from CIA World Book Factbook. "Country Comparison GDP-Per Capital (PPP). These Figures are arrived at by taking the purchasing power parity based on GDP divided by populations.
<https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html>

Health Expenditures by % of GDP from Central Intelligence Agency World Factbook.
<https://www.cia.gov/library/publications/the-world-factbook/rankorder/2225rank.html>

All of these statistical indicators are imperfect. However, the infant mortality rate of each country is a strong estimate and is generally accepted by international policy experts as

reflecting “the effect of economic and social conditions on the health of mothers and newborns, the social environment, individual lifestyles as well as the characteristics and effectiveness of health systems. (OECD 2013:36).”

Aggregate infant mortality rates do not tell the entire story of the health of a nation’s people in countries like the United States with known wide disparities in infant mortality. At the aggregate level, infant mortality within the United States is above that of some developed countries. Infant mortality in the United States is known to be highly variable with high infant mortality associated with racial and geographical areas, both related to health care access and living conditions. Likewise, GDP per capita does not capture the overall wealth and well being in countries with a wide disparity of wealth. Again, the United States is an example. Healthcare expenditures as a percentage of GDP do not capture how much a country focuses its health care expenditures onto primary care, including maternal and child health care, as opposed to large expenditures on health care processes involving extensive technology.

What Figure 7 does show is that the United States, with regards to infant mortality, receives poor results for its health care dollars. The OECD (2013) points out that among wealthy countries, there is often a relationship between per capita health care spending and perinatal outcomes. However, we can see from the above chart that the United States is an exception. A number of countries spend much less on health care while obtaining better results in terms of infant mortality. We can take Spain as an example. Spain has an infant mortality rate of 3.34, which places it among the countries with comparatively low infant mortality. Spain compares favorably to the United States with its IMR of 5.98. Yet Spain’s health care expenditures are 9.5% of GDP while the United States spends 17.9% of GDP on its health care system. In the

United States, increased health care spending does not result in improved overall perinatal outcomes.

The underlying causes behind infant mortality rates are different for developed and emerging countries. According to the OECD (2013:36), "... around two-thirds of the deaths that occur during the first year of life are neonatal deaths (i.e., during the first four weeks). Birth defects, prematurity and other conditions arising during pregnancy are the principal factors contributing to neonatal mortality in developed countries." There has been a significant decrease in infant mortality rates among countries followed statistically by the OECD but this has been particularly true in developed countries where infant mortality rates have reached a point of leveling off in recent years. Again, in the above table we can see that the IMR of developing countries hover around 3-4/1,000. The United States stands out as the exception to this trend. "At one time the infant mortality rates in the United States was well below the OECD average, but it is now above average.... Significant differences are evident among ethnic groups in the United States with Black or African-American women more likely to give birth to high-risk, low birth weight infants, and with an infant mortality rate more than double that for white women (12.9 versus 5.6 in 2006) [OECD 2011:36]."

Maternal mortality in the United States, the number of pregnancy related deaths per 100,000 live births, is another health indicator where the need for improved maternity care is apparent. The Centers for Disease Control began its Pregnancy Mortality Surveillance System in 1986. From the year 1987 to 2010 maternal deaths in the United States increased from 7.2 to 17.8 in 2010, the latest data available (CDC 2014). The factors involved in this trend of increased maternal mortality in the United States are not entirely clear. The CDC speculates that this trend in maternal deaths can to some extent be explained by computerized data collection and

increased awareness by hospitals and providers as to the criteria for identification of pregnancy related deaths. In underdeveloped countries with poor health care access, hemorrhage accounts for the overwhelming number of maternal deaths. By contrast, in the United States hemorrhage accounts for only 11% of maternal deaths. Chronic health conditions, i.e. hypertension, cardiovascular disease, cardiomyopathy, and diabetes, account for the bulk of maternal mortality in the United States.

With regards to pregnancy-related deaths in the United States, as with infant mortality, we see a racial discrepancy. The following statistics from the CDC showing pregnancy related mortality ratios from 2006-2010 broken down by race illustrates this point (CDC 2014).

- 11.7 deaths per 100,000 live births for white women.
- 36.4 deaths per 100,000 live births for black women.
- 17.7 deaths per 100,000 live births for women of other races.

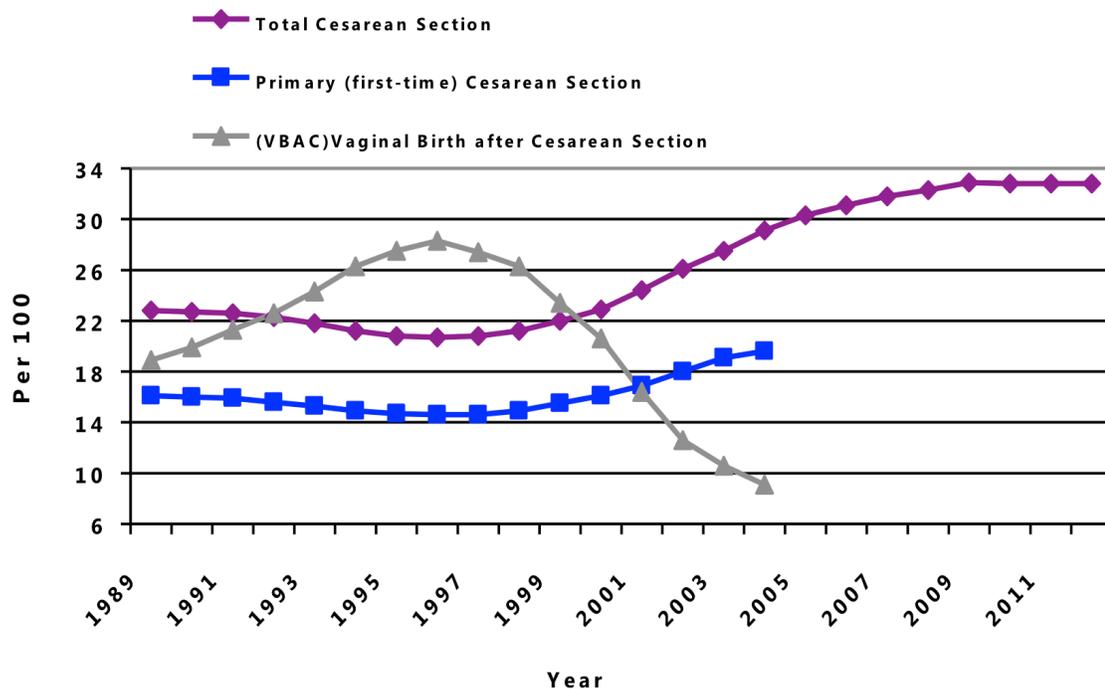
These statistics raise significant questions as to the quality of the American system of childbirth. Health care disparities and poor social support for many pregnant women, despite large health care expenditures, are routinely cited as causes of poor outcomes – our increasing poor comparative rates of preterm labor, low-birth weight, infant mortality, maternal mortality. The American obstetric practice of routine planned induction at 37-38 weeks has contributed to our high cesarean rate and cesareans in turn account to some extent to the poor outcomes listed above. Numerous studies have shown adverse impacts on the newborn with this practice of early induction including Rodgers and Cox (2013) and Robinson et. al. (2010). In response to these studies, ACOG (2013a) has now taken on an official position against medically unnecessary induction prior to 39 weeks gestation. We must wait to see if this new policy has a positive impact on our cesarean rate.

The impact of our cesarean rate on American women and infants cannot be over emphasized. Many American obstetricians still refuse to offer the procedure vaginal birth after cesarean (VBAC) despite the fact that VBAC has been shown by clear evidence to be safe when carried out judiciously. Vaginal birth after Cesarean provides the possibility of decreasing the cesarean rate in the U.S. Figure 8 shows the inter-relationship between the United States VBAC rate and our rising cesarean rate. As the rate of VBACs increases, there is a corresponding decrease in overall cesarean rates. The opposite is also true: as the rate of VBACs decrease, the overall cesarean rate increases. The primary cesarean rate, a mother's first cesarean, is a fundamental component of the cesarean problem in the U.S. given that subsequent pregnancies will most often result in scheduled cesareans.

Figure 8

Rates for Total Cesarean Section, Primary Cesarean Section and VBAC: 1989-2011

Source: Vaginal Birth After Cesarean: Final Panel Statement. NIH Consensus Development Conference Vaginal Birth After Cesarean. Bethesda, MD: National Institute of Health. March 8-10, 2010.)



We can observe from the above chart that beginning in the early 1990s, as obstetricians began to carry out VBAC in response to strong childbirth activist demand, there occurred a corresponding temporary dip in the cesarean rate. A decreased VBAC rate in the mid to late 1990s mirrors a return to rising cesareans rates, a rise that continued. The unreliability of state-by-state statistics regarding primary cesarean and VBAC rates make it difficult to chart these variables beyond 2005. What is clear from Figure 8, however, is the relationship of a rising cesarean rate with an increase in primary cesareans along with a decreased VBAC rate. This corresponds with anecdotal evidence from childbirth activists.

Nurse-midwifery has shown its ability to provide improved outcomes for mothers and babies at less cost to society. Public policy analysts have noted these outcomes and point to nurse-midwifery as an important element in successful reform of our childbirth system. Poor clinical maternal child outcomes in the United States are associated with a childbirth system where pregnancy is considered a medical condition that comes under the professional purview of an obstetrical specialty, unlike many European countries where midwives are the attendants at most normal births. Another factor noted by policy experts is the lack of an independent midwifery in the United States²¹ (Pew Health Professions Commission/University of California San Francisco Center for the Health Professions 1999; Gabay and Wolfe 1995a 1995b). The World Health Organization has long called for the promotion and integration of trained midwives as a key component of safe pregnancy care in both industrialized and emerging nations.

²¹ I make the statement that American nurse-midwives are not “independent” in this sense: American obstetrics is in a position to control midwifery clinical practice. In the U.S. the clinical practice of nurse-midwives is almost always controlled by physicians, either through direct supervision or through statutory requirements for nurse-midwives to obtain a physician practice agreement in order to practice – agreements that are used by obstetricians to control midwives. Even in the few states where practice agreements are not legally mandated, third party payers, under pressure from medicine, often require practice agreements for reimbursement of midwifery services. The obstetrical committees within most hospitals block attempts by independent nurse-midwives to gain admitting privileges. All these factors effectively place nurse-midwives under the control of their competitors.

For several decades policy experts have pointed to nurse-midwifery as a fundamental element in providing quality maternity care to larger numbers of women and babies. We need to look seriously at the factors that continue to marginalize nurse-midwifery as a profession. In this dissertation I provide concrete examples of how nurse-midwives, when practicing in a hospital maternity service that is not truly midwifery-led, are impeded from practicing the midwifery model of care that has been shown by numerous studies to improve maternal and child outcomes (Johantgen et. al. 2012; Goodman 2007; Waldenstrom and Turnbull 1998; Haire 1991; Blanchette 1995; Sharp and Lewis 1984; Mann 1981). I will further discuss this issue of midwifery outcomes, the need for greater utilization of midwives, as well as the need for midwife-led labor and delivery units in terms of policy implication in the conclusion of this dissertation.

Chapter Three

Epiduralized Birth: An Examination of the Evidence

Obstetrics is wider and broader than pure medicine. It has to do with the whole of life, the way you look at life, making objective discussion difficult. You are almost unable to split the problem off into pure science, always your outlook on life is involved.

(Geerit-Jan Kloosterman, Dutch Obstetrician)

This chapter looks at significant medical issues with regards to the safety of epiduralized birth, discussing medical literature relevant to an analysis of the risks involved in the routine administration of the epidural with its concomitant interventions. The chapter is not a complete literature review. However, I have studied four editions of the medical text *Anesthesia for Obstetrics* that range from 1979 to 2013 along with over 100 medical journal articles. What is most clear from my research is that there is little agreement among physicians regarding the impact of the epidural on labor, although there is beginning to be consensus on certain issues. Controversies continue as to the impact the epidural, also referred to as regional anesthesia. Does it prolong overall labor? Does the local anesthetic that is administered in the epidural, usually bupivacaine, negatively impact newborn behavior and/or maternal behavior? What is the impact of administering bupivacaine with pitocin, both powerful medications? Perhaps the most fundamental question: Is there a limit to what should be done to eliminate pain in labor?

In the first section of this chapter, *Obstetrics: Is It Evidence Based,?* I discuss the philosophical approaches in the science behind routine obstetrical interventions. Modern obstetrics has its critics who claim that the routine interventions – interventions inherent in the routinized care fundamental to epiduralized birth - are based on the need to manage birth for the convenience of the players involved. Also, while obstetrical practice claims to be evidence based, this section discusses the criticism that some of these interventions have not been proven

to be safe. Of major significance, the epidural was implemented without research as to its safety during labor. Research has been carried out after the fact and the obstetrical profession has ignored studies showing major side effects.

In the next section, *How Pain Came to Be a Medical Indication for Epiduralized Birth*, the history of the attempt to alleviate pain during childbirth and the limitations of various methods of pain relief are summarized. To understand epiduralized birth, it is helpful to look at how modern obstetrics has been on a quest for the perfect method for the relief of pain during labor. We have gone from using various medications for pain relief, all of which had limitations, to the epidural with its promise of a totally pain free birth. That promise has been so appealing that women have widely embraced the epidural, believing it to be benign. An important element in the movement towards epiduralized birth is the cultural assumption that modern medicine can and should provide a pain-free childbirth. Mechanized birth, made more efficient with epiduralized birth, is not something that has been forced onto American women, a point discussed several times throughout this dissertation. To the contrary, the epidural works for all players, including mothers. The reasons for this phenomenon are important for an understanding of how epiduralized birth has become the norm in American childbirth.

The third section, *The Epidural and Labor as a Mechanical Process*, discusses the mechanical approach to labor brought about by the adoption of Friedman's Curve. The importance of Friedman's Curve to modern, industrialized obstetrics can hardly be understated. The analysis of labor as a mechanical event, which is understood as a series of phases and thus standardized, was fundamental to the needs of institutional birth. For the sake of efficiency, the modern obstetrical hospital unit required a philosophical justification for the manipulation of labor that forms the basis for today's epiduralized birth. This mechanical approach to labor and

delivery was a break from traditional obstetrics, which recognized the importance of the environment, the mental and emotional needs of the mother, as well as the variations inherent in normal birth.

The next sections of this chapter discuss major controversies surrounding epiduralized birth: the safety of bupivacaine; prolonged labor (a direct result of the epidural); the subsequent need to augment labor with pitocin due to the prolonged labor that accompanies the epidural; and the implications of maternal fever, a frequent side effect of the epidural. In *The Safety of Bupivacaine*, the use of this local anesthetic, the primary medication used in the epidural, is discussed. Bupivacaine has been designated a Category C medication in pregnancy by the FDA; it should only be used when the benefits clearly outweigh the risks as it has been shown in animal studies to be harmful to the fetus. This section discusses the known side effects of bupivacaine and how obstetricians and anesthesiologists continue to ignore the fact that the epidural is not a benign intervention.

The next three sections - *The Epidural and Prolonged Labor*; *The Epidural and Augmentation of Labor*; and *Changes in the Management of Labor: The Epidural and Friedman's Curve* - together consider the debates surrounding the issue of prolonged labor and the risks inherent in routine administration of pitocin. A few studies claim that the epidural does not prolong labor. However, there is consensus among most obstetricians that the epidural does in fact prolong labor, necessitating the routine augmentation of labor with pitocin. This consensus is clearly revealed in the medical literature. Augmentation of labor with pitocin presents its own risks, namely increased risk for cesarean and fetal distress. Obstetricians continue to debate the pros and cons of various protocols for the safe administration of pitocin. Meanwhile, epiduralized birth, with its prolongation of labor, has led obstetrics to question the

validity of Friedman's Curve and its applicability to the reality of clinical practice. Recognizing the need to give women more time to give birth in the context of epiduralized birth, obstetricians have revised Friedman's Curve, expanding the time frame for what is considered normal birth. This development in obstetrical care is truly astounding. This reevaluation of Friedman's Curve is an important example of how a practice that is supposedly evidence based can be thrown out for the sake of convenience.

Next, *The Epidural and Maternal Fever*, discusses this frequent side effect of the epidural, maternal fever. Far from benign, maternal fever can have very real implications for the care of the newborn and interference in maternal-infant bonding. The next sections delve further into the disruption of the complex hormonal system of birth. These last sections - *The Epidural: The Impact on Newborn Behavior and Maternal-Infant Bonding*; *Oxytocin: The Disregarded Neurohormone*; and *The Significance of The Fetal Ejection Reflex on Fetal/Maternal Oxytocin Feedback* - show the evidence of how the disruption of the neurohormonal feedback system between mother and fetus has implications for the interruption of normal birth, maternal-infant bonding and newborn behavior. Scientists are only beginning to recognize and understand this aspect of epiduralized birth.

Obstetrics: Is It Evidence Based?

The application of evidence-based research has become an expectation in clinical practice. The gold standard for evidence is randomized, double blind studies. However, these studies are difficult to carry out on pregnant women due to ethical issues. At the same time, obstetrics is notable in that it is the only medical specialty that deals in a non-pathological

physiologic event – childbirth – a human event that encompasses cultural expectations by all involved. Obstetrical scientific evidence is rarely without bias.

I have found frequent disagreement in the literature on significant issues surrounding epiduralized birth. There are two opposing approaches to maternity with regards to the relationship between scientific evidence and clinical practice. The approach held by most obstetricians is to carry out routine technological interventions unless they have been proven to be unsafe. This enables obstetricians and anesthesiologists to continue to carry out the interventions inherent to epiduralized birth, despite research that questions their safety. There is another approach, one to which I adhere. I believe the onus is on maternity providers to *prove* that technological interventions are in fact safe before they become routine care during pregnancy and used for no clear medical indication. In modern obstetrics this has not been the case. The problem that I have observed is that interventions are too often implemented and become routine when they in fact have not been proven to be safe. Also, in some cases interventions are known to be unsafe and the risks shrugged off as minor. In too many cases convenience trumps science.

To illustrate this fact, we can look at the routine urinary catheterization that is an inherent part of epiduralized birth, whether the epidural is administered early or late in labor. Most obstetrical providers see urinary catheterization as a minor intervention. The incidence of hospital acquired urinary tract infection (UTI) is quite real. It is estimated that there is a 3-5% daily risk for acquiring a UTI in the hospital when a patient is catheterized (Lo et. al. 2008). This percentage does not take into account age or the length of time that a patient is catheterized. However, the incidence of antibiotic resistant infection in hospitals has become a serious risk with any intervention, particularly urinary catheterization. In my research on the safety of the

epidural, no researcher even mentions this one risk that is inevitably a part of epiduralized birth. I mention this seemingly minor intervention to emphasize the point that there is no part of epiduralized birth that is inconsequential.

How Pain Came to Be a Medical Indication for Epiduralized Birth

All cultures rely on various routines or interventions to help laboring mothers cope with the pain of childbirth. The experience of pain is highly subjective and variable. Many cultures have ways of attempting to alleviate pain, i.e. through the use of supportive care and social support. Catton et al. (2002) Provide a thoughtful analysis about the cultural changes in our attitude towards pain in childbirth and the interrelationship of women, obstetricians, and ultimately anesthesiologists with regards to the issue of pain and technological interventions during labor.

Ether was the first pharmacological agent used for relief of pain in childbirth. Numerous academicians identify the use of ether during labor as a turning point in Western culture's belief system regarding pain in childbirth. Ironically, physicians at the time were leery of using ether because of its known potential negative impact on the newborn – respiratory depression. During administration of ether to the laboring mother, it was difficult to control dosage and the impact of a given dosage was highly variable. Most physicians continued to hold the traditional belief that labor was a physiologic process that should be interfered with only when medically necessary (Catton et al. 2002). Interesting, Catton's portrayal of physicians maintaining a traditional philosophy of birth is contrary to the analysis presented by some social scientists and historians.

Catton et al. (2002) however, point to the role of women during the progressive era in demanding that medicine provide means to relieve pain during birth. This in turn advanced the

movement of birth into hospitals, where pain medications could be administered in a safer, controlled environment. The demand for pain medication also provided impetus to the developing obstetrical profession, which “criticized the philosophy of ‘watchful expectancy’ that had dominated obstetric practice throughout most of the 19th century (Canton ET. Al. 2002:S25).”

This fundamental change in our culture’s belief system regarding pain helps to explain how the epidural, with its known and possible negative side effects, has so rapidly come to be incorporated into obstetrical care. Relief of pain during childbirth was associated with progressive ideology. Pain came to be seen as serving no useful purpose and to be inhumane in any circumstance. Many women and obstetricians saw the alleviation of pain as an end in itself. Also, obstetrics considered pain to be a stressor and to put the fetus at risk. As a result, “Obstetricians used increasing doses of various drugs administered by a variety of new techniques (Catton ET. Al. 2002:S25).” This change in cultural attitudes also justified the growing technological intervention in childbirth.

Associated with this spirit of reform was an unbounded faith that human reason, through science and technology, could identify and overcome all causes of suffering and pain. This social milieu accounts in part both the intensity of demands of early feminists and the response of progressive obstetricians. It also explains their feckless pursuit and use of new drugs and techniques to alleviate pain (Catton et. al. 2002:S26).

Narcotics, i.e. morphine, Demerol and more recently Fontanel, began to be used for pain relief in labor. However, narcotics create difficulties in that timing of administration is critical to avoid neonatal respiratory depression at birth. The use of *twilight sleep*, a combination of morphine and scopolamine (an amnesiac), while popular from the 1950s through the 1970s also presented problems for obstetrical staff? Some women, who had been administered twilight sleep, unaware of their surroundings and behavior, were at times difficult to manage. The

epidural was first developed as an alternative to general anesthesia in surgery. When it was first introduced as a means of pain relief during labor, the absence of obvious side effects such as neonatal respiratory depression, as well as the complete elimination of pain, made it appear to be the perfect tool for pain relief during labor.

When epidural anesthesia began to be used in labor, it was recognized to cause disruption in the progress of labor contractions and so it came to be used as pain relief only when labor was well established and as an alternative to other forms of analgesia. For example, the use of pudendal anesthesia,²² traditionally administered for relief of the extreme pain experienced by some women as the baby proceeds through the birth canal past the ischial spines, was a particularly difficult procedure to master. Early advocates for the use of epidural during labor did not even consider its use throughout the entirety of labor. In the early years of its use, anesthesiologists and obstetricians did not consider the implications of using a local anesthetic via epidural throughout the entirety of labor nor did they consider the possibility that there may be an adverse impact on the mother or fetus. What was considered important was that the epidural does not cause respiratory depression of the newborn and when administered correctly provides excellent pain relief (Wester and Krumperman 1958).

As the use of epidural became routine, the timing of administration became a subject of debate. Studies looking at the impact of epidural anesthesia on the length of first stage of labor were contradictory. As a result, epidurals progressively came to be administered earlier during labor. Relief of pain, even in early labor, became an indication for epidural administration, particularly as “pitocin augmentation appears to readily correct any observed decrease in uterine

²² Pudendal Anesthesia involves injecting a local anesthetic into the pudendal canal, in which the pudendal nerve is positioned near the ischial spines of the pelvis. This creates a lack of sensation at the areas of the perineum, vagina and vulva. It requires careful detection by the obstetrician and involves the use of a long needle. By contrast, the epidural is a much easier procedure to carry out.

activity (Shnider and Levinson 1987:45).” It was in this way that augmentation of labor with pitocin came to be a routine intervention associated with epidural anesthesia.

The Epidural and Labor as a Mechanical Process

The adaptation of epidural anesthesia for use in labor fit perfectly into the mechanized viewpoint that had been embraced by modern obstetrics. The modern obstetrical profession holds a philosophical viewpoint on the mechanism of labor that is fundamentally different from early physicians. While early physicians had no scientific understanding of the neurohormonal system involved of labor, they understood that the laboring mother responded to various environmental factors that in turn affected the process of labor.

The modern obstetrical profession perceives labor as a mechanical process that can be manipulated. For decades students of obstetrics have been taught a philosophy of normal labor referred to as “the three Ps.” Labor was reduced to a mechanical process that resembles plumbing. Labor was as simple as a combination of the *passage*, the size and shape of the pelvis; the *power* of contractions; and the *passenger*, the position and size of the fetus (Simkin and Ancheta 2011). This was institutionalized with the wide acceptance of Friedman’s mechanistic analysis of normal labor, referred to as the Friedman’s Curve.

A turning point for childbirth in the United States was when Friedman’s Curve and external fetal monitoring (EFM) became a routine part of the management of labor. Friedman (1972) was an early proponent of the concept of the laboring mother as a machine, a metaphor that has been widely analyzed, and used, in critiques of modern obstetrics, particularly Martin (1987). The significance of the adaptation of the Friedman’s curve to the management of labor in the American hospital can hardly be overemphasized. It was perhaps the beginning of the

industrialization of birth, a term coined by Odent (2002), through the routinization of birth, the attempt to standardize a physical event that in reality is highly variable, so that it could be more conveniently managed.

The standardization of human labor was fundamental to the industrialization of birth. Friedman's 1972 journal article, *An Objective Approach To The Diagnosis and Management of Abnormal Labor*, became an influential work, which established the rationale for a reorganization of obstetrical care. In order to "simplify" the clinical observation of the progress of labor, Friedman developed a framework that divided labor and delivery into three stages. The first stage, labor, was then divided into phases – latent, active and transition. A standard time frame, a "progression of time in labor," was accepted for "normal" cervical dilation and fetal descent. "Ongoing measures" were obtained on a routine basis through frequent examination of the cervix and the findings plotted on a graph kept at the bedside of the laboring mother. A graph of the expected parameters of "normal" labor was seen as a "simple, practical, and objective tool for the study of individual labors in progress (Friedman 1972:843)."

By the end of the 1970's, a copy of Friedman's graph to plot the progress of labor was an essential part of every labor room in the United States. The graph, with the x-axis representing time and the y-axis representing cervical effacement and dilation along with fetal descent, represented the progress of labor in the form of a sigmoid curve (thus the term "Friedman's Curve"). The acceptable curve showed progress of at least 1.2 centimeters cervical dilation per hour for nulliparas (first time mothers) and 1.5 centimeters per hour for multiparas. Assessment of dilation based on frequent cervical examinations was plotted on the graph and juxtaposed to Friedman's Curve. When progress of labor fell "off the curve," it was considered "aberrant." "Graphic analysis" of labor "made possible the study of abnormal patterns... (Friedman

1972:850).” The concept of the laboring mother as functioning like a machine, a fundamental concept for industrialized birth, was clearly expressed by Friedman (1972:844).

One may simplistically consider the laboring patient as a complex machine. It is not necessary to understand the inner workings completely for us to be able to study such a machine in great detail, especially insofar as energy input, work output, and factors that affect both are concerned. The task demanded of the gravid patient consists of two components: cervical dilatation and fetal descent. The sources of energy for accomplishing these purposes are likewise made up of two aspects: namely uterine contractions and expulsive efforts. A mechanistic concept can be evolved for the labor phenomenon that allows us to consider the interrelations between energy input and work output. . . . A direct measure of efficiency is not yet obtainable. However, an indirect approach is possible and, as we shall see, it can be utilized for the purpose of determining the presence or absence of labor aberrations.

The significance of the role of neurohormones in the process of human labor was poorly understood in 1972, nor was there appreciation of the mind-body connection. Elements involving the role of the environment in the progress of human labor - elements such as a woman’s sense of safety, the need for quiet and privacy, and the presence of a trusted attendant - were not a part of this new mechanized framework of birth. Friedman’s mechanized view of human labor served as a theoretical justification for the coming industrialization of childbirth.

Time came to be every laboring mother’s nemesis, particularly first time mothers. Obstetrics did not consider that the constant observation of the laboring mother itself might be the cause of the disrupted, abnormal labors that were increasingly noted. With the need to manage labor by placing limits on what was considered normal in the progress of labor over time, obstetrics denied the wide variation that in fact exists in this physiologic process.

This standardization, and disruption, of labor brought more frequent augmentation of labor with pitocin infusion, ironically increasing the pain of labor. The respiratory depression seen so frequently with the administration of opioids for pain relief came to be seen as problematic. However, many obstetricians considered pain as a stressor on the fetus and so there was a need

for a new means of providing pain relief. The epidural came to be seen as a benefit precisely because of the fact that it does not lead to neonatal respiratory depression of the neonate. Pitocin administration then became routine with the administration of epidural in order to promote a more effective labor pattern.²³ Fetal distress at times is a direct result of the pitocin augmentation itself. The increased use of pitocin then brought about continuous external fetal monitoring (EFM), and the phenomenon that came to be called the cascade of interventions, all of which served to bring about the increased incidence of cesarean sections. The standardization of all of these interventions resulted in the system of epiduralized birth that I describe in this dissertation.

The Safety of Bupivacaine

Before discussing the various controversies regarding potential side effects of the epidural, it is important to focus on one fact: Bupivacaine, the local anesthetic used most frequently in the administration of epidural anesthesia, is not a benign medication to be routinely used during labor. The FDA has categorized it as a Category C in pregnancy medication - to be used sparingly during pregnancy and only when the benefits clearly outweigh risks.²⁴ Many obstetricians and anesthesiologists believe that pain by itself is a medical risk and in this way they justify the routine use of bupivacaine, despite the FDA's warning against its use in pregnancy.

During informed consent women are told that an epidural may result in a longer labor, the need for pitocin, and a fever. These are seen as minor aggravations when compared to the

²³ The epidural is known to reduce the strength of contractions as well as decrease the frequency of contractions (Suresh 2013).

²⁴ A medication that has been given a designation "Category C in Pregnancy" is a medication that has been shown in animal studies to be harmful to the fetus. Human studies are inconclusive. The medication should only be given in pregnancy when the benefits clearly outweigh the risks.

promise of a pain-free labor. Women believe that pitocin and epidural are safe. In fact, recent research calls into question the safety of the routine administration of bupivacaine via the epidural. In my observations at Community Hospital, mothers were not given this information and were not informed that, according to the FDA, the medication should be limited in its use during pregnancy.

Doris Haire (2005), in a statement provided to the American Foundation for Maternal and Child Health, described this state of affairs.

Obstetricians, midwives and nurses who care for women during childbirth need to know that there is no obstetric related drug that has been proven safe for the neurologic development of the fetus. There have been no adequate and well-controlled studies to determine the delayed, long-term effects of bupivacaine or any other epidural drug on pregnant women, or on the neurologic, as well as general, development of children exposed to the drug in utero or during lactation.

Haire (2000, 2001, 2005) goes on to state that the FDA warns in the approved label for bupivacaine that it readily crosses the placenta into the fetal circulation, can cause damage to the central nervous system, and should be used only in exceptional circumstances. Epidural and pitocin administration given alone or simultaneously, have become routine without clear evidence as to the safety of using these medications and with little debate within the obstetrical community.

Scientific literature regarding the use of epidural during labor shows that the epidural may have a number of side effects: disruption and prolongation of labor requiring augmentation of labor with pitocin; hypotension requiring fluid infusion; relaxation of the bladder resulting in urinary retention requiring a urinary catheter; and maternal fever requiring that the newborn be evaluated for sepsis. Additionally, there is some evidence that regional anesthesia has a negative impact on newborn behavior. Decreased blood levels of endogenous oxytocin is shown to occur

during epidural and pitocin administration and may play a role in the disruption of the oxytocin feedback system between mother and fetus and thereby result in disruption of maternal-infant bonding.

These last two issues, a possible negative impact on newborn behavior and disruption of maternal-infant bonding, have been debated for decades and remain controversial. Some of these studies involve experimental studies on animals because of the difficulty in carrying out randomized, double blind experimental studies with pregnant women as subjects. It is precisely because bupivacaine is shown to negatively impact maternal and newborn behavior in animals that it has been labeled as a Category C in pregnancy medication. Most medical studies on the use of bupivacaine in labor recognize the difficulty of carrying out robust experimental studies on laboring women. Yet, mainstream obstetrics tend to ignore animal studies.

Studies using animals as subjects can be extremely helpful in helping us understand the physiology of birth. However, as will be discussed further in the next chapter on the theoretical approaches to the study of childbirth, human birth is more than a physiological process. Cultural norms and values are not only involved in forming culturally specific birth practices. As humans, our social and cultural natures interact with physiology, in turn impacting physiology in ways that we have only begun to understand. Odent (2001:S43), a physiologist, makes this point:

[There] is a reason to clarify what we can learn from non-human mammals and also the limits of what we can learn from them. Let us take as an example the experiment by Krehbiel and Poindron, who studied the link between the birth process and maternal behavior. They found that after giving birth with epidural anesthesia, ewes do not take care of their lambs. It is obvious that the effects of an epidural anesthesia during labor among humans are much more complex than among sheep. It is easy to interpret such differences. Human beings use elaborated forms of communication and create cultures; this implies that our behaviors are less directly under the effects of the hormonal balances and more directly under the effects of the cultural milieu. This does not mean that we have nothing to learn from the sheep. Animal experiments indicate which question we

should raise where human beings are concerned. If ewes do not take care of their lambs after giving birth with an epidural anesthesia, this implies that where human beings are concerned the right question is: what is the future of a civilization born under epidural anesthesia?

The Epidural and Prolonged Labor

As recently as fifteen years ago, common clinical practice was to give an epidural only after labor was well established because it was thought to prolong labor. In *Anesthesia for Obstetrics, 2nd Edition* (1987), timing of administration for nulliparas was advised to be at cervical dilation of 6-8 cm and with regular contractions 3-5 minutes apart. Administration for multiparous mothers was recommended no sooner than 4-6 cm. By 2002, *Anesthesia for Obstetrics* stated that, although the issue of the impact of the epidural on duration of labor remained controversial, it was appropriate to administer epidural in early labor. “There is no reason to avoid epidural analgesia during the latent phase of the first stage,” stated the authors, who then went on to justify their position. “It is more important to provide pain relief on request than to deny it until an arbitrary cervical dilation has been attained (Hughes, et. al. 2002:54).”

Sng et.al. (2014), in a Cochrane Review meta-analysis of the clinical significance of early vs. late administration of labor agrees with Huges et. al. (2002) that women should receive epidural analgesia in early labor. Unfortunately, the study does not provide a clear conclusion to justify such a recommendation. The Sng et. al. study measured three variables: cesarean rate, instrumental delivery and the status of the baby as measured by Apgar scores and neonatal umbilical blood ph. Sng et. al. state that there is no difference in the rate of cesarean, instrumental delivery, or neonatal status. However, they then go on to state that their conclusion is that they are unable to come to a clear conclusion. “...It is hard to assess the outcomes clearly (p. 2),” they concluded. Despite coming to no clear conclusion, the researchers still

recommended that a woman should be administered an epidural upon request at any time in labor, including early labor. The Sng et. al. study shows an inherent problem with the use of meta-analysis in research. A high quality meta-analysis must have comparable study groups in order to have a high degree of validity.

There is a limitation to using apgar scores as a measurement when assessing the safety of the epidural. The Apgar score is a crude measurement of the status of the neonate and does not measure the subtleties of newborn behavior. The score does provide a simple and commonly understood measure of the viability of the newborn at the time of birth. The Sng et.al. study is an example of poor research being used to provide justification of an obstetrical practice, in this case early administration of epidural, without providing proof that it is without complications. The researchers failed to provide clarity on cesarean rates, second stage instrumental delivery and Apgar scores; they do not even consider the implications of prolonged exposure to both bupivacaine and pitocin that comes with early administration of epidural.

Whether epidural anesthesia prolongs first stage of labor continues to be debated. However, according to *Williams Obstetrics 21st Edition* (Cunningham et. al. 2001), "... Epidural analgesia usually prolongs the first stage of labor, and increases the need for labor stimulation with oxytocin (p, 376)." Suresh et. al. (2013), in their anesthesia text *Shnider and Levinson's Anesthesia for Obstetrics Fifth Edition*, also describe the prolongation of labor that occurs with epidural administration.

During my observations at Community Hospital, labor augmentation with pitocin was routine when a mother received an epidural. This alone suggests that empirical knowledge has shown what some research studies have not been able to definitively conclude – epidural anesthesia does in fact prolong first stage of labor, making augmentation of labor a necessity.

This reality of prolonged labor has led the obstetrical profession to redefine normal labor, a development I will discuss later in this chapter.

It is widely accepted that the second stage of labor, the pushing stage, is prolonged resulting in a significant increase in traumatic vaginal deliveries. This is associated with increased use of forceps or vacuum extraction during delivery and an increase in perineal lacerations. Other side effects that are widely recognized include: hypotension, resulting in the need for administration of intravenous fluids; bladder atony, resulting in urinary retention and the need for a urine catheter; maternal fever with an incidence of up to 33% of newborns evaluated for possible sepsis. The possible impact on newborn behavior and a relationship to increased cesareans are both highly debated and the research is contradictory as to both issues (Suresh et. al. 2013; Cunningham et. al. 2001).

The Epidural and Augmentation of Labor

As mentioned above, the augmentation of labor has routinely become a concomitant intervention with the epidural. Augmentation of labor presents obstetrical providers with a vicious cycle that often ends in cesarean (Rooks 2009).

- Epidural analgesia causes dystopia (stalled or prolonged labor).
- Pitocin is then added to augment labor, to establish a more productive labor pattern.
- If a low-dose protocol of pitocin administration is followed, the risk of cesarean section is increased.
- If a high-dose protocol of pitocin administration is followed, the risk of uterine hyperstimulation with resulting fetal hypoxia is increased, often leading to emergency cesarean.

As is the case with bupivacaine, pitocin is not a benign medication. The risks of pitocin are so great that in 2012 the Institute for Safe Medication Practices (ISMP) added the medication to its list of high-risk medications, one of only twelve medications to be given that distinction.²⁵ In response to the designation of pitocin as a high-risk medication, obstetricians have focused on how pitocin is administered, particularly the establishment of protocols for dosage and titration. There is no discussion with regards to limiting its use.

A “clinical anarchy” exists in the diagnosis of active labor and the administration of pitocin. At the level of clinical decision making, there is a lack of clear protocols and decision making is vague and ambiguous (Clark et. al. (2008, 2009). Diven et. al. (2012) also discuss the need for clear protocols for the safe use of pitocin. Pitocin is the cause of most adverse outcomes during birth, particularly fetal distress (Clark et. al. (2009). Clark et. al. (2009) acknowledge that the overwhelming use of pitocin is driven by the desire to control the timing of delivery. However, they state that this is merely the reality of modern obstetrics.

There are no nationally accepted protocols regarding the administration of pitocin. Initial dosage as well as the timing and amount to be given during incremental increases are decisions made by individual obstetricians based on their empirical knowledge. There is no upward limit on how much pitocin can be administered.²⁶ When I asked if there were protocols regarding the administration of pitocin at Community Hospital, I was told by one midwife, “If there are protocols, I haven’t seen them.” There remains a wide variation in regimens for pitocin administration (Cunningham et. al. 2001).

²⁵ “High-alert medications are drugs that bear a heightened risk of causing significant patient harm when they are used in error. Although mistakes may or may not be more common with these drugs, the consequences of an error are clearly more devastating to patients (ISMP 2012).” Along with pitocin, the list includes Flolan IV, magnesium sulfate injection, methotrexate, opium tincture, nitroprusside sodium, potassium chloride concentrate, promethazine IV, vasopressin IV.

²⁶ The Northern New England Perinatal Quality Improvement Network has published a guideline for the use of Pitocin. It calls for an initial infusion of 2 m/U per minute with incremental increases of 2 m/U every thirty minutes. The guideline gives no recommended maximum dose, stating that pitocin should be incrementally increased until regular contractions are observed.

At Community Hospital, given that most mothers received epidurals, the administration of pitocin was commonplace among nurse-midwives. Most of the midwives I observed began pitocin at a starting dose of 0.5 to 1 mU/min, a low dosage. Following this low starting dose, each midwife seemed to have her own preference for how quickly to increase the dosage and the maximum levels at which the pitocin would be administered. Simpson (2011:218) recommends a conservative, nonaggressive regimen of pitocin administration that includes a halt to administration once regular contractions are observed rather than a prolonged infusion of pitocin. She notes that there are a limited number of oxytocin receptor sites for oxytocin uptake and that “continued rate increases over a prolonged period causes oxytocin receptor desensitization or downregulation, making continuous pitocin infusion less effective in producing normal uterine contractions.” On the other hand, Cunningham et. al. (2001) advocate for a more aggressive protocol for pitocin administration.

Few obstetricians seem to consider that oxytocin is a complicated neurohormone that functions in a variety of ways beyond its role in maintaining labor contractions during labor. So important is the use of pitocin to epiduralized birth, so routine has its use become, that most obstetricians seem to be unable to ask the fundamental question: Is synthetic/exogenous oxytocin (pitocin) safe for the fetus? Prasad and Funai (2012) do raise the question whether the lack of research on safe parameters in pitocin administration should perhaps be considered when using it indiscriminately. “The use of oxytocin for labor induction and augmentation has been understudied, and safety issues beg for more objective data to support practice patterns (Prasad and Funai 2012).”

Changes in the Management of Labor: The Epidural and Friedman's Curve

The routine use of the epidural for pain relief during labor was once limited for financial reasons. Until perhaps fifteen years ago, many women had to pay out-of-pocket for an epidural, as Medicaid and many insurance policies did not cover routine, elective epidural during labor. Social and institutional influences changed this. First, regionalization and centralization of maternity care brought about on-site availability of anesthesia in a growing number of maternity units. Furthermore, physicians and nurses began to realize the advantage of giving epidurals early in labor for the routinized management of laboring women. Demand for the use of epidurals by both mothers and providers forced insurance companies and Medicaid in most states to begin to cover the cost of the procedure.

In the 1990s, advocates for the administration of epidurals early in labor stated that, even if it was still unclear if the epidural prolongs labor, pain alone justified early administration. As epidurals began to be given early in the labor process on a routine basis, it became obvious to providers that epidural anesthesia does, in fact, prolong labor, particularly in second stage of labor, a stage of labor colloquially referred to as pushing (Zimmer et. al.2000; Kukulcu and Demirok 2008; King 1997; Lieberman and O'Donoghue 2002; Leighton and Halpern 2002). This negative outcome was thought to be easily dealt with - routinely administer pitocin with the epidural. However, it has been found that even with pitocin administration, active labor is often prolonged and second stage is significantly prolonged with the epidural (Alexander et. al. 2002).

Concerns for the safety of epidural administration during labor and the effect on the length of labor led to the practice of combining the local anesthetic, usually bupivacaine, with a

narcotic, i.e. morphine or Fentanyl. The two medications act synergistically²⁷ allowing for the use of a lower concentration of the local anesthetic. Anesthesiologists have worked with this mix to find the “regimen that will maximize the sensory block and minimize the most common complications (King 1997:379).” However, most obstetrical providers do not recognize as significant the potential toxicity of bupivacaine on the fetal central nervous system.

The reality of the prolongation of labor that is a side effect of the epidural has forced obstetricians to take a new look at Friedman’s Curve. This is truly an irony of large proportions. I have discussed earlier how the routinization of labor was advanced with the adoption of Friedman’s Curve in the modern labor and delivery unit. Beginning in the 1970s, the labors of many thousands of women were carefully observed with hourly cervical checks and augmented with pitocin because their labor had fallen “off the curve.” At the same time, the cesarean rate in the United States began to climb. The routine use of the epidural only exacerbated the disruption of labor that resulted from the constant interruptions and observations of the modern labor and delivery environment.

Obstetricians are in a quandary: how to balance the practice of sticking to the curve with the need to give women more time in labor when they have been given an epidural. The solution has been to “reevaluate” Friedman’s Curve as it is no longer applicable to “contemporary” clinical practice and it is therefore necessary to “expand” the concept of normal progress in labor (Cesario 2004; Zhang et. al. 2002).

Normal, spontaneous labor has not changed. Clinical practices, particularly the epidural, have resulted in abnormal labor. Zhang et.al. (2010) state that with an analysis of thousands of vaginal births from nineteen hospitals, contemporary labor patterns look different today than

²⁷ Synergy in the combination of certain medications refers to the fact that when several medications are combined, at times the effect can be greater than the sum of the parts – in other words, at the clinical level, the same effect can be obtained by using smaller doses of each medication.

when Friedman first developed his curve of normal labor. “Active labor,” they say, does not seem to begin until 6 cms and it is common to see no appreciable cervical change for up to four hours. They pose various factors to explain this change that has been observed in the labor patterns of obstetrical patients – obesity, age of the mother, and contemporary “obstetrical practice,” a euphemism for the combined use of the epidural and pitocin administration. The obstetrical community is quickly accepting the Zhang et. al. studies (2002, 2010) as it relieves them from the conundrum created by the need to accept the prolonged labor that occurs with disrupted birth on the one hand, while not clearly debunking the Friedman’s curve as a traditional clinical practice by obstetrics.

Zhang et.al. (2010) were only able to include one third of their potential study group (a total of 62,413 laboring women) because of inductions and cesareans, both of which assume an interruption of normal labor. Even among these remaining one third, which included only primiparous women who began labor spontaneously and went on to have a vaginal delivery with a healthy newborn, half of the study group had labor augmented with pitocin and 80% received epidural analgesia. Despite augmentation, they still found a pattern of prolonged labor. “...Defining “normal labor,” state the authors, “remains a challenge (Zhang et. al. 2010:128).”

The obstetrical profession has adjusted Friedman’s curve because it is now an inconvenience, despite the fact that the profession has been wedded to the curve for decades resulting in uncountable unnecessary cesareans. Obstetrics is now ready to “revise” Friedman’s Curve in order to “meet the needs of current patient populations, technological advances, and nursing responsibilities (Cesario 201:713).” It is easier to modify Friedman’s curve than to change the contemporary obstetrical practices that are the underlying causes in the disruption of physiologic labor.

Zhang et. al. (2010) merely state the obvious – that given the realities of epiduralized birth [my words] more time and patience is called for when all is well with both the mother and baby. The study states that “Labor appears to progress more slowly now than before, even though more labors are being treated with oxytocin for augmentation (Zhang et. al. 2010:1286).” However, the authors give no suggestions as to what is causing this counterintuitive situation except to state the obvious: that “frequent obstetric interventions, (induction, epidural analgesia, and oxytocin use *may* have altered the natural labor process (p.1282: emphasis mine).”

Zhang et. al. (2000) note that expanding the curve of normality can help decrease cesareans, particularly in the first time mother, by providing the laboring mother more time. However, time and patience is precisely what the model of industrialized birth, with its emphasis on moving things along, does not allow for.

I had a revealing discussion with one midwife regarding the overwhelming use of epidurals, despite evidence as to safety, the need for patience, and the subsequent conflict over time with the institution.

Midwife: It’s true that epidural was first used in surgery on adults. And in the 1990s the epidural was only given once the mother was quite far along in labor and so the exposure to the anesthetic was much less. Now we are giving it when the mother is two or three centimeters and that’s unproven technology for sure. The mother is receiving the epidural for ten, twelve hours. We really don’t know what it does to the baby.

Maureen: It is interesting that this technology has been transferred over to obstetrics with so little research on the safety.

Midwife: I don’t think there has ever been a consensus task force on the use of epidurals. There has been research as to whether epidurals slow labor down but you’re right. I don’t think there has been research on the impact on the baby.

Maureen: This takes us back to the issue of Community Hospital’s low cesarean rate. You have about an 80% epidural rate and yet have a 23% cesarean rate.

Midwife: I think it is much lower. 20%. 18%. I think the big reason for the low cesarean rate is patience. It’s just patience that distinguishes us. And we are less quick

to react to occasional variables in the baby's heart rate. At some of the hospitals there is a philosophy "Oh. The baby's heart rate has changed. Let's crash her." They call it intrauterine resuscitation. Rather than looking more carefully and critically at the rhythm.

I also think we allow for more variation in length of labor and length of gestation. So that's what I think it is. And we primarily have a younger, healthier population. So that's in their favor... our favor.

Maureen: I think with the epidural, we are able to titrate the pitocin higher.

Midwife: Yeah. It's true. And in some other hospitals they are more concerned about how long the patient has been in the hospital. Or "Oh my God. The baby's heart rate just went down. Let's crash her." So I think it's lack of patience that contributes to the difference. And then there are the high rates of repeat cesareans. When you have three or four repeat cesareans scheduled every single day, Monday through Friday that impacts on the cesarean rate. [My note: She is talking here in general about common practice in other hospitals, not Community Hospital.]

Maureen: I also think that routine induction has something to do with it.

Midwife: Yes. People who don't deliver by dinnertime - that becomes a failed induction.

The validity of external fetal monitoring in the diagnosis of fetal distress is being questioned and this complicates the clinical situation. Even before epiduralized birth became the norm in our obstetrical units, the frequent use of pitocin for augmentation of labor demanded a means to evaluate the status of the fetus. Continuous fetal monitoring with the external fetal monitor (EFM) appeared to be the perfect tool. The addition of the epidural to the mix made continuous fetal monitoring even more important clinically. Epiduralized birth also made tracings from external monitoring more reliable with fewer artifacts due to movement by the mother.

However, what we are learning is that EFM was, and remains, an inexact assessment tool. Interpretations of fetal heart patterns are highly varied and false diagnosis of fetal distress is common. As a diagnostic tool it is highly sensitive, identifying true cases of fetal distress. EFM,

however, has a low specificity with a high number of false positives, reportedly as high as 99% (Sartwelle 2012). The data obtained with external fetal monitoring and the interpretation of that data by individuals remains highly variable. Sartwelle (2012) describes how an analysis of the reliability of EFM as a diagnostic tool has shown it to be of little value clinically.

Tested under controlled circumstances, experts frequently disagreed with each other and themselves. Inter-observation/intra-observer variability was the rule, not the exception... Harmless fetal heart rate changes were interpreted as fetal distress. Ominous tracings were seen as reassuring. ...

In one study, experienced obstetricians agreed in only 20% of cases. Two months later, the same tracings were presented to the same interpreters. Twenty percent were interpreted differently. In another study 12 national EFM experts interpreted 14 abnormal tracings. On average, two experts disagreed one-third of the time when asked to classify the patterns as innocuous, non-reassuring, or ominous, and they disagreed with almost the same frequency over the issue of continuing the labor or delivery immediately. In a British study, the experts classified 32% of the normal tracings, the controls, as having ominous tracings in the second stage of labor (Sartwelle 2012:327).

Intermittent fetal monitoring through auscultation²⁸ has been shown to be as sensitive as EFM in detecting fetal distress. And yet EFM has become standard in industrialized childbirth. The result has been the rise of unnecessary cesarean sections (Sartwelle 2012).

The Epidural and Maternal Fever

It is widely accepted that maternal fever, a temperature greater than 100.4°, is a side effect of epidural anesthesia. Estimates of maternal fever as a result of epidural vary from 14.5% to 34.0% (Lieberman et. al. 1997; Cohen et. al. 1997). Elevated maternal temperature is directly related to length of labor and therefore duration of exposure to epidural, a fact that would argue against early administration of an epidural. It is hypothesized that this rise in temperature is a

²⁸ Intermittent auscultation of fetal heart tones during labor involves the manual use of a Doppler placed on the mother's abdomen to listen to the fetal heart rate and rhythm at set intervals. It is rarely used in the hospital, despite proven to be as accurate as continuous fetal monitoring, because the use of an epidural and/or pitocin administration requires the use of external continual fetal monitoring. (Sholapurkar 2010; Albers 2001)

result of thermoregulatory changes that are a direct result of the epidural. Infection is a rare, but serious, occurrence with epidural.

It is difficult to rule out maternal sepsis in the case of maternal fever. A mother's white blood cell count is normally elevated in pregnancy. Palpation cannot be used to assess for abdominal pain because the laboring mother who has received an epidural does not have sensation in the abdominal area. The result is that the neonate born to a mother with elevated temperature is usually evaluated for neonatal sepsis. This involves frequent blood draws and usually prophylactic administration of antibiotics. In many hospitals, the newborn is subsequently admitted to the neonatal ICU for 48 hours for evaluation. These newborns are separated from their mothers during the hours that are critical for bonding and initiation of breastfeeding,

Newborns appear to be directly impacted when the laboring mother has fever. These newborns are more likely to have a one-minute Apgar scores less than 7. They are more likely to be hypotonic. They are more likely to require resuscitation (Lieberman et. al. 2000). It is unclear why maternal fever has a negative impact on the fetus. Lieberman et. al. (2000:12) summarize that "even modest temperature elevation during labor is associated with an increased risk of cesarean section and operative vaginal delivery" and is "associated with a number of adverse outcomes in the newborn." While most adverse outcomes are "transient," Lieberman et. al. (2000) comment that more research is needed to determine if there are any lasting adverse effects. Women are informed that they may have a temperature during labor. However, in my observations they are not given precise information as to the potential consequences to the newborn if they develop a fever during epidural administration.

The Epidural: The Impact on Newborn Behavior and Maternal-Infant Bonding

I wrote earlier of the impact on the newborn that results from maternal fever. This is the one adverse outcome widely accepted by obstetrical providers. More controversial are suggestions by some researchers that that newborn behavior and maternal-infant bonding are negatively impacted by the epidural. These two issues are quite contentious as most research studies are inconclusive.

It is absolutely contraindicated to give bupivacaine intravenously due to its toxicity. Yet that is exactly what we are doing to the fetus when we administer an epidural during labor – at a point in fetal development when the fetal brain is not fully developed. Low concentrations of bupivacaine are found in the maternal bloodstream following administration of epidural. Research also shows that bupivacaine readily passes through the blood vessels in the epidural space and through the placenta entering directly into the fetal blood where it is found in larger concentrations than the maternal blood levels (Lieberman and O'Donoghue, 2002). The fetus is unable to metabolize the drug as efficiently as the mother.

Drugs administered by epidural enter the mother's bloodstream immediately and go straight to the baby at equal, and sometimes effectively greater, levels than in the mother (Fernando & Bonello, 1995; Brinsmead, 1987). Some drugs will be preferentially taken up into the baby's brain (Hale, 1998), and almost all will take longer to be eliminated from the baby's immature system after the cord is cut. For example, the half-life of bupivacaine (i.e. time for blood levels to fall by half) is 2.7 hours in the adult, but around 8 hours in the neonate (Hale, 1997). Studies using the Brazelton Neonatal Assessment Scale (NBAS) have found deficits in newborn abilities consistent with toxicity from these drugs [administration of local anesthetics via epidural] (Lieberman and O'Donoghue, 2003). (Buckley 2003:276)

A number of research studies suggest that the use of bupivacaine during labor may not be safe for the fetus and impacts maternal/fetal attachment. Epidural analgesia and pitocin both

result in a decrease of endogenous oxytocin in the maternal blood level. The release of oxytocin by the mother is an essential hormone involved in maternal/infant bonding (Rooks 2007).

The most robust study strongly suggesting that epidural administration is unsafe is Murray et. al. (1981). This is a controlled study comparing three groups – nonmedicated mothers, mothers receiving epidural analgesia and mothers receiving both pitocin and epidural. The focus of the study was to study the possible impact of epidural analgesia on the maternal/fetal unit. They found a significantly prolonged second stage in the two medicated groups, a phenomenon that is now well recognized by birth attendants. There was a high incidence of malpresentation of the fetus in the medicated mothers resulting in a higher incidence of instrumental delivery. There were greater numbers of maternal/newborn separation following birth among the medicated mothers, making it difficult to determine if abnormal newborn behaviors were a direct result of medication or a result of the maternal/newborn separation.

All babies were assessed in the first twenty-hours using the NBAS test (Brazelton Newborn Behavior Assessment Scale). The researchers found that:

Compared with the nonmedicated babies, babies in the two epidural groups performed poorly on the motor, state control, and physiological response clusters as well as their total score on the NBAS... The percentage of babies with deficient or near-deficient scores (scores of 5 or 4, respectively) was markedly higher in the medicated groups.... These findings parallel reports by Standley et. al. (1974) that 1-3 day-old babies exposed to a variety of local and regional anesthetic techniques were tremulous, irritable and motorically immature (Murray et. al. 1981:76).

Bupivacaine is eliminated from the fetal system only after five to six half-lives (48 hours). The continued presence of bupivacaine in the fetal system led the researchers (Murray et. al. 1981) to suspect that there was, in fact, a direct relationship between epidural administration and abnormal newborn behavior. Furthermore, when assessing the third study group, babies exposed to both pitocin and bupivacaine, they found an even more pronounced

abnormal motor function. These babies were more “tense and hypertonic” and reflex responses and integrated motor actions were even more depressed as compared to the epidural only group. From this the researchers suggest an “added effect” when the two medications are administered together, as is so common in our maternity units today. They stated that it was unclear if this added effect was a result of a synergistic effect between the two medications or whether it was a result of the stronger, more frequent contractions so commonly seen when pitocin augmentation is given along with epidural analgesia. One of the advantages of epidural analgesia, from a practical clinical standpoint, is that the mother is able to tolerate pitocin titration to higher levels.

At one month postpartum there were no differences in NBAS scores suggesting “that direct drug effects had worn off by 1 month (Murray et. al. 1981:78).” Other differences, however, were found: “Mothers of medicated babies reported that they were less adaptable, more intense, and more bothersome in their behavior. These mothers also rated their babies... as having poorer interactive ability and state control and poor overall performance (p. 78).” Mothers of nonmedicated babies were significantly more likely to rate their baby’s state control as “exceptional.” The medicated babies were fed less often, “a finding consistent with reports that they [the mothers] did not respond as promptly to their babies’ cries (p. 78).” These findings could be a result of maternal characteristics but the researchers state that they carefully controlled for socio-economic factors. The mothers had also been carefully screened for any differences in “belief in reciprocity” using the Cobler’s Maternal Attitude Scale.²⁹ The researchers, however, could not rule out that the findings of newborn behavior among medication-exposed babies were a direct, ongoing result of one or both of the medications as opposed to initial interruption of maternal/newborn interaction among the medicated groups.

²⁹ A mother’s disbelief in the importance of reciprocity has been shown to be a strong predictor of abuse and neglect on the part of mothers.

Murray et. al. (1981:80) placed high value on the self-reports by mothers stating that such reports were possibly more valid than the NBAS assessments.

The differences between the examiners' and mothers' assessments at 1 month raise the issue of the veridicality of the mothers' perceptions. The discrepancy may be more apparent than real, however, because the NBAS is designed to elicit and score best behavior, whereas mothers are likely to have based their judgments on characteristic or typical performance. Neonatal assessments that score modal rather than best performance may be more sensitive to drugs effects (Brackbill 1979) and may provide more stable predictions of later functioning (Horowitz, Sullivan, & Linn 1978).

In other words: No one knows a baby better than its mother. Murray et. al. (1981) end with this unequivocal recommendation: "Although it is at times necessary and appropriate for some mothers to receive medications during childbirth, the implications of this study are that the elective use of medication should be minimized (p. 81)."

Lieberman and O'Donoghue (2002) had similar findings. In their research review it was found that babies exposed to epidural were 50% more likely to have "poor state control"³⁰ from birth to day five and this difference continued through at least the first month of life. "The epidural-exposed infants," they found, "showed less alertness and ability to orient during the first month of life and were less mature in motor function (p. s59)." They also point out that due to the common side effect of fever in the mother who receives an epidural, the epidural-exposed newborn is more likely to be admitted to a neonatal unit for a work-up to rule out newborn sepsis.

Epidural anesthesia may inhibit all the hormones involved in the normal process of birth (Buckley 2003): oxytocin, which is important for functional labor contractions, maternal/infant bonding, and the let down of breast milk; beta-endorphins, excreted by the pituitary gland during labor in response to pain; estrogen and progesterone, known to increase the number of uterine

³⁰ Poor state control in the newborn is a measurement of the ability of the newborn to be calmed, to cuddle, self-soothe, and to show hand to mouth activity (Lundqvist and Sabel 2000).

oxytocin receptor sites; catecholamines, thought to activate the fetal ejection reflex, stimulate release of surfactant and aids in the newborn metabolism and finally prolactin, along with oxytocin known to be involved in maternal behavioral changes and production of breast milk. Buckley also cites animal studies showing profound disturbance of normal maternal/infant bonding behaviors when given epidurals during labor.

Not all studies show a relationship between epidural administration and abnormal newborn behavior. Lieberman and O'Donoghue (2002) acknowledge that there are studies that have not found these changes in newborn behavior in epidural-exposed newborns. However, the studies that failed to associate abnormal newborn behavior with epidural exposure used several assessment tools that were considered to be unreliable by Lieberman and O'Donoghue (2002). The authors conclude that more research on the potential effects of epidurals on mothers and babies is needed. However, in their conclusion they point to areas where the evidence is clear.

In addition to demonstrating where further research is needed, this review also reveals that there are some unintended effects that consistently accompany epidural use. These unintended effects are present in randomized trials as well as observational studies. We are obligated to inform women about these side effects so they can make truly informed decisions about the use of pain relief during labor. Information about choices for pain relief during labor needs to be conveyed during pregnancy; once women are in labor, it is too late. This obligation is particularly pressing because use of epidural for pain relief during labor is an elective procedure.

Nulliparous women should be told that they are less likely to have a spontaneous vaginal delivery, that they are more likely to have an instrumental vaginal delivery, and that their labor is likely to be longer. They should also be informed of the implications of the higher rate of instrumental vaginal delivery, specifically the increased rate of serious perineal lacerations that accompany its use. Women should also be informed of the higher rate of intrapartum fever. They should be informed that if they develop a fever their infant may be more likely to be evaluated for sepsis and treated with antibiotics for suspected sepsis but that there is no evidence that epidural increases infection in mothers or infants. Issues addressed in informed consent will need to be modified as we learn more.

Epidural analgesia represents one of a spectrum of options for pain relief during labor that should be available to women. In addition to continuing research related to epidural,

research into other pharmacologic and nonpharmacologic methods of pain relief should also continue. (Lieberman and O'Donoghue 2002:S64)

Other researchers agree. Another controlled clinical study (Rahm et. al. 2002), in a showed that endogenous oxytocin levels were significantly higher in nonmedicated birthing mothers than mothers who had received epidural analgesia. Rahm et. al. (2002) believed so strongly in their finding that epidural anesthesia is associated with a decrease in endogenous oxytocin and prolonged labor they presented this recommendation.

Most studies of the EDA [epidural analgesia] during labor have focused on its effects on labor outcome but only few of those studies have considered the role of possible alteration of the endogenous oxytocin. In our prospective study, we saw a decrease in plasma oxytocin levels, prolonged labor, and an increased use of exogenous oxytocin in women with EDA. Even though this study cannot determine the extent to which the decrease in endogenous oxytocin contributed to the results, it seems to be important to further investigate the role of endogenous oxytocin during labor. Because EDA is an important method for pain relief during labor, it is necessary to make objective information available to medical staff as well as patients about the disadvantages and advantages of EDA (p 1038).

Oxytocin: The Disregarded Neurohormone

Odent (2001; 2002) has discussed what he calls an epidemic of abnormal labor patterns in the Western world, prolonged labor and labor arrest – or what obstetrics calls dysfunctional labor. This interruption of normal labor, according to Odent (2002), is most often a result of a birth environment that interferes with physiologic birth. Normal labor contractions depend on oxytocin attaching to receptor sites. Hormones associated with the fight or flight syndrome, specifically epinephrine and norepinephrine, compete with oxytocin at these receptor sites. During labor, environmental stimulators such as noise, activity, fear and anxiety, can interfere with the uptake of oxytocin by stimulating the secretion of the fight or flight hormones.

Odent owes much of his work to Niles Newton (1966a, 1966b, 1987), one of the first scientists to describe the significance of environment on the progress of labor and successful delivery. Pregnant mice exhibited prolonged labor and higher levels of stillbirth when placed in stressful environments in a controlled experiment by Newton (1966a). Newton's initial and subsequent work continues to be seen as the impetus in the study of environmental impact on successful labor and delivery as well as the impact on mother/infant attachment. Newton's findings, as well as Odent's subsequent work, have paved the way for a theoretical understanding of a physiological approach to birth, an approach that involves providing a birth environment that is undisturbed with limited stimulation – quiet, calm, and safety.

Childbirth and lactation are physiologic processes that rely on oxytocin. However, the hormone plays a significant physiologic role at other times throughout our life experiences. Moberg (2003) describes the role that oxytocin plays within our neurohormonal system, referring to oxytocin as the “calm and connection” hormone, and a key neurohormone of the parasympathetic system that mediates the ability to interact socially and provides a sense of calm and relaxation.

To understand the role that oxytocin plays in birth, it is necessary to understand how, as a key hormone in the parasympathetic system, it interacts with other neurohormones that are a part of the sympathetic system. Moberg (2003:24) provides a clear explanation of this relationship.

It is important to emphasize that both the fight or flight reaction and the condition of calm and connection are essential to life. Precisely like other animals, we humans must have the ability to meet challenges and mobilize all our powers to take whatever action is needed at a given time. Likewise, we also need the opposite. The body needs to digest food, replenish its stores, and heal itself. We must be able to take in information, express feelings, be open and curious, and establish contact with other people. It is this ability that enables us to recover after more or less challenging incidents or periods.

... The two conditions of fight or flight and calm and connection tend to operate in balance, as if on a see-saw. When we contentedly digest food, we seldom experience

agitation, anger or stress. When we are wound up, angry, or hurried, digestion slows down and we feel less sociable. *One mechanism does not exclude the other, but either one of them can temporarily dominate.* [My emphasis.]

Oxytocin serves to balance the well-known flight or flight system, a part of the sympathetic nervous system that has been well researched. The fight or flight system involves the rapid secretion of stress hormones, including epinephrine and norepinephrine, that have a multi-system impact on the human body. These two systems, the fight or flight system and the calm and connection system are usually in balance. During labor, however, stress hormones create an alertness and tension and interfere with oxytocin at the cellular receptor sites associated with labor. The stress hormones, particularly epinephrine, as part of the sympathetic nervous system interfere with the parasympathetic nervous system during labor, of which oxytocin is a key element (Moberg 2003).

Most obstetrical providers do not recognize that the process of labor is a parasympathetic mediated physiologic response to oxytocin, and to a lesser extent other hormones, and as such is easily thrown out of balance by any surge of sympathetic mediated neurotransmitters. For undisturbed labor to proceed, the birthing mother requires an environment that prevents stimulation of the neo-cortex in order that the parasympathetic system can dominate, allowing for adequate oxytocin secretion.

The Significance of The Fetal Ejection Reflex on Fetal/Maternal Oxytocin Feedback

The fetal ejection reflex is a well-recognized phenomenon in undisturbed birth, occurring toward the end of labor. Providers experienced in non-epiduralized birth easily recognize this reflex where powerful expulsive contractions, uncontrollable by the mother, result in the birth of the fetus. The altered state of consciousness seen in the mother during nonmedicated birth is a

part of the ejection reflex. This reflex is eliminated by the epidural and as such there are many providers, both nurse-midwives and obstetricians, who rarely see this phenomenon and do not recognize its significance. Without the fetal ejection reflex, second stage becomes a mechanical event with the mother coached through pushing, given directions on how to bear down in order to bring the baby to the introitus (the opening of the vagina).

The fetal ejection reflex is part of a neurohormonal feedback system important to physiologic birth and maternal/newborn attachment. Summerlee (1981) discusses the numerous tests on laboring animals showing the elevation of endogenous oxytocin throughout undisturbed birth, stating how important this hormone is to physiologic labor. Laboratory studies show that oxytocin levels dramatically increase “with the appearance of the head of the fetus at the vulva... (Summerlee 1981:2).” Oxytocin secretion seems to occur in a pulse like pattern, rather than the continuous infusion of exogenous oxytocin (pitocin) that is a central feature of epiduralized birth.

A decade after the Summerlee (1981) research, another laboratory study examined the pattern of endogenous oxytocin release during the parturition of pigs. The authors report that studies had shown that oxytocin release “is very sensitive to environmental disturbance... Environmental disturbance will result in a cessation of parturition and fall in circulating oxytocin (Gilbert et. al. 1994:136).” Their measurements of oxytocin release during parturition showed that “oxytocin secretion during parturition in the pig is complex and pulsatile, with one clear component being a postpartum oxytocin pulse. This pulse is closely linked to the passage of material (either fetuses or placentae) down the birth canal (p. 136).” They also found a rapid increase of oxytocin during the period of fetal expulsion but to a lesser extent than did Summerlee. This pulse like secretion of endogenous oxytocin, states Ejdeback (2009), is key to

successful breastfeeding in humans and the administration of exogenous oxytocin interferes with the release of endogenous oxytocin.

These animal studies suggest that the fetal ejection reflex is significant for the maternal-infant bonding that is promoted through the secretion of endogenous oxytocin. As mentioned previously in this chapter, the fetal ejection reflex appears to be absent in epiduralized birth. Odent (1987; 2006) has observed that in nonmedicated births, even in hospital settings, it is common to see the fetus ejection reflex as a point of no return where nothing can stop the birth of the baby. Maternal contractions will result in the birth of the baby and no holding back by the mother can stop the birth. Typically a look of panic or surprise comes over the mother's face. She goes someplace into her brain and during this period it is difficult to speak to her and receive a response. There is no need for voluntary pushing as the baby is born with no voluntary effort by the mother. Her contractions are beyond her control.

Odent (2006) questions the entire obstetrical framework where human labor is divided into three stages. From my observations it is clear that providers often disagree as to when a woman is actually in labor. It is also not uncommon for a woman to be completely dilated, a moment when Friedman's framework would state that labor has progressed to second stage, and yet have no urge to push for one or two hours. At what point would we say that the mother has reached second stage – when she is fully dilated or when she experiences the urge to push? Friedman's entire framework ignores the significance of the fetal ejection reflex.

The conception of a second stage associated with full dilation has led to the routine practice of directing the mother to begin actively pushing at full dilation rather than waiting for the fetal ejection reflex to take over. Throughout my training and my research, I have so often heard the words "You are fully dilated. You should start pushing now." Numerous birth

advocates as well as midwives (Roberts and Hanson 2007) have questioned this practice of active pushing, or “bearing down” by the mother, stating that it is associated with a series of adverse outcomes – malpresentation of the fetus, decreased fetal oxygenation, pelvic floor damage, future urinary and/or fecal incontinence and future sexual dysfunction due to pelvic floor damage.

Prior to Friedman’s work, birth attendants relied on observation of the mother to determine when birth was imminent. Prior to the mechanized viewpoint of birth, and later epiduralized birth, the fetus ejection reflex was recognized as the point when the birth attendant knew to get ready to assist with the delivery of the baby. Of course, this assumes that there is a birth attendant watching, or as it once was called, labor sitting. This is no longer feasible in the context of the modern obstetrical unit. In the old days of obstetrics, where a mother was ready to deliver but the physician was absent, I witnessed the perverse situation where women were told to not push until the doctor arrived, perverse in that with the fetal ejection reflex there is a point where the contractions pushing the baby out are beyond the control of the mother. There have been many babies born into the hands of nurses while all are awaiting the presence of the obstetrician.

In his critique of the concept of second stage, Odent (2006:1) emphasizes the importance of recognizing the fetus ejection reflex as a key part of physiologic birth.

Today I consider this ‘reflex’ as the necessary physiological reference from which one should try not to deviate too much. During the powerful and irresistible contractions of an authentic ejection reflex there is no room for voluntary movements. *A cultural misunderstanding* (my emphasis) of birth physiology is the main reason why the birth of the baby is usually preceded by a second stage, which may be presented as a disruption of the fetus ejection reflex. All events that are dependent on the release of oxytocin (particularly childbirth, intercourse and lactation) are highly influenced by environmental factors....

These considerations about ejection reflex versus second stage are opportunities to suggest that the true role of the midwife is to protect an environment that makes the ejection reflex possible. The point is to keep in mind the basic needs of labouring women. The point is to reconcile the need for privacy and the need to feel secure. This means the importance of the midwife as a mother figure. A mother is first a protective person.

Odent and Newton wrote their initial discussions of the significance of environment to the normal progress of birth and the significance of the fetal ejection reflex before birth became widely industrialized. They both emphasize privacy, quiet, a feeling of security and safety as key environmental elements for successful birth in humans. One could expect improved neonatal outcomes when birth is undisturbed, given the extent to which decreased endogenous oxytocin levels are shown to interfere with labor. Newton (1987:107) points to the neonatal outcomes of the North Central Bronx Hospital, a renowned midwife-led service serving a high-risk population where emphasis is placed on nonmedicated births. This maternity service has significantly better neonatal outcomes compared to “institutions where less attention is paid to minimizing environmental and psychologic disturbances.” Newton (1987:108) goes on to state that, “The endocrine research on human labor is complex and sometimes contradictory.... Much better controlled research is needed on the environmental regulation of labor. It may be especially important to know which environmental factors inhibit or promote normal human labor.”

There is a growing body of research showing that exposure to pitocin during labor disrupts and alters the maternal/fetal oxytocin feedback system (Buckley 2003). Not surprisingly, given his ecological emphasis, Odent has spoken to the safety of pitocin and the growing evidence among researchers that there is a relationship between exposure to pitocin during labor and neurological disorders. Odent (2007) claims, “we are learning that, among humans, the

period surrounding birth is a period of dramatic reorganization of central oxytocin binding. Artificial induction of labour creates situations that undoubtedly interfere with the development and the reorganization of the oxytocin system in such a critical period.” Wahl (2004) also points to the fact that neurohormones of the oxytocin family have been shown in many studies to influence social behavior in both animals and humans. What is still unknown is the precise mechanism that causes the disruption in oxytocin regulation.

It is possible that decreased maternal endogenous oxytocin levels following birth, as occurs with pitocin administration, interfere with maternal/infant bonding. Studies have shown that mothers who have been given pitocin during labor have decreased blood oxytocin levels two days after birth as compared to mothers who have had births without pitocin (Rissenberg 2010). In light of this research, Wahl (2004:458) calls for obstetrical providers to “reexamine administration of OT [oxytocin] at childbirth, and to conceive and administer alternative labor inducing analogues that are proven not to have neurobiological effects.”³¹

The complexity of the neurohormonal interactions between the maternal/fetal unit is not completely understood. Rissenberg (2010:12,13) however sketches a probable scenario:

Exogenous postpartum OT [pitocin] in the infant could, by influencing feedback mechanisms, interfere with the endogenous release of OT [oxytocin] in response to the mother’s touch, along with its stress- reducing effects. Both OT release and stress reduction increase with positive physical contact (Ditzen *et. al.* 2009), and OT increases the stress-protective effects of touch (Heinrichs *et. al.* 2003). The soothing effect on a baby of being touched and held likely operates by stimulating the release of OT in the infant’s brain, reducing anxiety, distress and crying. This early sensory activation of the OT system may be necessary for its subsequent development, as is true for other sensory neural systems. A reduction in the OT-mediated reward value of touch may help explain the hypersensitivity to touch associated with ASD [Autism Spectrum Disorder] (American Psychiatric Association, 1994). OT may also mediate the reward value for the baby of other social emotional stimuli and responsive behaviors, such as making eye contact and

³¹ One such intervention to augment labor is a favorite of homebirth midwives who do not have access to pitocin. Periodic nipple stimulation is known to spur on labor, presumably by increasing endogenous oxytocin blood levels in the mother. This makes perfect sense as it is well recognized that the suckling of the baby promotes release of endogenous oxytocin resulting in the let down of breast milk.

exchanging smiles with the mother and babbling in response to her voice, which are likely necessary for the development of visual and auditory processing of emotion and communication, processes that are characteristically deficient in ASD.

At the same time, reducing distress in the baby is highly rewarding for the mother, whereas failure to do so increases her distress and anxiety. This in turn can interfere with maternal care, including breastfeeding (Zanardo, 2009), depriving both mother and baby of the stress-reducing effects of nursing and the regular close physical contact it ensures (Heinrichs et. al. 2001; Uvnäs-Moberg 1996). The OT-mediated calming effects on mother and baby are thus mutually reinforcing, and disruption of postpartum OT function in either the infant or the mother at this critical time is likely to interfere with mother-infant bonding and the subsequent development of the baby's OT system and social emotional processing later in life.

It is posited that a complex feedback system involving oxytocin occurs between the mother and fetus during pregnancy and birth, one that is probably significant in mediating the interaction between mother and newborn following birth. Buckley (2003) states that this oxytocin feedback system is shown in animal research. Levin, et. al. (2007) show a correlation of maternal-infant attachment with increasing maternal oxytocin levels from early to late pregnancy. Oxytocin is not the only neurohormone responsible for social bonding but it recognized as one of the most important. Human survival depends on a complex set of behaviors that occur between mother and infant – touch, eye contact, vocalizations, and breastfeeding, among others. The presence of endogenous oxytocin in both the mother and infant is key to this complex of bonding behaviors (Feldman et. al. 2007).

Summary

The discussion in this chapter, along with the studies cited, does beg the question: how safe is the use of bupivacaine and pitocin during labor? There is much that we still do not understand about birth. We do know that birth is not the mechanical process to which it has been

reduced by obstetrics. Childbirth involves a complex hormonal interaction between mother and fetus. Some of the hormones that we know are involved, and interacting, in birth include oxytocin, prolactin, catecholamines, and beta-endorphins. These are only the few that scientists know are involved. How and to what extent they work together is not well understood. Oxytocin is perhaps the most important but is only one such hormone involved. It is the hormone, in its synthetic form (pitocin), that has been used to manipulate labor. In its endogenous form, oxytocin has been shown to be significant for maternal/infant bonding as well as the development of socialization in the infant.

Modern obstetrics, with its excessive environmental stimulation associated with industrialized childbirth, causes disturbed labor. It then attempts to solve the very problem it has brought about through the infusion of pitocin to either induce or augment labor. The addition of the epidural to the mix of medical interventions solved the problem of the increased pain that often accompanied the administration of pitocin. This has occurred with no research as to the safety of this mix of two very potent medications – bupivacaine and pitocin.

Given the degree to which epidurals have become routine in our system of childbirth, it is surprising that there is not more research on the impact of the epidural on the fetus. Furthermore, the research that has been carried out does not always take into account the combination of bupivacaine and opiate given simultaneously with pitocin. The studies cited here that report changes in newborn behavior in babies from mothers given epidurals are significant and should give us reason to be concerned.

The impact of epidural analgesia, along with its corresponding pitocin augmentation, on maternal endogenous oxytocin both during and after birth is an area that is only beginning to be of interest to researchers. To the extent that pitocin and epidural administration both interfere

with natural levels of endogenous oxytocin in the mother and the newborn, the safety of the epiduralized birth of our modern childbirth system needs to be questioned.

I have been asked by one medical anthropologist, “How can so many providers and researchers believe that it [epidural and pitocin] is safe?” To understand this phenomenon we have to go back to the observation by Kloosterman (DeVries 2004a), the Dutch obstetrician, who observed that American obstetrical practice is often based on tradition rather than on science. Evidence based research, states DeVries (2004b:595) often “becomes a rhetorical justification for whatever particular groups [are] going to do anyway.” I would argue that this is particularly true for obstetrics. If my observations have shown anything, it is this point: Evidence-based science in obstetrics is often biased and influenced by cultural and structural factors (DeVries and Lemmens 2006). Clinical decision-making is influenced too often on convenience rather than what is known to be safe. The reformulation of Friedman’s curve to normalize the prolonged labor of epiduralized birth is a prime example of clinical practice based on convenience rather than science. The health and safety of mothers and their baby depends on routine clinical practice that is truly evidence based; evidence that *proves* a routine intervention to be safe based on true science and not led by convenience or the desire to justify a practice that has already become so routine that no one wants to face the possibility that it may, in fact, pose risks to the mother and/or baby.

The failure of providers to carry out good practice too often comes down to the Gleichschaltung of birth that I describe throughout this dissertation. In our epiduralized system of birth, various obstetrical interventions work together in a way that reinforces the totality of interventions, making industrialized birth possible. Epiduralized birth serves the interests of providers, mothers, and hospitals to such an extent that it is difficult for any individual to have

the intellectual and moral strength to take a step backwards, to take an objective look, and question the safety of the various interventions that make up the entirety of epiduralized birth.

We are still learning about the profound impact of the epidural (bupivacaine) on the fetal brain. The administration of bupivacaine together with pitocin is not based on adequate research to determine its safety at the clinical level. The Murray et.al. (1981) study stands out and is unequivocal in its recommendation. “Although it is at times necessary and appropriate for some mothers to receive medications during childbirth, the implications of this study are that the elective use of medication should be minimized (Murray et.al. 1981:81).”

Nurse-midwives are challenged by Rooks (2009:348) to be more proactive in providing the assertive informed consent needed by women to make safe decisions. “Women who request epidural analgesia need to be told that because it reduces the release of oxytocin from their own brains that loss will probably have to be replaced with synthetic oxytocin administered through an intravenous drip.” Women also need to be informed of the difficulty inherent in pitocin administration – a low-dose regimen increases the probability of cesarean section. A high-dose regimen increases the possibility of uterine hyperstimulation and resulting fetal hypoxia. In my observations at Community Hospital, this information was not provided to mothers in a fashion that emphasized the risks.

At the time that the use of pitocin and epidurals became routine, the research into maternal/fetal attachment unfortunately went out of vogue. This important area of study needs to be brought back into the mainstream of research. We can see from the above discussion that both bupivacaine and pitocin, whether given singularly or concomitantly, possibly has significant impact on the maternal/fetal unit during birth and afterwards. When used together, is that impact a synergistic one? More research is needed, as there is still much ambiguity in the present

research. There is also the need for alternative forms of pain relief to be considered. Nitrous oxide is a method of pain relief used widely throughout Europe. Ironically, this method of pain relief is used in many dental offices in the United States. While nitrous oxide does not completely block pain during labor, nitrous oxide has the advantage that the laboring mother controls its administration. Its use does not require the presence of an anesthesiologist. It has been widely studied and is shown to have a low toxicity level and is rapidly excreted in the mother and the newborn. It does not cause respiratory depression in the newborn (Reynolds (2010). There have been recommendations that hospitals consider its use as a safe alternative to the epidural (Rooks 2007).

Chapter Four

Theoretical Discussion of the Social Science of Childbirth

... Anthropology can benefit from viewing reproduction itself as a key site for understanding the ways in which people *re*-conceptualize and re-organize the world in which they live. (Cecilia Van Hollen (2003:5)

There has been a proliferation of popular and academic literature on childbirth and midwifery, both cross-cultural analyses of childbirth systems as well as research that specifically discusses the American system of childbirth. Numerous works, both published and unpublished, describing direct-entry midwives and the homebirth movement have been written. Also, there has been a flourishing of personal narratives by direct-entry midwives over the past twenty years as well as a number of oral histories of traditional southern African American midwives carried out by academics interested in midwifery.³²

I propose that this focus of attention on homebirth and direct-entry midwifery in the study of American midwifery and childbirth has been a result of the natural affinity that feminist academics have felt toward the independent spirit of direct-entry homebirth midwives and the fact that there has been to some extent a buying into the long standing critique by direct-entry midwives of nurse-midwives as having sold out. At the same time, it has been easier for academics to gain access to direct-entry midwives and their homebirth practices. As Jordan (1993[1978]) has pointed out, it is very difficult for researchers studying the American system of childbirth to gain access to hospitals as research sites. The American medical establishment has little to gain from having the gaze of critical researchers placed upon them. As a result, the

³² The narratives referred to here are too numerous to cite in total. "Spiritual Midwifery" by Ina May Gaskin was one of the first. Others that have been well read include: "Sisters On A Journey. Portraits of American Midwives" by Phyllis Chester; "Circle of Midwives" by Hilary Schlinger; and "Birth Without Doctors: Conversations with Traditional Midwives by Jacqueline Vincent-Priya. There has also been an avid interest in the stories of traditional South African-American midwives. These narratives include: Listen To Me Good. The Life Story of an Alabama Midwife by Margaret Charles Smith and Linda Janet Holmes; Motherwit. An Alabama Midwife's Story by Onnie Lee Logan; Beyond The Storm by Gladys Miton; and Why Not Me? The Story of Gladys Milton, midwife by Wendy Bovard and Gladys Milton.

voices of nurse-midwives have remained unheard, for the most part, by non-medical academics. This is a gap in our academic study of American childbirth, a gap that my research will begin to fill.

Origins of Academic Interest in Childbirth and Midwifery

The interconnection between academic interest in childbirth, also discussed as reproduction, and popular movements predate the latest literature. Prior to postmodernism, the social sciences, heavily influenced by a materialist and structural outlook, looked upon reproduction as an essential social process. Engels (1884) placed reproduction on par with, and in a dialectical relationship with, the means of production, with both determining the course of human history. Reflective of the strong influence of structuralism on the discipline of anthropology, early anthropologists “tended to focus on how reproductive practices and beliefs reflected social and cultural systems (Van Hollen 2003:5).”

Margaret Mead was perhaps the singular social scientist to first look upon childbirth from the standpoint of women, both as individuals and as a group, as opposed to unaware agents of the historical march of society and its structural elements. She was also influenced by the social movements of her time. Her work on maternal-infant attachment in the 1960s was a reflection of a growing interest in childbirth, not only as a social process, but also as an interaction between physiological, social and cultural factors. The popular movements of the time influenced her academic interests – the movement for legalization of birth control and abortion, as well as the La Leche League movement (Richardson and Guttmacher 1967).

In the late 1960s, popular writings emergent from the Women Right’s Movement, and soon afterward the Alternative Childbirth Movement, captured the attention of a generation of

young women, activists and academics alike. Firestone (1970) in *The Dialectic of Sex* argued that for women to gain equality we needed to free ourselves from the binds of biology – that our reproductive capacity formed the basis for our oppression as women. Firestone’s book was quickly followed with *Our Bodies, Ourselves* (Boston Women’s Health Book Collective 1971), a book that took a very different take on biology. As women we could empower ourselves by coming to know our bodies. In many ways these two works set up a contradiction within the second wave feminist movement, a contradiction between those who rejected childbirth as a fundamental part of what it means to be female and those who embraced, and to some extent romanticized, childbirth as is seen in Ina May Gaskin’s (1975) *Spiritual Midwifery*.³³

In 1973 Ehrenreich and English wrote a political treatise, *Witches, Midwives and Nurses*, claiming a historical connection between midwifery and the persecution of witches in medieval Europe. While slim on historical documentation, their work was a bridge between the world of academia and the women’s movement and inspired interest within academia for the study of the social science of childbirth and midwifery, even as childbirth was becoming increasingly technical and managed.

All these works were instrumental in giving voice to the developing homebirth movement in the United States. Unfortunately, the American College of Nurse-Midwives (ACNM) did not support homebirth at the time, preventing the possibility of a united American midwifery. At the very moment when the homebirth movement was gaining momentum, the ACNM, in 1973, took an official position against homebirth, stating that hospital was the safest and “preferred site for childbirth (Rooks 1997:67).” The ACNM’s rejection of homebirth was a factor in the rise of

³³ Focusing on a limited vision of women’s rights (fighting for an equal rights amendments and the right to abortion), it was only in the past fifteen years that the National Organization of Women, finally bridging this biology impasse, passed a resolution stating that the right of each woman to decide where and with whom to give birth is a fundamental aspect of reproductive freedom.

direct-entry midwifery. Women who were determined to have their babies at home set about learning by doing, whatever the costs, and the nurse-midwifery profession at the time did not stand with them.

Also significant for the developing alternative childbirth movement were two highly charged critiques of the American obstetrical system. Suzanne Arms (1981) in *Immaculate Deception* was the first to describe the “wheel of interventions” that characterized the growing medicalization of birth. Her critique of our system of childbirth was not restricted to obstetricians. She criticized the role of nurse-midwives for their involvement in hospital birth, essentially characterizing the profession as having sold out – a characterization that has stuck even as the nurse-midwifery profession has evolved.

The voice of a generation of women facing the alienation of medicalized birth, including the developing trend of unnecessary cesarean sections, was also reflected in Cohen and Esner’s *Silent Knife* (1983). Their angry attack on the cavalier attitude of the obstetrical profession toward rising cesarean rates along with the passionate comparison of unnecessary cesarean to rape was compelling. Their voice represented a growing popular movement of resistance to cesarean sections. *The American Way of Birth* by the influential author Jessica Mitford (1992), although appearing later than other popular works, added to the social commentary of American childbirth because of its documentation and measured tone.

I have described these popular works because they heavily influenced an entire generation of women, giving voice to a (mostly) white, middle class, alternative childbirth movement. It is probable that female academics, taking up the study of childbirth and midwifery starting in the 1970s, were also strongly influenced by these works. The subsequent academic works have been advocacy driven and the early characterization of nurse-midwifery as having

sold out to the medical profession can perhaps partially explain the lack of interest among these academics regarding the nurse-midwifery profession.

Childbirth and Midwifery in the Social Sciences

The academic discourse on childbirth and midwifery has been influenced by several trends. First, most research has been limited by the boundaries established by various disciplines. Secondly, the concepts of medicalization, hegemony, authoritative knowledge and the mechanical conception of the female body have permeated these works. Thirdly, while most modern theoreticians mention, or give lip service to, the concept of biology, few place as central to their analysis the reality of childbirth as a biological and evolutionary event.. Lastly, historians led the study of American childbirth within academia starting in the early 1970s and their works are numerous.

Childbirth has also long been of interest to anthropologists who recognized that reproduction was a central element to human organization. However, early anthropologists did not study childbirth “for its own sake” but rather as a means to study analytical concepts of traditional interest to anthropology, i.e. ritual, indigenous forms of medicine, or kinship systems (Davis-Floyd and Sargent 1997:1,2). Rapp (1997: xi) comments that the study of childbirth perhaps remained on the margins of theory and praxis because it was considered a “women’s subject.” Despite this marginalization, Davis-Floyd and Sargent (1997), in their summary of the history of the anthropology of childbirth, document how quite a few anthropologists, despite their lonely position within the discipline, endured in making the cross-cultural analysis of childbirth central to the study of social life.

The publication of Brigitte Jordan's "seminal" work (Van Hollen 2003:14), which initiated an "explosion" in the study of childbirth by anthropologists (Davis-Floyd and Sargent 1997:5), was a turning point in anthropology for what has become a dynamic and prolific sub-discipline in its own right. Van Hollen (2003:5) sums up this development:

Whereas earlier anthropological approaches to reproduction tended to focus on how reproductive practices and beliefs *reflected* social and cultural systems, scholars now argue that anthropology can benefit from viewing reproduction itself as a key site for understanding the ways in which people *re-conceptualize* and re-organize the world in which they live.

Sociologists have also made childbirth a focus of study, most notably Barbara Katz Rothman, Ann Oakley, and Raymond DeVries. Their works have paralleled that of anthropologists over the past several decades. What these sociologists tend to share with anthropologists is a qualitative approach to research and to a certain extent reflect a blending of academic disciplines. The sociologist Raymond DeVries (2004b) asserts that the theoretical boundaries of academia have stifled academic discourse and has created a false dichotomy between social structure and culture; in real life, social structure and culture are interrelated and inseparable. This is particularly true for childbirth. Within anthropology, the more recent trend towards a critical analysis has begun to transcend these arbitrary boundaries, focusing on how "reproduction is structured across social and cultural boundaries, particularly at local/global intersections. ... (Ginsburg and Rapp 1995:3)." Ginsburg and Rapp have led in criticizing the "erasure" and "exclusion" of women in discourse and policy making by institutions and the inherent inequalities revealed within that discourse. They have emphasized the need to focus on and recognize "women's centrality to reproduction in all its complexity... documenting, empowering and theorizing about female experience (Ginsburg and Rapp 1995:4)."

As a way to organize discussion on the academic discourse surrounding childbirth, I focus on key concepts that flow through academic works regarding childbirth: medicalization, the conception of the body as machine, hegemony, authoritative knowledge, and the relationship of biology and culture. The terms medicalization, hegemony, authoritative knowledge, and the mechanization of the body, while discussed as distinct concepts, are not easily separated. All involve the question of how normal childbirth has come to be seen as a medical event and how the power to define childbirth as such is expressed.

Medicalization as a theoretical construct comes directly from Ivan Illich's (1976) analysis of the impact of biomedicine on modern society. The concept of hegemony also permeates the academic and popular discourse surrounding the critique of American childbirth. The origins of the term hegemony in the social sciences of health care flows from the influence of Antonio Gramsci on modern intellectual thought. The term has come to be used in a variety of ways in academic discourse and the meaning has evolved. The original meaning of hegemony as used by Gramsci is far more complicated and encompassing than its frequent use reflects. The concept of authoritative knowledge coined by Brigitte Jordan (1993[1978]), while related to the concept of hegemony, has gone beyond a Gramscian analysis.

Gramsci is particularly relevant to the discussion of modern childbirth. Gramsci essentially argued against a mechanical, economic deterministic view of how social norms change. His concept was that the subordinate classes take on the belief systems of the dominant class, internalizing that belief system and coming to see it as their own. Critical to my analysis is Gramsci's notion that culture does not automatically flow from economic structure, that there is a degree of intentionality in cultural changes. This goes directly to my description of our childbirth system as being one of *Gleichschaltung*. The nurse-midwives I observed know that

the system they work under is dysfunctional. However, because the machine works so well with each piece dependent on the next, they find it difficult as individuals to resist the status quo and attempt to change the system, to disassemble it. There is a sense of inevitability and frustration that I hear in the words of nurse-midwives. Within a Gleichschaltung system, people often question the acceptable norms. However, acting against the norms, resisting those norms, can result in grave consequences – losing a job, losing ones reputation, facing ostracism.

Prior to discussing these key theoretical concepts, I wish to ground this discussion on a theoretical focus shared by most academics: the domination of childbirth in the United States by the obstetrical profession. A story told by the sociologist Raymond DeVries (2004a) describes this phenomenon. In his study of childbirth in the Netherlands, DeVries interviewed the Dutch obstetrician, Geerit-Jan Kloosterman, prior to Kloosterman's death.

Professor Kloosterman, the author of a Dutch midwifery text, became renowned, both in the Netherlands and throughout the childbirth community, for his support of midwifery and homebirth. It is no exaggeration to state that the support given to homebirth by Professor Kloosterman during his lifetime was a significant factor in the continuation of a dynamic Dutch midwifery in the latter twentieth century. DeVries' story, following his interviews with Kloosterman, shows several important concepts: childbirth reflects the cultural norms and social organization within which birth occurs even as it is a biological given. Also, obstetrics can attempt to medicalize birth in order to control the process but ultimately this is impossible.

Several years ago, the distinguished Dutch gynecologist/obstetrician, Professor Gerrit-Jan Kloosterman, was invited to London to give a lecture to an international association of obstetricians and gynecologists. Kloosterman, Chair of Obstetrics at the University of Amsterdam at the time, was well respected and well known for his support of the Dutch practice of midwife-assisted births at home. He was in the middle of his lecture – an analysis of the Dutch system, which showed that the continued use of midwife-attended home birth posed no danger to mothers and babies – when a strange thing happened.

While he was talking, several members of the audience got up and left the room, noisily, in an obvious display of displeasure with his presentation.

After he finished the lecture, Kloosterman and the president of the association discussed the small protest. They asked themselves, “Why doesn’t this happen in other specialties?” They agreed it would be unheard of for physicians to walk out in the middle of a lecture about cardiology, even if they thought the data were suspect. Protocol in the science of medicine dictates that disagreements about data be hashed out in collegial exchanges: One does not protest against data, one challenges the data on the basis of methodology, or analytic technique. Kloosterman and the president concluded that obstetrics does not really belong in the field of medicine. Perhaps, they conjectured, obstetrics would be better located in the field of physiology. After all, it is the only discipline in medicine where something happens by itself, and, in most cases, everything ends well with no intervention (DeVries 2004a:13,14).

Our “outlook on life,” as stated by Kloosterman, goes to the heart of this discussion on the academic discourse surrounding childbirth. Kloosterman was quoted as stating, “Obstetrics is wider and broader than pure medicine. It has to do with the whole of life, the way you look at life, making objective discussion difficult. You are almost unable to split the problem off into pure science, always your outlook on life is involved (DeVries 2004a:14).”

Medicalization

Ivan Illich put forth the analytic concept of medicalization, along with the associated concept of iatrogenesis, in his influential 1976 book, *Medical Nemesis. The Expropriation of Health*. This critique of biomedicine as “diagnostic imperialism” proposed that the “medical monopoly” had an iatrogenic impact on society at the clinical, social and cultural level. Modern medicine, with its singular clinical emphasis on technology, fails in its attempts to solve the modern epidemics associated with culture, i.e. hypertension and obesity, and often actually causes more harm than benefit. On a social level, modern medicine has turned individuals into consumers, expropriating health and creating “a morbid society in which social control of the

population by the medical system turns into a principal economic activity (Illich 1976:43).” The legitimacy of medicine to define health and illness and to create medical conditions out of normal life processes creates a social paralysis, taking health out of the realm of individual responsibility into one of institutional responsibility. Culturally, iatrogenesis takes away from society the traditional forms of coping with suffering and pain through self-care.

Perhaps more than any other analytic concept, medicalization has influenced the recent academic discourse on childbirth. I have chosen to compare the initial works of five social scientists who are well recognized for their work in the field of childbirth, the anthropologists Brigitte Jordan, Robbie Davis-Floyd and Emily Martin along with the sociologists Barbara Katz Rothman and Ann Oakley to illustrate the varied ways in which medicalization is understood. Their works are written as if they are speaking to each other, an academic conversation if you will. This makes sense when one considers that they are of the same generation, as academics they were aware of each other, and their writings have been carried out in the context of the alternative childbirth movement and the movement for an independent midwifery. The initial research of each academic was carried out in the late 1970s, excluding Robbie Davis-Floyd and Emily Martin, whose works began in the 1980s. A survey of the initial works of these five researchers reveals that each reflects the training of her discipline, while at the same time defying disciplinary boundaries.

Brigitte Jordan pursued a cross-cultural study of childbirth during the 1970s carrying out ethnographic research of childbirth practices in four countries - Mexico, the United States, Holland and Sweden. Jordan’s research was particularly focused on Mexico where she lived for extended periods of time in a village establishing a relationship with an indigenous midwife. She

ultimately was allowed to accompany the midwife to births where she was able to watch and participate.

In the preface of the 1993 fourth edition of her 1978 book, Jordan comments that when she first began her research “there were no analytic concepts that would handle my material (p. xi).” She drew inspiration from Margaret Mead as one of the few social scientists to have written on childbirth as a significant social event.

Key elements of Jordan’s analysis include:

- 1) Childbirth practices are not isolated practices on the part of individuals but are socially patterned systems with cultural internal consistency. Birth is a universal biological event that is socially regulated and consensually shaped with “the particular pattern depending on local history, ecology, social structure, technological development, and the like (1993:4).”
- 2) A concern for the impact on indigenous systems of childbirth by highly technological childbirth systems. Local systems of childbirth are transformed, often not for the better, as they interact with and incorporate western knowledge, technology, and ideology.

A British sociologist, Oakley’s initial research (1980) was contemporaneous to Jordan. Like Jordan, she comments that when she was beginning her research there existed little in the way of research regarding childbirth. Her focus has been on the “social character” of childbirth – “an understanding of what happens, why and with what consequences to women having babies in any culture (1980:2).” Not surprisingly, as a sociologist Oakley looked to structural relationships in her analysis of childbirth.

The fundamental characteristic of childbirth in British society, according to Oakley, is the transformation of childbirth into a medical “case,” with control and power in the hands of the physician and medical institutions, as opposed to a social event with support coming from a woman’s immediate community.

Obstetrics, like midwifery, in its original meaning describes a female province. The management of reproduction has been, throughout most of history and in most cultures, a female concern; what is characteristic about childbirth in the industrial world is, conversely, its control by men. The conversion of female-controlled community management to male-controlled medical management alone would suggest that the propagation of particular paradigms of women as maternity cases has been central to the whole development of medically dominated maternity care (Oakley 1980:11).

The progress of prenatal care brought with it the fundamental element of the “monitoring of maternal behavior (Oakley 1986[1984]:42),” a social phenomenon with quite mixed implications for the health of mothers. Prior to this monitoring of maternal behavior by maternity professionals, “medical practitioners in the eighteenth and nineteenth centuries had to place some reliance on women’s own opinions as to whether or not they were pregnant (Oakley 1986[1984]:19)” as well as give credence to the mother’s own perceptions about the state of her health and that of her baby. The transformation of pregnancy into a medical case by the medical system is the essence of the medicalization of pregnancy, according to Oakley (1986[1984]).

Barbara Katz Rothman is a sociologist by training and yet is quite postmodern with a good deal of self-reflexivity in her initial 1982 book, *In Labor: Women and Power in the Birthplace*. Rothman’s voice and her personal narrative are pivotal to her writing. She also draws heavily on history and philosophy in her analysis of childbirth in the United States. Rothman wrote at a time when sociology was still heavily quantitative and had yet to embrace qualitative methodology with its reliance on rich description, let alone the idea that the experience and role of the researcher should be central to any work.

For Rothman, the fundamental characteristic of modern childbirth lies in the social phenomenon of hospital birth and the rapid, extreme transition in place of birth - that is from birthing in the home to the hospital. It is in the attempt to explain this phenomenon that she developed her analytic framework. Two “oppositional models” of care are in competition for

control of childbirth – medicine and midwifery. Midwifery embraces a women’s perspective, a perspective on birth “in which women are the subjects, the doers, the givers of birth (1982:34).” “It is in the conflict between these two perspectives that the contradictions surrounding birth in America arise (p. 33).”

Rothman, in her initial writing, is the most overtly political in her analytic framework. There is a fundamental contradiction within the arena of childbirth. This medical model vs. midwifery model framework has both structural and ideological elements. First, central to the medical model is the ideology of technology, a mind-body dualism, where birth is conceived as a mechanical event. This is in opposition to the idea that pregnancy is a state of the woman, and that normal pregnancy should be the “working norm.” Secondly, fundamental to the medical model is an ideology of patriarchy. “Not only is the male body taken as the norm by which the female body is understood, but the female reproductive processes are also understood in terms of men’s needs. Thus, in the medical model, the woman is pregnant with the man’s child (1982:39).” Thirdly, a commodification of childbirth has taken place in medicine, but particularly in the United States where health care is a business concern. Childbirth is a service that medicine provides rather than an activity that women engage in. Emboldened by commodification of the body, technology takes on a life of its own.

In Rothman’s framework, there is a dialectical relationship between social structure and ideology. The medical model, the conception of the body as machine, arises out of technological society; the medical model then leads to more technology. “This approach to the body as machine, found in the medical model, both comes from the technical/industrial society and reflects that society, shaping it and its members (1982:35).” The rise of the modern hospital

system was key to this development for “the medical model of childbirth needed the hospital in order to develop to its logical conclusion (1982:40).”

What I would add from my own observations, is that American childbirth does involve two very different ways of looking at the management of labor: an obstetric framework of labor and delivery that meets the requirements of an industrialized system and an opposing framework that recognizes birth as a human physiologic process. Rothman (1982) referred to this second framework as “the midwifery model of care.” I wish this were true. From my observations of nurse-midwives and interviews of direct-entry midwives, I would say that American midwives of all types utilize a framework of birth as a physiologic process to varying degrees depending on the setting of practice. Even in the context of homebirth, midwives respect the physiologic process of birth to the extent possible given the realities of local power relations between midwife, local obstetricians and hospitals.

Davis-Floyd’s (1992) analysis of modern childbirth in the United States has also been quite influential. Her central concern is to explain how and why American women have widely accepted and placed faith in the medical model of childbirth. After having interviewed over one hundred women on their birth experiences, Davis-Floyd observed that it is the consistent acceptance of hospital birth, as well as the acceptance of medical procedures, that is characteristic of American birth. “It took me years to be able to hear that most of these women were not raising their voices in resistance and revisioning of the American way, but in varying degrees of harmony and accord with that Way (1992:5).”

Underlying this social phenomenon is our society’s fundamental belief in the superiority of technology over nature. According to Davis-Floyd, the fear of the unpredictability and uncontrollability of nature exists to one extent or another in all societies but is particularly strong

in American culture. Fundamental to the technocratic model, which our society embraces, is the belief that we can predict and control nature through technology, eliminating danger and risk. Yet birth is inherently unpredictable and can never be entirely controlled. “So the dilemma becomes,” states Davis-Floyd, “how to create a sense of cultural control over birth, a natural process resistant to such control (1992:60)?”

Davis-Floyd goes on to interpret birth stories and obstetrical procedures in terms of ritual. In her paradigm, it is through ritual that we as a society gain a sense of control over natural processes and accomplish a protection from perceived dangers. Obstetrical procedures, she says, “are in fact rational, ritual responses to our technocratic society’s extreme fear of the natural processes on which it still depends for its continued existence (1992:2).” Martin’s (2001[1987]) contribution in turn has been to deconstruct the metaphors within modern medicine that reveal the mechanization of the female body within our industrialized birth system.

All of these academics use the term “medicalization.” Initially used by Ivan Illich (1976), he observed that an ongoing process within modern society is the medicalization of life. The concept is fundamental to a paradigm of industrial/technological societies where the universe has come to be conceived in mechanistic terms. The body is then looked upon as a machine that can be altered, repaired, and controlled. The medicalization of childbirth is a process seen throughout the world although it has most strongly played out in the United States.

Following is a brief description of how each of these academics defines “medicalization.”

- | | |
|---------|--|
| Jordan: | Birth is a physiologic event that is culturally shaped. Also, birth has become a “medical event” in Western society reinforced by authoritative knowledge. |
| Oakley: | Medicalization represents the colonialization of the body by medicine (patriarchy) and the transformation of birth from a social event to a medical event. |

- Rothman: Medicalization has created two dialectical and oppositional models of childbirth: the medical model of care and the midwifery model. Patriarchy lies at the basis of the medical model of care.
- Davis-Floyd: Medicalization is a process that is consistent with our society's core cultural ideas and values. Medicalization is the means by which our society resolves our fear of uncertainty.
- Martin: Commonly accepted medical metaphors reveal the extent to which medicine has commodified women's bodies and turned women's bodies into a series of parts of a machine.

In her cross-cultural comparison of birth, Jordan views medicalization of birth as inherent to and a reflection of Western society. Her concern is in the interface between western systems and the low technology, indigenous systems of less developed countries and the tendency of high tech systems to overwhelm indigenous systems of care. For Davis-Floyd, medicalization is a development "consistent" with our society's conceptual frameworks. The medicalization of childbirth, "nurtures" our cultural need to believe that we have overcome nature (Davis Floyd 1992).

For Oakley (1980; 1986), medicalization represents "colonialization" of the body and "control" of men over reproduction, the desire to control women. This colonialization is manifested in the doctor/patient relationship where the "conflict" between physician as expert and a woman's own knowledge is played out. Similarly, Rothman views the medical model and the midwifery model of care as actively opposing each other. "It is in the conflict between these two perspectives that the contradictions surrounding birth in America arise (1982:33)."

Rothman viewed patriarchy as a fundamental element of the medicalization of birth. Similarly, Oakley also presents patriarchy as fundamental to modern childbirth in her 1980

academic work, *Women Confined: Towards a Sociology of Childbirth*. “Contemporary obstetric medicine has its roots in the ‘scientific’ and technological domination of male midwives over the empiricist and ‘natural methods of traditional female midwifery (1980:26).” She continues to state that, “Since it [obstetrics] was originally developed as a challenge to females modes of reproductive care, its ideology has historical roots in anti-feminism, in the creation of a mythology of women that represents them as a marginal group (Oakley1980:45).” At the time of Rothman and Oakley’s initial writings, it was certainly true that modern obstetrics was overwhelmingly a male occupation. That is no longer true. The case for patriarchy as fundamental to modern society’s turn towards technological birth is a reflection of the prevalent thinking of a specific era.

Where Rothman and Oakley see conflict and contradiction, Davis-Floyd and Jordan see consistency and acquiescence. The usefulness of Davis-Floyd’s analysis is that it helps explain the appeal that high-tech birth holds for American women. Medicalization is something that women actively pursue as opposed to something that is forced upon them by our modern institutions. On the other hand, modern health care institutions offer women little choice.

While Rothman and Oakley tend to overemphasize the contradictions within our health care system, Davis-Floyd and Jordan tend to overemphasize the degree of stability. Their emphasis on the internal consistency of childbirth systems overlooks the subtlety of social conflict in the childbirth arena. Nor do these four authors give credence to the agency of women to manipulate, resist or utilize the medical system in ways that they find suitable. An overemphasis on cultural stability also misses the role of the individual in the social tensions that ultimately lead to social change.

Labor rooms in American hospitals are anything but examples of the internal consistency of culture. The labor room battles that I witnessed during the days of the alternative birth movement revealed subtle but intense conflict between a mother's desire and wishes in conflict with the medical model of care. In today's world, as I will describe in later chapters, mothers are still active players in our industrialized birth but in ways quite different from the era of these early theorists.

The more recent works of critical anthropologists have included a critique of the use of the concept of lexicalization in describing women as passive players in the growing use of technology during childbirth. Riessman (1998) expresses this critique:

...Feminists have not always emphasized the ways in which women have simultaneously gained and lost with the lexicalization of their life problems. Nor have the scholars always noted the fact that women actively participated in the construction of the new medical definitions, nor discussed the reasons that led to their participation. Women were not simply passive victims of medical ascendancy. To cast them solely in a passive role is to perpetuate the very kinds of assumptions about women that feminists have been trying to challenge. (p. 47)

Hegemony and Authoritative Knowledge

Gramsci was intrigued by the question of why modern revolutions had not occurred in industrialized society as predicted by Marxists. Gramsci's analysis of hegemony developed out of a critique of orthodox Marxism, what he referred to as "mechanical historical materialism" or "economism," where cultural change was interpreted as an inevitable result of structural changes (changes in the means of production). This rejection of economic determinism led to an elevation of the significance of culture relative to social structure. Central to his analysis of power relations was that the dominant class in any society maintains its power through a cultural

hegemony, a hegemonic apparatus from which values and ideas flow, reflect and maintain the self-interest of the dominant class and are imposed upon society.

This hegemonic apparatus creates a “technically and morally unitary social organism (Forgacs 2000[1988]:34).” Society in general comes to see the worldview of the dominant class as normal, inevitable and embraces this worldview as in their own self-interest, a form of self-deception or what some intellectuals have referred to as false consciousness. The oppressed, Gramsci proposed, “for reasons of submission and intellectual subordination [adopts] a conception which is not its own but is borrowed from another group; and it affirms this conception verbally and believes itself to be following it, because this is the conception which follows in ‘normal times’ – that is when its conduct is not independent and autonomous, but submissive and subordinate (Forgacs 2000[1988]:328).” In this way the oppressed cooperate in their own exploitation and “the ideological unity of the entire social bloc which that ideology serves to cement and to unify (p. 330).” Within this hegemonic apparatus, the intellectual class serves to legitimize the entire social system and is “an organizer of society in general, including all its complex organism of services...(Gramsci 2005[1971]:5,6).”

A logical conclusion to this philosophical formulation is that, because culture does not inevitably flow from economic forces, there is a possibility of intentionality in political action where the cultural hegemony of the dominant class can be challenged. A reform of consciousness becomes possible “when one succeeds in introducing a new morality in conformity with a new conception of the world, one finishes by introducing the conception as well; in other words, one determines a reform of the whole of philosophy (Forgacs 2000[1988]:192).”

The concept of cultural hegemony flows throughout most analyses of modern childbirth and is used to explain the overwhelming appeal of obstetrics to the extent that indigenous childbirth practices are threatened. Within this analysis, women themselves are complicit in maintaining a system of care in which their bodies are relegated to the status of machines to be manipulated and managed. Everyday acts of resistance as described by Scott (1986; 1990) or the “measured judgments” of individuals as described by Morsy (1995) in actively engaging in decision-making are merely self-deceptions.

In its infancy, the American medical profession was noted for a lack of regulation along with a local, pluralistic, entrepreneurial nature. Additionally, our hospital system was primitive compared to industrialized European countries with their tradition of a regulated medical profession and advanced teaching hospitals (Starr 1982). The rapidity with which the American medical system has changed from an open system to a business monopoly has intrigued social scientists.

Gramsci, in his analysis of American culture and its impact on economic change, what he called “Fordism,” was particularly prescient. If hegemony is used by the ruling class to create a “technically and morally unitary social system,” then the United States with its relatively unformed superstructure, a nascent cultural and social system and open economic system, was prime for a more rapid, and complete, modern rationalization of society than European society. American industrialization became the ultimate application of modern productivity and managerial techniques onto economic institutions and is the principle upon which the modern American economy developed into a powerful worldwide power.

Hegemony here [in the United States] is born in the factory and requires for its exercise only a minute quantity of professional political and ideological intermediaries. The phenomenon of the “masses”...is nothing but the form taken by the “rationalized” society in which the “structure” dominates the superstructures more immediately and in which

the latter are also “rationalized” (simplified and reduced in number) [Forgacs 2000[1988]:279].

The increased rationalization and standardization of American hospitals as described by Perkins (2004), particularly with regards to childbirth and newborn care, corresponds to Gramsci’s concept of hegemony as born in the factory. Hospitals are more and more bottom-line oriented, organized along modern business models. Emphasis is on the application of modern managerial techniques to enhance efficiency, productivity and revenue generation. The implication for labor and delivery is the need for greater control, or management, over labor and delivery in terms of time and cost. Supportive care is a cost while technological intervention and the use of technical implements, such as external fetal monitors, are revenue generators.

Each hour a woman spends in labor increases cost and cuts into profit, serving as a strong motivation to manage, to standardize, labor with frequent labor augmentation. Standardization and management of labor, in which as many interventions as possible are used, serve to increase profit. Each intervention represents a reimbursement. Routine induction of labor, while associated with increased cesareans, helps maternity units cut labor costs (i.e. weekend overtime pay), relieves obstetricians from the inconvenience of weekend calls, while at the same time increasing revenue. Planned cesareans increase the ability of operating rooms to plan staffing levels in advance optimizing the use of both staff and facilities. Healthy newborns are increasingly classified as at risk, admitted to neonatal intensive care units for observation, and submitted to the risk of unnecessary testing - increasing the cost of care to society, while also increasing revenue for the hospital. Of course, none of these health care decisions are discussed as economic – they are clinically justified, normalized and viewed as medical progress.

While economics is fundamental to the technicalization of American childbirth (Perkins 2004), a powerful conceptual framework holds the entire system together that many American families have come to see as normal – that childbirth is a pathological event that can be medically managed. Implicit is the promise and expectation of guaranteed positive outcomes.

Used freely in academic discourse regarding childbirth, the meaning of the term “hegemony” has evolved over time. Comaroff and Comaroff (1991:20) make the point that the concept has come to be “unspecified and inadequately situated in its conceptual context.”

... We take hegemony to refer to that order of signs and practices, relations and distinctions, images and epistemologies – drawn from a historically situated cultural field – that come to be taken-for-granted as the natural and received shape of the world and everything that inhabit it. It consists, to paraphrase Bourdieu (1977:167), of things that go without saying because, being axiomatic, they come without saying; things that, being presumptively shared, are not normally the subject of explication or argument (Bourdieu 1977:9). This is why its power has so often been seen to lie in what it silences, what it prevents people from thinking and saying, what it puts beyond the limits of the rational and the credible. In a quite literal sense, hegemony is habit forming (Comaroff and Comaroff 1991:23).

Van Hollen (2003:15) also uses this refined definition of hegemony in her discussion of childbirth in South Asia. “I use the term ‘hegemony’ to mean those systems of knowledge, symbols, and practices which are culturally constructed in the context of relations of power and which ‘come to be taken for granted as the natural and received shape of the world and everything that inhabits it.’ ”

In the 1993 edition of her original work, Jordan adds a discussion on power and knowledge, what she calls “authoritative knowledge,” to her analysis of the impact of biomedicine on indigenous systems of childbirth. She does not reference Gramsci but rather refers to Bourdieu and Passeron for whom systems of knowledge are the means by which dominant groups within social systems are reproduced. Knowledge systems, Jordan argues, or

what she calls “authoritative knowledge” hold power to the extent that they represent an “internal consistency,” appear “natural, reasonable” and are “consensually constructed (1993[1978]: 153).” It is these characteristics, she argues, that explain the power of biomedicine and it is through authoritative knowledge that hierarchical social structures are maintained and relations of power and authority are reproduced. She further argues that, to the extent that authoritative knowledge holds powerful sanctions, “People not only accept authoritative knowledge (which is thus validated and reinforced), but are actively and unselfconsciously engaged in its routine production and reproduction (1993[1978]:153).”

According to Jordan’s analysis, the biomedical model of childbirth has become dominant to the extent that it is seen as appropriate. It’s dominance as a medical system lies first, in the high cultural value placed on technology within American society and secondly, in the cultural authority given to the obstetrical model as representing scientific truth.

Much of the thinking of social scientists with regard to childbirth has emphasized the power of biomedicine over the lives of individuals, deemphasizing the potential for resistance to biomedicine as well the progressive aspects of biomedicine, both in what it represents as well as in the reality of what it offers to women. Jordan, with her theoretical paradigm of authoritative knowledge, does not offer adequate consideration to the possibility that American women perhaps embrace technology for the benefits that might accrue. As described in the historical section of this dissertation, Leavitt (1983; 1986) documents how technology in childbirth was not merely forced upon women but actively sought by women. In fact women were involved in seeking out the incorporation of technology into the American system of childbirth. In my observations, I find that to still be true. Anthropologists are only beginning to develop a discerning analysis of the dynamic relationship between choice and constraint in relationship to

childbirth and the ways in which women go about “negotiating the contradictory forces within which their lives are embedded (Ginsburg and Rapp 1991:228).”

Biology and Culture

The relationship of biology to society has long been an area of debate within academia and so it is only to be expected that this would also be true in the social science of childbirth. Jordan (1993 [1978]) and Oakley (1980) both discuss biology and society but with differing approaches. Jordan is known for her biosocial paradigm, which describes biology and society as being interconnected. The quote below illustrates Jordan’s paradigm.

[Childbirth is a] phenomenon that is produced jointly and reflexively by (universal) biology and (particular) society. The distinction between what is biological and what is social is, in many ways, merely analytic. It has no ontological status. ... The physiology of birth and its interactional context (or the sociology of birth and its physiological context) constantly challenge all efforts to separate them.

...If we consider the sparse ethnographic record, we find that there is no known society where birth is treated, by the people involved in it’s doing, as a merely physiological function. On the contrary, it is everywhere socially marked and shaped. To speak of birth as a biosocial event, then, suggests and recognizes at the same time the universal biological function and the culture-specific social matrix within which human biology is embedded (1993:3).

Oakley, on the other hand, has a paradigm of women as reproducers where childbirth, or reproduction as she tends to call it, is first and foremost a social and cultural activity.

Having a baby is a biological and cultural act. In bearing a child, a woman reproduces the species and performs an “animal function”. Yet, human childbirth is accomplished in and shaped by culture, both in a general sense and in the particular sense of the varying definitions of reproduction offered by different cultures. How a society defines reproduction is closely linked with its articulation of women’s position: the connections between female citizenship and the procreative role are social, not biological (1980: 6).

Oakley places great emphasis on social arrangements. Childbirth is a “biological event...the defining feature [of which] is [its] social character. ... Bodies function in a social world, and the parameters of this world supply an influence of their own (1980:7).” In giving childbirth, the individual woman represents the “union of nature (biological reproducer) and culture (social person) directly (1980:8).” Oakley does give recognition to the biological” element of childbirth but ultimately biology is about society. “Particular childbirths create or break families, establish the ownership of property and entitlements to poverty or privilege; they may alter the statuses, rights and responsibilities of person, communities and nations (1980: 8).”

Even as Oakley speaks of biology, or reproduction, she is speaking not of physiology but of social roles and functions. Jordan has the biology of childbirth embedded in the specific social matrix in which it is expressed. In Oakley’s paradigm, biology is subsumed within social relations and structure, particularly patriarchy.

The management of reproduction has been throughout most of history and in most cultures, a female concern; what is characteristic about childbirth in the industrial world is, conversely, its control by men. The conversion of female-controlled community management to male –controlled medical management alone would suggest that the propagation of particular paradigms of women as maternity cases has been central to the whole development of medically dominated maternity care (1980:11).

In Oakley’s early work (1980), we can see the beginnings of her emphasis that childbirth is a biological event that is mainly defined by its social character (Oakley 1986[1984]).

Rothman (1982) does not discuss biology or physiology. For Davis-Floyd (1992), the significance of biology lies in her paradigm where fundamental to the “technocratic” model of western society is the utilization of technology in order to overcome biology.

Emily Martin (2001[1987]), a critical anthropologist, has been influential with her cultural analysis of the “biomedical” model of childbirth, a metaphorical analysis of birth as

“(re)production” – an analysis focusing on culture that also recognizes how economic and social forces shape our ideas, social expectations and institutions. Modern scientific thought, obstetrics being one example, is not “objective” but is a social and cultural construct where “facts” may in truth reflect cultural organization of experience as much as, or sometimes more than, actual physical reality.

Martin is a materialist in the sense that she traces how changes in the economic and social organization of society, particularly beginning with the Industrial Revolution and more recently the development of modern technology, have resulted in changes in the way we give meaning to and experience biological processes. Additionally, for Martin, words are the essence of how a society gives meaning to the world as we see it and are a reflection of worldview. Language and metaphor provide a basis upon which to understand the cultural assumptions fundamental to our social system and describes the meaning given to physical processes.

Martin describes the American childbirth system as a reflection of a cultural conception of the body functioning as a machine. This Cartesian model of the body as machine (separation of the body from the mind and spirit) has logically evolved into a conceptual model of the body as factory. Reflecting the larger social system, modern health care has evolved into a social system that relies heavily on technology and information, has lines of authority that are highly hierarchical, and is driven by profit. Under this system, the body is no longer merely a machine but the factory itself. The doctor is no longer a “mechanic” but a “supervisor” or “owner.” The mother is a laborer whose machine (body) produces an end product (baby). The entire focus of the process of childbirth (or reproduction in general) is now whether there has been successful or failed production (reproduction). Where the body is conceived as a series of parts, a profound body-self fragmentation occurs. “The organic unity fetus and mother can no longer be assumed

and all these newly fragmented parts can now be subjected to market forces, ordered, produced, bought and sold (Martin 2001[1987]:20).”

Perkins’ (2004) economic analysis of the rationalization of American health care in general, and maternal infant health care in particular, parallels that of Martin. However, in her critique of Martin’s analysis of the body as metaphor lies a significant philosophical divide. According to Perkins, it is not the cultural metaphor of the body as machine that drives our childbirth system and obstetrical practices. Rather, it is the economic organization of our childbirth system that drives our cultural understanding. Furthermore, economic organization and cultural understandings are mutually reinforcing.

With primary goals of accelerating throughout and enhancing productivity in the labor and delivery unit, active management and induction were inherently managerial techniques that enhanced the development of birth as a production process.

I agree with Emily Martin’s association of active management with production metaphors. But, as with other paradigm/intervention associations, it was not the metaphors drove practices. Oxytocin use itself shaped the metaphors; active management prescribed oxytocin to strengthen uterine contraction and correspondingly diagnosed dystocia as a problem of inadequate contraction. This focus on uterine contraction ignored other factors contributing to prolonged labor, such as resistance of the cervix and birth canal. Metaphors of production were just as much the result of structuring labor and delivery units like production units and using technology to enhance productivity, as they were its cause. Like the use of forceps, episiotomy, cesarean section, and intensive care before it, active management theory and practice coevolved with the economic organization of obstetrics. This means that reforming medical practice requires reforming this organization (Perkins 2004:155).

Perkins’ criticism of Martin lies in the question of the relationship of social structure and culture, a question that has been debated among social scientists for decades. When we are discussing childbirth, there is also the question of the role of biology in relationship to culture, a question that has also been debated for years.

Trevathon (1987; 1997) has been the most influential anthropologist to bring biology into the discussion of childbirth. “Critical anthropology has pushed the body itself too far into the

background,” Trevathon (1997:85) states. She is making the point that, while recognizing the universality of the social nature of human birth, most social scientists lack an appreciation of human birth as a fundamental biological human event, and, furthermore, show a discomfort with the physicality of childbirth.

This discomfort with the reality of biology, a discomfort with the physicality of birth, seen in the writings of some social scientists is particularly apparent in the criticism of Odent by Emily Martin (2001[1987]). Both Martin and Odent share a criticism of the “biomedical” model of childbirth - a social and cultural model of childbirth that has brought alienation, a lack of control, the separation of the mother and newborn as an “organic unity” (Martin 2001[1987]:20), as well as causing its own dangers (iatrogenesis) during childbirth, a fact emphasized by Illich (1976) in his critique of biomedicine.

Despite their agreement on this critical point, Martin criticizes Odent’s emphasis on the physiology of birth as serving to essentialize women, to reduce women to our biological functions.

In Odent’s view, birthing women are perceived as moving back in time and down the evolutionary tree to a simpler, animal-like, unselfconscious state. This assessment must be viewed in light of the historical exclusion of women from ‘culture’ – that higher activity of men – and the exclusion of women’s culture (such as their writing) from the mainstream. It is ironic that Odent’s efforts to give birthing back to women occur at the cost of reasserting a view of women as animal-like, part of nature, not of culture. Even though Odent has been made a hero by many birth activists in this country, we would do well to realize that his views share a lot with those of nineteenth-century writers who relegated women to the “natural” realm of the domestic (Martin 2001[1987]:164).

Martin’s analysis of the connection between cultural metaphors and obstetrical practices has been instructive, adding to our understanding and critique of modern obstetrics. Her understanding of the cultural underpinnings of childbirth has been to analyze obstetrical metaphors and to show how the language used by obstetrics to describe the physiology of birth

reflects cultural assumptions – an ideology of male superiority that views the female body as less than human, as a passive agent to our physiology, and for obstetrics in particular, an objectification of the woman as a reproducing machine.

However, when Martin extends this critique to Odent's contribution to our understanding of the physiology of birth, I believe that it reveals a discomfort with biology that is seen in the work of many feminist activists and academics alike. The fact that childbirth is a physiological event can be easily lost when analyzed from the perspective of cultural variation and power relations. For many feminist academics, including Martin, nature (biology) is equated as subjugation. Martin's critique of Odent misses the essence of his writings. Physiologic birth does not have to take women backwards in the arena of human rights. Odent's critique of industrialized birth is instructive in how technology threatens the health of mothers and babies.

Odent emphasizes the instinctual nature of human birth - functional labor involves a giving over of control, a shutting down of the neo-cortex (the thinking part of our brain), by the mother - a process necessary for the body to do its work. This is the essential point made by Odent (1984; 1987; 2001; 2002; 2006), and before Odent, Niles Newton (1966a; 1966b; 1987) - that undisrupted birth involves limiting stimulation of the neo-cortex so that the parasympathetic system can dominate, allowing for the uninhibited pulse-like secretion of oxytocin that is seen in successful labor. This point has been controversial among some feminists and academics and particularly articulated by Martin (2001[1987]).

Martin's viewpoint is not unique. It can be traced to some of the earliest feminist academics. Sherry Ortner's (1972) seminal article, *Is Female to Male as Nature is to Culture*, endures as an early stake of this intellectual position. Ortner's position that women cross-culturally are viewed as a part of lower order nature, while men are associated with the higher

cultural activity, heavily influenced feminist anthropologists. Based on this posit, it then seemed logical to state that as men see themselves as superior to nature, then women, seen as a part of nature, were considered to be subordinate to men based on our reproductive capacity

Specifically with regards to Odent, Martin has criticized what she interprets as a regressive attitude that relegates women to an animal-like state. Odent's emphasis on the importance of, in effect, shutting down the neo-cortex to the extent possible is interpreted by Martin as reflecting an ideology of women as being of a lower order than men. Her fundamental criticism of Odent is that his analysis of the physiology of birth reduces the essence of women to our reproductive function. It is not helpful that scientists routinely refer to the sub-cortex as the "primitive" part of the brain. It is the part of the brain that controls the autonomic nervous system, is essential for life, and a part of our biology that as humans we share with other mammals. When Odent emphasizes the significance of the parasympathetic system and the need to limit the activities of the neo-cortex during birth, I believe it is a stretch to suggest that he views women as more primitive than men due to our reproductive capacities.

In a rather irrational manner, when women's reproductive biology is viewed as the basis of women's subjugation, as opposed to a part of our essential humanity and potential empowerment, it follows that women are therefore inferior as a result of their own reproductive biology. Biology does, in fact, become destiny as a result. This "nature-society dichotomy," as pointed out by Descolla and Pálsson (1996:3), hinders "true ecological understanding."

Odent's writings have captured the imagination and influenced childbirth activists throughout the Western world. An argument can be made that within the alternative childbirth movement his analysis has been used to romanticize childbirth. It is easy from the lens of our technological society to forget that until recently women faced dangers during pregnancy and

childbirth, dangers still faced by millions of women in underdeveloped countries as well as women in our own society who do not have access to adequate health care. It is all too easy, in the critique of the biomedical model, to downplay the dangers of childbirth. However, I do not believe that Odent's criticism of industrialized birth extends to a denial of the dangers faced by women who do not have access to life saving technology.

I have heard Odent speak several times and there is no doubt that he romanticizes birth to a certain extent, although I may have missed something in the translation. There may have been something missing in the translation, so to speak, in the very French way in which he expresses himself. I would point out that Gaskin (1975) also romanticizes birth but most academics do not confuse her romanticism of birth with a reduction of women to their role as reproducers.

A weakness in the critiques of industrialized childbirth lies in the fact that many theorists fail to account for the reality that human birth is a fine-tuned physiologic process developed through years of evolution. Historically, anthropologists have long recognized the variation in the social organization of human birth. Trevathan (1997) provides a perspective from which to see a unique characteristic of humans: birth involves social organization, customs and interventions that are driven by an evolutionary imperative. "It was the evolutionary process itself," Trevathan says, "that first transformed birth from an individual to a social enterprise (1997:81)."

Trevathan (1987) discusses how the evolution of human birth, so intricately tied to what it means to be human, relies on a series of physiologic events, each designed to facilitate the successful birth of the human baby. Human birth has evolved into a complicated biological event as compared to other mammals. Bipedalism and encephalization simultaneously resulted in competing evolutionary tensions for successful human reproduction. Bipedalism changed the

morphology of the human pelvis, narrowing the pelvis in relationship to the human fetus. At the same time, evolution favored the enlargement of the brain. The evolutionary compromise of these tensions was the birth of a relatively helpless infant, a characteristic specific to human infants.

An understanding of the uniqueness of the altriciality of the human infant and how this characteristic forms the basis of what we know as human society – our cultures, social structures, our kinship systems – is missing from much of the literature on the social science of childbirth. Even Jordan (1993[1978]) with her bio-social paradigm – birth is a universal physiologic event that is uniquely shaped by each individual culture – does not give adequate discussion to the particularities of the physiology of human birth and how this impacts the way that childbirth is shaped by society.

With her biological and evolutionary perspective, Trevathan (1997) provides a unique critique to this on-going discuss of authoritative knowledge and childbirth. She raises the question as to when, if ever, women have had unfettered power to make individual decisions with regards to pregnancy and childbirth. Trevathan makes the point that for most animals birth is a solitary, private event led by an instinctive, physical drive for isolation. The trade-off between the physiologic drive for isolation in favor of social birth had to have been very strong and could well be associated with the development of “the consciousness of vulnerability” (1997:83) that impelled women to seek and accept assistance during birth.³⁴

Shostak (1983[1981]) and Konner and Shostak (1987) have documented that a cultural practice of solitary birth exists among the !Kung tribe of Africa. However, they point out that a laboring mother rarely gives birth alone during her first birth. Among the tribe, birthing alone,

³⁴ This is a *theoretical* concept put forth by Trevathan, one difficult to prove. However, I find her theory both logical and compelling.

while not unusual, appears to be more a cultural “ideal” that represents physical courage. They do not conclude that it is the norm. At the time of Shostak and Konner’s fieldwork, the !Kung and their reproductive strategies were viewed as possibly representative of human society during the Paleolithic period. This example of solitary birth does not by itself negate Trevethan’s thesis.

The essential point made by Trevathan is that women hand over decision-making on some level during pregnancy and birth in all cultures. The laboring mother does not make decisions regarding her care, in any society, outside of cultural and social expectations and norms. An evolutionary perspective on childbirth, Trevathan states, “adds to our understanding of how birth today is constructed and experienced” and at the same time does not “inevitably lead to assuming that we are passive victims of our evolved bodies (1997:80).” Trevathan’s thesis regarding social birth as a result of human evolution is supported by the work of Denis Walsh (2006a; 2006b), a British clinical researcher. Walsh has shown the significance of a trusted caregiver for normal progress of labor as well as to the development of matrescence, the embrace of mothering. Unique to the biomedical model, with its separation of the body from the mind, is the extreme disconnect between the mother-baby dyad. Also, the relationship that has existed in traditional societies between mother and birth attendant is lost in the midst of the modern industrial labor and delivery unit.

With the above survey of the academic literature, I hope that what is apparent is the need for more research to be carried out as to the variations and uniformity seen in human birth from a cultural, structural, as well as a biological standpoint.

Chapter Five

Childbirth at Community Hospital: “Turning the Board Blue”

... It is a cultural contradiction that pregnant women in the United States will do so much to insure the health of their fetus and then, at the moment of birth, subject their baby to all the dangers of the drugs and devices of modern medicine. (Devries et. al. 2009:51,52)

I report to the labor and delivery unit at Community Hospital shortly before 7:00 am: the morning shift change. (Shifts for physicians and nurse-midwives at the labor and delivery unit are twelve hours long.) I swipe my badge through the security monitor. The double door clicks open and I walk into the unit. It is a clean, updated medical floor. I hear – silence: none of the expected sounds of birthing. A few nurses are sitting at the nurses’ station. There is no activity in the halls of the L-shaped unit with rooms on both sides of the two halls. When nurses do appear they are calm and quiet. I hear no noise coming from the patients’ rooms. This occasionally changes when a crisis occurs, which happens on the rare occasion. Otherwise, one would not guess that this is a labor and delivery unit. It feels more like a cardiac care unit.

The silence of the labor and delivery unit is a significant characteristic of epiduralized birth. I found that I was not alone in my unease at the very quiet in this new type of labor unit. In one interview a midwife of twenty-five years brought up her own discomfort with this aspect of the labor unit. This is a midwife who has worked at a variety of birth settings – home birth, a freestanding birth center, a small community hospital and then a very large hospital that had 14,000 births a year – a hospital she referred to as a baby factory. She described to me several previous jobs. A small community hospital she had worked at had an epidural rate of 50%. The new large hospital she subsequently moved to had an epidural rate of 75%. She is describing her reaction to the quiet of this huge labor and delivery unit.

Maureen: You used the term “baby factory.” Tell me more what you mean by that?

Midwife: When I walked into the unit, I was struck by how quiet it was. It was huge with tons of labor and delivery rooms. Labor and Delivery was on two floors it was so busy. I was struck by the quiet. It was because all the patients had epidurals. The bedside nursing... the difference between this hospital and the smaller community hospital...there was no labor sitting whereas at the community hospital the nurses did that a lot for us and with us. We had a family approach and the practice was quite driven by the midwifery presence.

Maureen: So in the course of your career, you have really seen the changes. The epidural is one of the most obvious. The epidural has become so popular; patients come in demanding it immediately.

Midwife: Unfortunate.

Maureen: How do you account for it?

Midwife: Number one: My thinking about it having come through the whole process seeing the epidural rates go up and seeing c-section rates go up. It’s discouraging especially coming from the feminist movement – owning and taking back your body. So I think, a grass-roots movement is going to have to happen again.

I came to be discouraged at the births I observed, so many a prototype of the others.

There were days when I found myself just tired of it all as I left to go to the hospital. I had been trained in the philosophy of physiologic birth. As one midwife taught me, “Each woman births as she lives.” I have seen the wide variation of normal birth. The utter sameness of the births I witnessed at Community Hospital had me disconcerted and stood in contradiction to the concept that individual women experience birth in different ways.

The History of Community Hospital

Community Hospital is a small historic hospital that has existed for over one hundred years. For fifty years until around the year 2000, an OB/GYN resident program served as the basis for the maternity service at the hospital. During those five decades, the maternity service

operated along the lines typically found at other community hospitals. Private physicians, at first general practitioners but increasingly obstetricians, held privileges at the hospital and admitted their private patients to the maternity floor for labor and delivery. The laboring mother would usually not see her physician until birth was imminent. Staff nurses provided care. These physicians increasingly entered into group practice rather than solo practice and provided cross-coverage for each other, arrangements that allowed for physicians to work fewer evenings and to plan vacations. It also created a lack of continuity of care; many women were delivered by a physician they had never before seen.

When an obstetrical residency program was established at Community Hospital, it reinforced the lack of continuity. More often than not a mother would find herself delivered by a resident rather than her private physician. The role of the OB/GYN resident was what we would today call hospitalists – they assessed patients who came to the labor and delivery unit, consulted with the patient's physician and gave orders to staff nurses on management of labor. It was not unusual for the resident to deliver the baby without the presence of the attending physician, particularly at night. The residents also carried out a variety of gynecologic procedures, i.e. hysterectomies, under the supervision of attending physicians.

The old model for obstetrical and gynecologic services at community hospitals relied on this system of health care delivery. A strong feeder system for obtaining patients is an important factor in the ability of a hospital and obstetrical service to remain competitive in today's health care marketplace. Private obstetricians prefer to have admitting privileges and refer clients to hospitals with residents for reasons of convenience and life style. Residents who staff an obstetrical service around the clock provide back-up services for private obstetricians making

middle of the night visits to the hospital less likely. The loss of the obstetrical residency program at Community Hospital threatened the very existence of maternity care at the hospital.

Throughout the last decades of the twentieth century, newer hospitals known as medical centers or tertiary care hospitals have increasingly surrounded smaller community hospitals, growing ever larger. As these medical centers have attracted larger number of doctors, and the patients who come with them, smaller maternity units at community hospitals have shut down. The same pressures existed for Community Hospital. In the early 2000's, the OB/GYN residency program shut down due to a lack of clinical activity. In other words, the hospital could no longer support such a residency program because of a decrease in the number of deliveries and other obstetric and gynecologic procedures needed for the education and training of the residents.

The midwifery service was established at Community Hospital in 2001 as an alternative to the residency program. It was the only full-scope, 24/7 (twenty-four hours, seven days a week) nurse-midwifery service in the community. The staff physician who had led the residency program approached several nurse-midwives who had served the community in various capacities for a number of years. The service was organized along the lines of what was called a collaborative practice between midwives and physicians. Eight full time equivalent midwives were hired to provide service, both prenatal and labor and delivery as well as well woman care.³⁵ These full time midwives were supported by a group of per-diem midwives who filled in gaps in the schedule. One nurse-midwife functioned as the Midwifery Service Director.

A group of staff physicians, four Ob/Gyns employed by the hospital including the Ob/Gyn Department Chair, worked alongside the nurse-midwives. Part-time physicians who

³⁵ Well-woman care refers to primary care provided to women who are not pregnant – typically the care that healthy women expect from a yearly visit to a provider. This care would include Pap smear, breast exam, and contraception if needed. Diagnosis and treatment of sexually transmitted infections and urinary tract infections are included in the scope of practice of CNM as well.

helped to fill in scheduling gaps at night and on weekends also supported the physician group. The midwifery service carried out most prenatal care and most deliveries but an OB/GYN was on-site at all times, including nights. When only one physician was on-site, a nurse-midwife acted as first assist during surgery. In addition, the hospital contracted with an anesthesiology service, which enabled the service to carry out planned and emergency cesareans. The presence of 24/7 anesthesiology coverage also enabled the practice to provide epidural pain management. One disadvantage for the maternity service at Community Hospital was that anesthesiologists served the entire hospital. Because the maternity unit did not have a dedicated anesthesiologist, it was not unusual for laboring mothers to wait for epidurals, particularly at night.

After initial assessment and during subsequent gathering of data during prenatal care, patients were placed into one of three groups: 1) Appropriate for nurse-midwifery care, which generally meant no major risk factors. 2) Appropriate for nurse-midwifery care under close collaboration with a physician. This often meant that the mother would see both a physician and nurse-midwife throughout prenatal care. A nurse-midwife would more than likely deliver the mother with a physician in close proximity. 3) Appropriate for physician care only. In reality, most of the mothers requiring a physician-attended delivery were transferred to a tertiary care maternity service nearby. The nurse-midwives attended most vaginal deliveries with the physician called for consultation or if a cesarean was necessary.

Prenatal and well-woman care was provided in an office suite at a physician office building next to the hospital. In the hospital itself, the labor and delivery unit held 20 beds (three of which were triage beds), a Level I newborn nursery, and an operation suite for cesareans and gynecologic procedures. Increasingly, the patients were referred by community health centers or

were self referred, as opposed to earlier years when maternity patients came from private physicians.

The nearest maternity service, a Level II neonatal unit, was a large, high volume tertiary care center with thirty beds. This maternity unit has such a high volume that it is not unusual for women to labor in a bed in the hallway waiting for a regular bed to become available. This service is known for its frequent and routine inductions. Rapid epidurals were available as a result of the presence of an anesthesiologist dedicated to the labor and delivery unit. What the midwifery service at Community Hospital offered in comparison was a small, intimate setting with highly individualized care.

The maternity service at Community Hospital was organized around the principle of collaborative practice, a concept that is much in vogue with nurse-midwives and obstetricians. The nurse-midwives at Community Hospital described collaborative practice as cooperation between midwives and obstetricians to serve their patients in an “inter-collegial and respectful” manner. For collaboration to be effective, there needs to be “dialogue” and “respectful daily interaction” along with an “evolving understanding” of the standards and philosophy of the two professions. Monthly joint meetings were held to discuss a variety of issues - departmental policy, clinical cases with unusual or out-of-the-norm characteristics, or decisions regarding transfer of care to more specialized maternity care.

From the beginning there was, in theory, a great deal of unity between the midwives and obstetricians regarding some aspects of physiological birth. By protocol, inductions were not routinely scheduled and it was agreed that inductions would be carried out only when medically necessary, a major difference between Community Hospital and its surrounding hospitals. Vaginal Birth After Cesarean (VBAC) was encouraged as it was recognized that VBAC is

usually safer than a repeat cesarean. However, a mother could freely choose to have a repeat cesarean. Overall, there was a commitment to avoid cesarean births except when medically necessary.

Theoretically, policy decisions and decisions regarding patient care would be cooperative, with give and take on all sides. While a great deal of decision-making was carried out through discussion and consensus, ultimate decision making rested with the Chair of the Department and Chief Medical Officer for the hospital. The staff Ob/Gyns exercised their right occasionally to make decisions regarding medical policy, albeit with consideration to the input of the midwifery group.

The Midwifery Service Director served as a liaison with the Department Chair and there were frequent meetings between the two where concerns of the midwifery group were communicated. The ideal was to have “open communication.” Most decision making, with a few significant exceptions, was carried out in a respectful and cooperative manner. However, despite the fact that most vaginal births were delivered by midwives, I would not consider this maternity service a midwifery-led service in the sense described by Walsh (2006b, 2009) and Sandall et.al. (2009, 2010).³⁶ There were occasions when the midwives disagreed with the physicians and when this occurred the opinions of the physicians trumped that of the midwives. The organizational model for the maternity service was a hierarchical model, even given the benevolence of some of the physicians.

³⁶ Both of these British researchers describe a midwifery-led service as one where a midwife is the primary care provider for the mother. Their research suggests that midwifery led units result in fewer interventions, maternal reporting of increased satisfaction and empathetic care, and improved relationships between mothers and midwives.

What the Epiduralized Birth Setting Looks Like

When I walk into the double doors of the labor and delivery unit at Community Hospital, to the right is a hallway with rooms on both sides. At the beginning of this hallway are two rooms, one on the left and one on the right. Both were used for triage³⁷ of patients and during the early years, when the service had more patients, the rooms were used as overflow when all the other rooms were filled with patients. Walking further down the hallway, there were three labor rooms on the left. On the right was the nurses' break room and an office. At the end of this hallway were double doors beyond which was the operating room, kept ready for surgery at all times. This is where cesareans were carried out as well as elective surgeries such as tubal ligations and hysterectomies.

The hallway that formed the other line of the L-shaped unit led straight ahead from the entrance to the unit. Immediately to the left was the "station," a common area in any labor and delivery unit. This was the hub of the unit. Patient charts were kept here. The area was surrounded with a continuous wall desk that held several computers at which people could sit to write notes, access medical journal articles and other information. In one corner of the station was "the board," a central element of the unit. The board was a crucial means of communication between the midwives, doctors and nurses in the unit and in the management of birth.

The board is white and information is added or erased throughout the shift. Each room number runs vertically down the board. Across the board horizontally are listed essential pieces of information: Patient's name; key pieces of obstetrical history, i.e. number of previous babies,

³⁷ Triage of patients occurred for a variety of reasons. If a patient had any complaint at all, she could walk into the unit and ask to be assessed. One example might be that the mother was concerned that the baby was not moving as often as was normal. Another common reason for triage was that the mother would come to the unit without calling stating that she was in labor and asking to be admitted. She would be assessed in a triage room, including having external fetal monitoring which would show the fetal heart pattern and the maternal contraction pattern. These interactions could be difficult, as many mothers would demand to be induced. The midwife service had a policy against induction of labor without a medical indication. The medical studies showing direct correlation between induction and cesarean rates are numerous. One midwife informed me of what she called "sneak inductions" where women would walk in and know what to say in order to be admitted and induced.

weeks of gestation); if induced, when induction began and how; what medications patient is on, i.e. antibiotic for positive Beta Strep; rate of pitocin infusion; presence of epidural; last time that epidural medication was given and if continuous the flow rate and other information of interest to the staff: how long the patient has been in labor and the condition of the cervix – dilation and effacement and position of the baby.

It is around this board where outgoing and oncoming midwives and doctors gather to discuss each patient at shift change, exchange information and discuss plan of management. Information on patients who are in labor, in the process of being induced or in triage is written in the color green on the board. Once a patient delivers, the information is erased and new information about the postpartum mother and baby is written in blue.

I began to notice the significance given to turning patients from green to blue on the board. I watched as one midwife marched up to the board and with a dramatic swipe erased the green information and begin writing in blue information about the newly delivered mother. I began to sense that, while in theory women did not have to advance along the lines of the Friedman's curve as in the past, in some providers' minds there was still the awareness of how long labor was taking and the desire to move things along.

This awareness of how the Board was used to move things along according to the needs of the unit was one of my "aha" moments. I had finished an interview with one midwife and the tape was off. We were sitting in the midwife call room and chatting when she said she had to get back to the unit. She was at the door when I said to her, "I've noticed that there seems to be value placed on moving mothers along, getting the delivery done as quickly as possible. Is that true or am I imagining this? What is this thing about the board?"

This midwife turned and looked at me intensely and with surprise. “Oh. You’ve noticed that. You’re talking about “turning the board blue.” I thought to myself, “I should have known there is a name for it.” Turning the board blue is a visual representation of what occurs in the industrialized labor unit, what Walsh (2006b) calls the assembly line of childbirth or Fordism. It is a process whereby staff attempts to move labor along, not because of reasons of normal vs. abnormal labor, à la Friedman’s curve, but in order to clear beds for potential incoming patients – to make each patient’s hospital stay as efficient as possible. Time spent in labor and postpartum is a critical element of the cost per delivery, a figure crucial for the department making budget and one paid attention to by hospital administrators.

Also in the station were several large telemetry monitors. These monitors were an important element of the workings of the unit. From these monitors all measurements of the mother and baby can be observed from a distance – the baby’s heart pattern, the mother’s contraction pattern, the mother’s blood pressure and oxygen levels, the nurse’s notes, the pitocin infusion level – the list goes on. The monitoring machine at the mother’s bedside sends all data to the station via telemetry. There was a telemetry monitor on the wall of the physician break room. There were nights when the physician did not leave the break room. One midwife said to me, “They know when the baby has been born because there is no longer a tracing on the monitor.”

Walking past the station to the left was the newborn nursery. Along both sides of the hallway were more labor rooms, all private except for one room that had two beds. That room was rarely used. It had been used for overflow during the early years of the service. At the end of this hallway was a blank wall, the wall to nowhere, a wall that will become important in this story when I discuss the closing of the service.

The labor and delivery rooms were spacious, clean and stocked with supplies. Each room had a bed that can be broken down into a traditional delivery table, with stirrups, if necessary. The midwives rarely broke down the bed. Each room also had a reclining armchair, a TV hung on the ceiling and a bathroom. Two rooms had large Jacuzzi tubs for water births. The midwives at Community Hospital did occasionally have a water birth although I was not lucky enough to see one there. Most mothers wanted pain medication, usually an epidural, which precluded a water birth.

The main object of each labor room, the center of everyone's attention, is what I came to call the Robo Nurse. It is a rectangular shaped cabinet on rollers, about the height of most people's waist, next to the bed. This Robo Nurse serves as the central monitoring unit for the patient. On top of the box sits the fetal/maternal monitor. From this monitor, the mother is attached with two straps, one of which holds a flat ultrasound sensor against her lower abdomen to monitor the fetal heart pattern. Another strap around the abdomen holds a toco disc to the upper fundus of the uterus and monitors the frequency and strength of the mother's contractions. A blood pressure cuff is attached to the mother's arm and sometimes a pulse oximeter (to measure oxygen saturation) to her finger, which are also hooked into the Robo Nurse. The staff nurse can set the machine to take the blood pressure and monitor the mother's oxygen levels at established times.

All of this information is seen on the monitor that sits on top of the Robo Nurse unit. Also on top of the box is a keyboard. The staff nurse or midwife can type periodic notes into the monitor. This computer-like monitor replaces the out-dated external fetal monitor from which strips of paper flowed out showing the tracing of the baby's heart rhythm and the mother's contraction pattern. Now, with the push of a button the provider can move the electronic image

back in time to compare the fetal heart rhythm and contraction pattern. This computerized system, with the ability to type progress notes into the system, also replaces the paper chart that was used in the past to write clinical notes. Also at the mother's side is at least one IV pump. It is through this pump that the flow of IV fluids and pitocin infusion rates are maintained. All of this information is sent by telemetry to the monitors in the station as the nurse enters information, i.e. the pitocin infusion rate. Below the monitor and keyboard are drawers where supplies are kept.

A synergy is created by the use of technology in these new birth settings where the needs of all the players involved come together. By the estimate of the Department Chair, over 80% of the women at Community Hospital chose to have an epidural. From my observations I would agree with this estimate. In fact, I estimated the epidural rate to be closer to 90%. During prenatal care I observed inadequate discussion of the pros and cons of epidural anesthesia. The mother signs an informed consent form for administration of an epidural when admitted to labor and delivery. However the informed consent tends to be pro forma. The midwives knew that the mothers were determined to have "my epidural" and were generally acquiescent to the woman's decision despite their professional belief in physiologic birth. It was after all a matter of the mother's choice.

When I was in training as a nurse-midwife, epidurals were not routine. Many insurance companies would not pay for an epidural unless it was medically necessary, for example in the case of maternal exhaustion during a prolonged labor. Medicaid in most states did not cover epidurals. It was not uncommon for women with insurance to have to pay out of pocket for an epidural. When administered at the mother's request, it was given only after labor was well established, usually at a minimum of five centimeters dilation and with contractions regular,

strong and three to five minutes apart, so that labor would more likely proceed without augmentation with pitocin. Epidurals are now given as soon as possible when requested by the mother. I saw epidurals given when an induction was begun, a time of minimal pain if any.

At Community Hospital, epidurals were usually administered quite soon after admission even in the early phase of labor. Blood is drawn and sent to the lab. Once lab results are received, the anesthesiologist is notified. Anesthesia is available 24/7 for the administration of epidurals, although often not as quickly as the mother would wish. Anesthesia arrives at their convenience and how long a mother must wait for her epidural partially depends whether the anesthesiologist is held up in surgery. Large maternity units now often have dedicated anesthesiology for the maternity unit. From the standpoint of the anesthesiologists, these epidurals are a mixed blessing. They are considered a nuisance by some of the anesthesiologists, particularly if they are woken up at night. At the same time, labor epidurals have become the bread and butter of many anesthesia departments. Epidurals keep anesthesiology busy making it economically feasible for a hospital to have in-house anesthesia 24/7.

From the standpoint of the labor and delivery unit, the routinization of childbirth made possible with the epidural makes for a smooth running unit. Once an epidural is given, the mother is immobilized, even with the so-called “walking epidurals.”³⁸ An IV becomes necessary to avoid the decreased blood pressure occasionally caused by the epidural. This also guarantees that the mother is kept hydrated, a care process that was once a function of bedside nursing care. A urinary catheter becomes necessary, as the mother cannot walk to the bathroom and the epidural medication affects the tone of the bladder. Even sitting on a urinal is difficult and more importantly requires nursing care as the mother has difficulty moving.

³⁸ Even with so-called “walking epidurals”, I never saw a woman taken out of bed although one midwife talked about getting women up into a chair as a matter of course, a move that probably required the help of three staff.

Prior to routine epidurals, continuous external fetal monitoring and monitoring of contractions was difficult to accomplish as the mother would move around or get up to go the bathroom. Nurses were continually readjusting the straps in order to continue obtaining an adequate continuous strip. The immobility of the mother who has received an epidural makes for a more accurate, undisturbed image. It is no longer technically a paper strip due to the use of telemetry but some providers still refer to the monitor image as a tracing.

As described earlier, technology has advanced so that information from the bedside monitor into which the nurse types notes, i.e. when the epidural is topped off, vital signs, a continuous image of the fetal heart and contraction pattern, rate of pitocin infusion. This information is transmitted via telemetry to the central monitoring unit in the station. The picture one sees upon entering the labor room is that of the pregnant mother, perhaps on her side, sometimes on her back, immobile, her pregnant womb apparent, with numerous lines attached to her. The Robot Nurse unit, although not large, becomes the central focus.

The anesthetic from the epidural slows down contractions, and so almost everyone with an epidural now receives a pitocin drip. With the blocking of pain by the epidural, if the epidural is inserted properly, pitocin can be titrated to higher levels. Contractions and progress of labor become more predictable through the careful titration of pitocin. The midwife can often predict when the mother will be fully dilated. As the mother usually feels no pain, little bedside care in the form of labor support is provided.

The delivery of the baby itself is usually equally routine. As the mother has difficulty moving, she typically delivers on her back, in a semi-recumbent position, with several people holding up her legs. The mother usually has little or no sensation of contractions and does not feel the physiologic fetal ejection reflex, the involuntary need to push, and so is often told to

begin pushing based on determination of full dilation from a cervix check.³⁹ The pace of pushing is determined by the contractions seen on the monitor. This directed pushing takes longer because of the lack of sensation. As described in Chapter Three, there is more to the physiologic fetal ejection reflex than the mechanical process of the baby moving through the birth canal. There is some evidence that this critical phase of labor involves a surge of neurohormones, both maternal and fetal, a surge that is central to maternal-infant bonding.⁴⁰

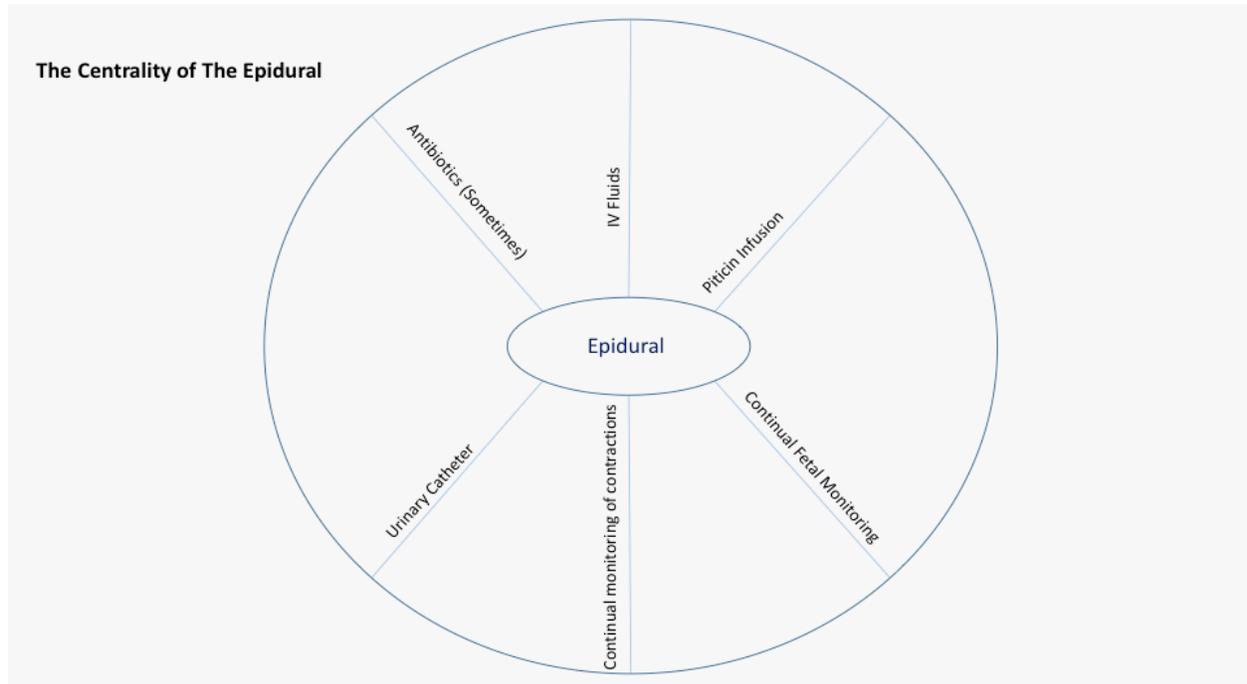
In physiologic labor, this involuntary urge to push can occur later than full dilation. The period of time between full dilation and the ejection reflex is an important time when the fetus settles into a final position within the birth canal, one that is optimal for both the baby and the mother's pelvic architecture. As a result, epidurals are associated with prolonged second stage, directed pushing, fetal malpresentation and the use of forceps or vacuum extraction during delivery.

The visual representation below shows what I described in the introduction. The cascade of interventions is no more. Instead we have a complex, unitary, interconnected set of interventions. Remember the merry go round of interventions as described by Arms? This interconnected, totalistic set of interventions, this unitary whole, is held together by the routine use of the epidural. What the following graph reflects is that if a mother has an epidural she will automatically have an IV. She will have IV fluids. She will have augmentation of labor with pitocin. She will have a urinary catheter. Without the epidural, this complete totality of management of labor would not be possible. The epidural is the hub of the wheel. That is why I speak of the centrality of the epidural.

³⁹ Several midwives did share with me that they tried to avoid this practice of directed pushing, encouraging a process they called "laboring down". This involved having the mother continue to labor after full dilation allowing for a period when the baby would begin to make its way into the birth canal. This practice was discouraged by some of the physicians and nurses.

⁴⁰ The significance of the fetal ejection reflex was discussed in detail in Chapter Three.

Figure 10

The Centrality of the Epidural

As illustrated above, the epidural becomes central to an entirety of interventions. If a mother receives an epidural, she will receive all of the interventions described above. In a noninterventive pregnancy these subsequent interventions are no longer obligatory. The epidural is central to the uniformity of what we now see as normal birth in America's system of birth.

Under these conditions the labor and delivery unit runs like a well-oiled machine. Another analogy would be that of a well-run industrial assembly line monitored by computer technology. The entire system is a Gleichschaltung of birth. As mentioned in the preface, I do not use the word in the sense that it came to be used politically. Rather I use it in its original industrial meaning – as something that is so well coordinated and brought into line that the pieces are inseparable and work in perfect harmony as a whole.

From the standpoint of efficiency, turning the board blue is an essential organizational element of the labor and delivery unit. Pitocin is titrated to manage the timing of deliveries to fit

the need of the unit. Each hour that a patient spends in a bed during labor and during the postpartum period represents a cost to the hospital and ultimately the labor and delivery unit. Turning over the beds increases the overall cost efficiency of the unit. Turning over beds also prevents the situation where a laboring patient comes into the unit and there is no bed available.⁴¹ Industrial efficiency is also involved in the large number of routine inductions. In some maternity units, routine inductions and repeat cesareans provide a large degree of certainty in the staffing of a maternity unit, which helps the bottom line in a maternity service's budget.

I held a second discussion with another midwife about the pressure to move patients along – to “turn the board blue.” I wanted to see how prevalent this practice was in the midwifery service. As our discussion proceeded she became more forthcoming, stating that although there were differences in how the midwives practice there was some degree of pressure to manage labor in order to move things along.

Maureen: Do you feel pressure to move someone along so that she delivers before the next midwife comes on?

Midwife: Sometimes. Because some people will comment on that... Like (Midwife X) will make a lot of comments regarding that. Like, “Well, clean it up before I get there.” Or...

Maureen: Meaning get someone delivered.

Midwife: Yeah. She wants to come to an empty board. So sometimes you feel that way. But sometimes I will leave people and I'll say, “Sorry”. And people will say, “No problem”. Because I don't feel like... “Wish she had delivered before I got here.” It is what it is.

Maureen: That's interesting. So do you think that in this midwifery practice pretty much everybody knows who... that there are some who think that you should actively manage someone's labor so that she gets delivered by the end of the shift?

Midwife: Well... There is sometimes the implication that I would like you to “clean it all up for me” before I get there. That's the implied ideal. But you can't really.

⁴¹ Although during my time at Community Hospital, this was not a problem. Their census had become so low that I never saw a time when all beds were occupied.

Maureen: And by saying “cleaning it up”...

Midwife: It means get them delivered. But these are just comments. I don’t know how you really *do* that.

Maureen: I have had one person in an interview... And it just blew my mind because I’m trying to get a handle on this concept. She used the term “turn the board blue.”

Midwife: Oh I see. Getting them all blue. Right.

Maureen: By which she meant getting them all delivered by the end of the shift.

Midwife: No, I don’t feel like that.

Maureen: Getting them all blue. And I thought, “Ah. There’s even a term for it.”

Midwife: I’ve never heard that before. No, I’ve never heard that before.

Maureen: So now I hear another term for it. “Clean it all up.”

Midwife: Yeah. But I think... I feel that there is one midwife who certainly we all have at times felt pressure from. I feel like with (Midwife X), I’ve done things that I wouldn’t necessarily have otherwise done because I knew she was coming in and I knew that she would want me to move on it. And I don’t like that feeling. And I’ve had to tell myself to just hold back.

Maureen: What are the things you would do in order to “move on it”?

Midwife: Like start pitocin. Break somebody’s water. And I’ve regretted it. I think it happened once that I broke somebody’s water because I knew she was coming on. [The midwife means that shift change was coming soon.] And the patient was seven. [She means seven centimeters.] And I never break someone’s water because I just don’t think it makes a difference.

Maureen: You were hoping that by doing it, she would deliver before you left?

Midwife: Yeah.

Maureen: So maybe like it was three hours before the end of the shift?

Midwife: Yeah. Yeah. Or at least I could get her to like... there were more than one labor patient and they just hadn’t progressed super fast all night. And I was going to leave her with a couple of patients. I think there were two. And they just hadn’t made a lot of progress. I felt like... yeah... I don’t feel that way with other people. I might say, “I am so sorry that you’re” ...but...

I don't feel that the person before me has done something wrong if I come on and there are people in labor. I always come in thinking, "Well. Whatever happens, happens. It's just the way it is." I'm just a bystander basically.

This pressure to manage labor and move things along is a function of the needs of the industrialized labor and delivery unit with its shift work, staffing needs, the desire to be prepared for the inevitable new patient coming in, and ultimately the cost efficiency of the unit. The way to manage the production of the labor and delivery unit is to have the complex of interventions, the epiduralized birth – the Gleichschaltung of birth.

Walsh (2006b; 2009), a British medical ethnographer, describes the same phenomenon, what he calls assembly-line childbirth or Fordism. Hospital birth has come to be process oriented and out of sync with the "temporality of labor and birth." Without interventions, the length of birth is individual, highly variable and unpredictable. The industrial model of childbirth, with its obsession on standardization and management of the length of labor, is designed to move women through the system, a particular concern in large hospitals. Walsh (2009:166) describes the commonalities of industrialized birth with Fordism.

Both arrange activity around disassembled stages and with clear demarcation for employees' roles. As a car is 'birthed' following linear and discrete processes on an assembly line, so laboring women are processed through 'stages' using a mechanistic model. Both has a timescale for completion of the product, and both have highly sophisticated regulatory framework. ...

Procrastination and delay cannot be accommodated, because of a cascade effect for other stages. In their study of a large delivery suite, Hunt and Symonds (1995) observed that the labor procrastinators ('nigglers,' or women in early labor) did not constitute real work in the eyes of the midwives in their study and that this activity needs sifting out if the system is to work efficiently. Delays after a process is started are dealt with by acceleratory interventions such as artificial rupture of membranes.

Just when we could expect that this complex of interventions is complete, there is one more intervention heading around the corner. The one glitch in epiduralized birth is the prolonged second stage (pushing), which is abnormally long with the epidural and where we see the need for intensive nursing care due to the mother's difficulty in pushing. We now potentially have a new solution, the missing spoke – a plastic bag to be inserted into the mother's uterus around the baby's head. This bag is then used to literally pull the baby out, avoiding the use of forceps or vacuum extraction. Named the Odón Device, for the car mechanic who designed it, the device has been endorsed by the World Health Organization (*New York Times*, November 13, 2013). It is promoted as a life saving tool in the case of true obstructed labor, which next to hemorrhage is a major cause of maternal and neonatal death in third world countries where cesarean sections are often unavailable. It is too easy to see, however, that in the hands of a major health device manufacturer, (it has been licensed by Becton, Dickinson and Company, a major manufacturer of syringes), this bag can quickly become the final spoke in our Gleichschaltung of birth. The temptation to use what is seen as a benign tool in order to shorten second stage in the epiduralized birth might prove to be too great. Of course the manipulation into the mother's womb will then likely require the routine use of antibiotics. (Because 25% of mothers now test positive for Beta Strep, the use of antibiotics is already a common intervention in routine birth.) Other similar types of instruments are being tested. Which one will prove to be the final tool in our Gleichschaltung of birth remains to be seen.

The Agency of Mothers

“I came in one night and they told me I was only 1 cm. and that the pain I felt was cramping but not real contraction, so they sent me home. But I was so uncomfortable at home. I came back in and I was going to make sure they kept me this next time.”

These words, spoken to me spontaneously by a mother, represent the back and forth I witnessed between midwives and mothers throughout my observations - women demanding to be induced but sent home. Many would come back two or three times before they were finally admitted. Some would just go to a nearby hospital where they knew that they would be admitted. Women are active players in this industrialized system of birth. This can be seen in the demand for epidurals and induction as well as the desire to have as many ultrasounds as possible.

At Community Hospital three ultrasounds during pregnancy were the norm. The first is to obtain the best dating possible for the pregnancy. The second, performed during the second trimester, is to determine if the baby has any anomalies and location of the placenta. The third, closer to the estimated due date, is to verify the position of the baby as well as the condition of the placenta and the health of the fetus. If a mother goes beyond her “due date”⁴², or if there is any medical condition to be ruled out, it is not unusual for the mother to have a fourth or even a fifth ultrasound in the form of a biophysical profile.⁴³

As I have previously noted, the Chief of Obstetrics at Community Hospital estimated that 80% of the patients received an epidural verifying my observations that epiduralized birth was the norm at Community Hospital. From my interviews, it is apparent that interventions such as planned induction, epidurals, augmentation of labor, and elective cesareans are widespread.

Cahill et. al. (2010) estimate a 90% epidural rate in many maternity units nationwide. Routine induction and epiduralized birth has indeed become the norm.

⁴² I place the term “due date” within quotation marks because the meaning of the term is in flux. The very concept of a due date is one that has fundamentally changed as a result of industrialized birth. What once was an estimated date with five weeks of potential variation has come to be viewed as a date certain by both doctors and mothers alike. I discuss later how this five-week period has now been categorized into three distinct periods – early full term, full term, and late full term, justifying greater use of testing in normal pregnancy.

⁴³ A biophysical profile is a diagnostic procedure simultaneously using ultrasound and electronic fetal monitoring. It provides an analysis of the wellbeing of the fetus. A score is provided based on five measurements – fetal heart rate in relation to fetal movement, frequency of fetal movement, fetal muscle tone, fetal respirations and the amount of amniotic fluid (also called the amniotic fluid index or AFI).

It is difficult to find precise statistics on the scale of these interventions due to the lack of centralized data collection in the United States. The CDC is still attempting to implement a single birth certificate for all states so that local and regional variations in outcomes and maternity care can be captured. What is known is that there are wide variations in the use of epidurals, variations that are seen by race, class, and age as well as region (Osterman and Martin (2011). Women are told that the epidural is safe and the appeal of a painless childbirth is obvious. Routine induction brings an element of control to what has in the past been an experience that involves anxious waiting. Routine induction, having a set date for delivery, allows the modern mother the ability to organize all the various social demands on her time.

The midwifery service at Community Hospital had a policy against routine induction. In theory, there needed to be a medical indication for induction to take place. Such indications would include postdates, concern that a baby was growing too large, low amniotic fluid, maternal hypertension, etc. This policy against routine induction was based on the desire of the service to keep down its cesarean section rate.⁴⁴ The correlation between inductions and the rising cesarean rate has been shown in numerous studies. Despite their normative status, it is well established by research that cesareans not uncommonly lead to significant mortality and morbidity including maternal infection, maternal hemorrhage, neonatal respiratory difficulty, and neonatal infection (Liu et. al., 2007; Belizán et. al. 20007). During my year of observation I noticed an increase in inductions, not only social inductions but inductions for medical reasons, particularly decreased amniotic fluid index (AFI).⁴⁵

⁴⁴ I discuss the cesarean rate at Community Hospital in more depth in Chapter Seven.

⁴⁵ I will discuss the significance of the findings of decreased AFI in Chapter Six when discussing the relationship between nurse-midwives and obstetricians during clinical decision-making.

The maternity service began to see a rise in its cesarean rate after 2008 even as its number of deliveries steadily decreased. This increase in the cesarean rate during a time of decreased number of births was counterintuitive because with a decreased census one would expect that each patient would receive more individualized, supportive care that would theoretically bring down the cesarean rate.⁴⁶

An increased number of inductions could explain why the cesarean rate increased. Another factor for this rise in cesareans within the practice was discussed in a staff meeting where the Department Chair presented data on the trend of rising obesity, failure to descend, and increased newborn birth weight among their clientele. In 2010, the mean Body Mass Index (BMI)⁴⁷ of the practice's clients was 37.2. Depending on the height of the patient this can represent a weight of 177 lbs for a 4' 10" mother to 304 lbs for a 6' mother. He noted that they were also seeing greater numbers of women with BMI of 45 – 65.⁴⁸ The practice had seen an increased newborn birth weight of 4.4% between 2006 and 2010. An analysis of the data had shown a consistent relationship with obesity and failure to descend and the Department Chair believed that both were underlying causes of the increase in their primary cesarean rates. When I asked if the failure to descend by the fetus might be related to increased epidural rates, the Department Chair stated that it was unclear if there was a correlation.

Chu et. al. (2007a) noted in a meta-analysis study that women who are obese or severely obese before pregnancy are two to three times at risk for having a cesarean than normal weight woman. Dempsey et. al. (2005) found in a cohort study of 738 nulliparous women that those

⁴⁶ As I will discuss in Chapter Seven, Community Hospital reached a peak in their census in 2006 with its highest number of deliveries - 1,289 deliveries - still quite a small number of deliveries compared to surrounding hospitals. In that same year, the service's cesarean rate was 26.9%, still below the national average, and the lowest rate in its community. The midwifery service focused on bringing down its cesarean rate and by 2008 had a rate of 20.07%. However, by 2012 the number of deliveries had decreased to 622 while the cesarean rate had risen to 27.65%.

⁴⁷ Body Mass Index (BMI) is a measure of weight in relation to height.

⁴⁸ To give an idea of what this represents: a woman 5' 5" woman with a BMI of 45 weighs 270 lbs.

who were overweight (BMI 25.0 – 29.9) prior to pregnancy were twice as likely to undergo a cesarean as lean women (BMI \leq 20.0). Obese women (BMI >30) were more than three times likely to deliver by cesarean. It is unclear to what extent this increase in obesity among patient at Community Hospital was responsible for an increase in their cesarean rate.

What is clear is that the nurse-midwifery service at Community Hospital was providing care to an increasingly high-risk population due to an increasing number of extremely obese mothers. Despite this fact, the maternity service continued to show positive neonatal outcomes.⁴⁹ I interpret their positive outcomes as a reflection of the quality care provided, despite the high risk of many of their patients.

The nurse-midwives resisted the trend towards elective induction, knowing well that elective induction is highly correlated with a subsequent cesarean particularly in first time mothers (Ehrenthal et. al. 2010). However, the patients at the midwifery service had difficulty accepting the induction policy and found creative ways around it. During my time with the service, I began to see the service allow an erosion of its policy regarding elective induction for a variety of patients. The pressure to accept routine induction was great and it was coming from the patients as well as some of the physicians.

I began to witness discussions at the Board on some mornings regarding what was called “social inductions.” Patients would appeal to physicians to be induced – physicians they knew to be sympathetic to routine induction.⁵⁰ A physician would state that he was bringing in a patient that day for a social induction. Even as the midwife demurred that it was against policy, the decision by the physician was really not up for question, although it was the midwife who had to carry out the induction. The first time I witnessed this, the reason for the social induction was

⁴⁹ I will show the statistics on the outcomes of newborns born at Community Hospital in Chapter Seven.

⁵⁰ I came to appreciate the maternal grapevine throughout the community when it came to such issues.

that the husband needed to be out of town in several days. As I became aware of an increase in the number of social inductions, the reasons varied. For example, the day of induction was the only day that the patient could find someone to care for her children or it was the only day she could be assured of transportation.

Sometimes the reason to give in to a patient and induce labor would more obviously be the desire to not lose a patient to a competing hospital. According to the state Medicaid rules, a mother could go to any hospital for delivery. Medicaid reimbursement was separated by prenatal and intrapartum care. As a result, a mother could receive prenatal care at Community Hospital but then present to another hospital for delivery and that hospital received the portion of Medicaid payment for the intrapartum care. Competing hospitals were willing to induce a mother who walked into their unit. Mothers knew the right things to say – “I haven’t slept in three days.” “My back pain is severe.” The rationalizations were numerous.

Community Hospital would become aware that they had lost a patient when they received a fax from a competing hospital stating the mother had been admitted for induction and requesting a copy of her prenatal records. The Midwifery Director of the service admitted to me towards the end of 2012 that in one month they had seventy expected deliveries but the actual number of deliveries had been sixty. Ten out of seventy patients had presented to another hospital asking to be induced and their request was carried out.

One evening while I was present, a patient came in to the labor and delivery unit stating she was in labor and insisting that she be admitted. The midwife on duty assessed her condition. The mother was having an occasional contraction and was in discomfort. The midwife was in a quandary and then went through what I call a cognitive contortion to justify her clinical decision-making. “This mother”, she told me, “came in two days ago. She was four centimeters then and

she's still four centimeters. She isn't having regular contractions but she's in a lot of discomfort. If I send her home, she says she is going to another hospital where she knows she'll be admitted. Her cervix is favorable. I know once I start pitocin she'll go fast. So I've decided to augment her labor."

I looked at her and said, "You realize don't you that are not augmenting her labor? You are inducing her labor. She's not in true labor. She has had no cervical changes since her last visit and she's not having regular contractions."⁵¹ The midwife looked at me sheepishly, sighed and shrugged her shoulders. She was correct in that the mother quickly began to have regular contractions once pitocin was administered and quickly delivered. However, her chart called her an augmented labor. It was not the first time I have seen an induction of labor called augmentation of labor – a reason why it is difficult for researchers to determine an accurate picture of how often induction takes place. This midwife later discussed her conundrum in an interview.

Midwife: ... We have sent people home because we pride ourselves on our low C-section rates and not intervening. However, there have been patients not in active labor sent home. They might be multiples at 4 or 5 centimeters but if after several hours it's judged that there hasn't been any changes, or their labor hasn't picked up, they were sent home. And subsequently we find out that they go to another hospital and are admitted.

So is it that important to send people home or keep them and give them a whiff of pitocin when they are four to five centimeters and we're not busy? Where do we draw the line? And Dr. X has seen somebody... we still haven't identified who... somebody he saw outside at clinic who was sent home from here twice at six centimeters, who was judged not to be in labor. A client will say, "Wait a minute. I thought we get admitted. I thought you admit people at six centimeters." And I say, "Well, it's nice to be in labor too." I've known people to walk around for a week or two at six centimeters.

In the course of the above discussion, I described to the midwife my discussion with a Dutch midwife about the phenomenon of women having a period of irregular contractions with

⁵¹ I was not pointing this out as a criticism. It is simply that I know there is so much in obstetrics where elements of labor are not clearly defined and onset of labor is one of those gray areas where the lack of clear distinction results in unnecessary intervention.

no cervical change. Here we call it prodromal labor or latent phase of labor. During our above discussion, I said, “You know. In the Netherlands, they don’t believe in latent phase. A woman is either in labor or she isn’t in labor.” The midwife at Community Hospital was amazed. “What do they call it?” she asked. “I don’t think they have a word for it,” I answered “ They just say the mother is not yet in labor.”

Twenty years ago, patients would have been told to go home and come back only when having regular contractions at least every five minutes apart. A patient might have been given medication to help her sleep in order to cope with the common discomfort of late pregnancy. But she would not be induced merely for her convenience or the convenience of the physician. However, that was then and today it is a different world for most women.

The desire for a social induction is quite intense. Although most of the pregnant women at Community Hospital were on Medicaid, there were few patients who fit the common stereotype of the “welfare queen” who sits at home having babies, living off the largesse of the taxpayer. Most patients had jobs. Many of those jobs were low paying service jobs that require long hours and require physical labor such as being on ones feet for long periods of time. Many patients were without private transportation. For many women the uncertainties and discomforts that come with the end of pregnancy are not mere inconveniences. When will the baby finally come? The reality of life for many patients requires planning – arranging care of children while they are in the hospital, arranging transportation.

The lack of social support is felt most acutely in this population of mothers. In this cohort of patients, social induction was not a convenience. In many cases it was a necessary part of life. I witnessed this pull and tug between patient and provider with regards to induction time and again. It is possible that the increase in cesarean rates seen at Community Hospital is a

direct correlation with the fact that social induction became an increasingly common practice in the maternity service. However, the need of mothers to control the timing of their birth is very real. It is an irony that the ability to sit back and wait for birth to occur in good time has become a privilege that only women of means can afford.

I was discussing this pressure on the midwives to begin to induce labor with several of the midwives and the things they said were illuminating. One midwife spoke about what was lost when a mother was given a routine induction – the importance of the anticipatory period before the start of labor.

Midwife: I think it's surrendering. To have a natural childbirth, you have to have a confidence. What I saw in my last practice, this core of high achieving, workaholic, goal oriented women... shooting off emails on their way to the hospital... that's different from here that's for sure... but they did self select to nurse-midwifery because they wanted support. ... I think they were trying to do so many things; they weren't totally putting as much [into it] or getting into that place of quietness. For some of them I would have to work with them to put on the brakes. I would say, "I think it's good to take a week off before your due date just to tie yourself together and get yourself into the place where you need to be to take on labor and stuff." ... It's an approach to life ...

Another midwife compared the inductions at Community Hospital to other settings where she had worked.

Maureen: [I was commenting that I have observed a lot of inductions.] I don't know how it compares to other hospitals. There does seem to be a lot of inductions.

Midwife: I disagree. It's really bad out there. There might be a lot of augmentation. So people who are in labor get pitocin... But if you spend time at hospitals that are mostly physician deliveries, people come in complaining of labor...

Maureen: When they're truly not in labor.

Midwife: Yeah. I don't know if they've looked at the national induction rate, but it's way higher than here. People fight over spots for inductions.

Maureen: What do you mean, "fight over inductions?"

Midwife: Oh. Physician practices. Because induction schedules get filled. That's why ACOG made that rule, and a lot insurance companies. That you can't induce before 39 weeks. Because it had become such a problem.

[My note: At large hospitals with competition among physician practices over the induction schedules, many physicians have routinely scheduled a date for induction at the 20 week prenatal visit. A hospital schedules inductions in the way they schedule elective surgeries. If there is no opening for a 39-week induction, obstetricians then work backwards scheduling the induction for 38 or even 37 weeks. It was not unusual for a baby to be delivered who was assessed after birth to be premature, less than 37 weeks gestation, because a due date is nothing more than an estimate. It was because of this growing pattern that ACOG came out with a position that it is unsafe to have elective induction prior to 39 weeks.]

Maureen: Right. So you're saying, women are routinely being scheduled for inductions at other places.

Midwife: Oh absolutely. Yeah. Or maybe it isn't called that. People are kept who are not truly in labor because they want to be.

Maureen: And then it's called augmentation of labor when it's really induction.

Midwife: Right. Right. I don't think we're doing that. I mean... Sure sometimes it happens. And you know it happens. But it doesn't happen routinely. And because you are in the hospital and you have access to pitocin it's easy to just say, "Look. You are still at six and it has been four hours." Because in the homebirth it still happens, augmentation, you just use different methods. You have someone stimulate their nipples... keep walking. I can remember times when I thought, "I just wish I had some pitocin." [my note: This midwife once had a homebirth practice.] So I think a lot of augmentation happens. So inductions do happen but not as often as other places.

Maureen: I think you're right. My training was at [Hospital X]. There were four midwives employed by a physician group and they had their own clientele of women who asked for them. And they were, of course, very reluctant to induce labor prior to 42 weeks unless there was a medical reason. And there were quite a few VBACs because at that time the pendulum had not yet swung again with regards to VBAC. And about half our clients were Champus. [My note: Champus is now called Tricare, the insurance plan for military personnel and career veterans.] And Champus at the time would not pay for a VBAC without a trial of labor unless there was a clear medical reason for the repeat section. I went from that to out-of-hospital. I haven't worked at a tertiary care center. [What I am saying here is that the insurance carrier insisted that the mother labor for a period of time and attempt a vaginal delivery. They would not pay for a cesarean unless labor had progressed beyond a normal period of time. This policy has changed under pressure by both physicians and consumers. Most insurance carriers now automatically pay for a repeat cesarean per a mother's choice.]

Midwife: Right. So maybe the numbers here are not ideal. But if you compare it to the standard, it is a lot better. A *lot* better. People aren't going to give you induction numbers. Because as I was saying, there isn't a schedule. And physicians will say to the patients sometimes, if you want an induction, go in, complain of x, y, z and you'll get admitted. It's like a sneak induction.

Maureen: What kinds of things would a woman say?

Midwife: The baby's not moving. If you're 40 weeks and the baby isn't moving as much, chances are you're going to have an induction. They'll just sneak it in somehow. It's an easy way for the doctor to say, "Let's just induce her." And then he has his induction in.

Maureen: This happens in triage.

Midwife: But this is common in obstetrics in other places.

Maureen: You're probably very right. I'm not going to get good statistics on inductions and the numbers are smaller than I think.

Midwife: We go *days* without an induction. The larger hospitals will have daytime induction and nighttime induction. They have five spots for the day and five spots for the night. And they are scheduled weeks in advance.

Maureen: And they have spots on the schedule for induction just like they schedule operating rooms for repeat sections far in advance?

Midwife: Yeah. Yeah. And you better get them on the book weeks early because if you don't get it on the book early, you're not going to get in.

Maureen: That's just crazy. Here what tends to happen is that somebody will be seen in clinic and they'll be sent over.

Midwife: They'll be sent over. And some of it are the physicians because Dr. X sends over a lot of people. And maybe that's something we have to tease out. Because we're delivering the physician's patients also.

Maureen: Right.

Midwife: Sometimes we're caught too because if she's being followed as high-risk at [Hospital X] and they say she needs to be induced, it's hard to recommend against that. Who's... Maybe the physicians are able to schedule inductions. It's not an out-of-hospital setting. But compared to other hospitals, it is a lot better.

Maureen: When you compare it... Where did you train and work?

Midwife: I worked at a small community hospital in (City X) but it was busier than here. It was kind of similar. There were both nurse-midwives and physicians. So some of the way things were done, you could see the way that physicians did things. And then I worked in a large tertiary care center in (City Y) that did 7,000 deliveries a year.

Maureen: Wow. So you know what you are talking about.

Midwife: The community hospital wasn't bad. You could see that nurse-midwives did things one way and the physicians did things another way. Although some nurse-midwives did things the physician way. But we had inductions every single day. Like multiple. And at the big hospital, forget it. And they were all nonsense.

Maureen: So in your experience you worked at the busy large hospital, where there were a lot of routine, scheduled inductions. Did you see the correlation between inductions and cesareans?

Midwife: Oh absolutely. Absolutely. First of all, with a primip you are already putting her at risk. Because it just takes longer for a primip. And once you're at the hospital, the clock starts ticking. And people aren't patient. They're checking people every two hours, which is unfair. They are not necessarily thinking in terms of ripening a cervix. Because ripening of a cervix can take multiple days. It can take two days. They are ripening a cervix for twelve hours over night and starting pitocin regardless of whether her cervix is ready. And they also don't want to be there at night so if it hasn't happened by a certain time... It's horrible. It's ridiculous. I couldn't stand it. I had to get out of there.

When this midwife said that Community Hospital would go days without an induction, from my observations I can say that her statement is not true. This midwife only worked several nights a week, and elective inductions occurred during the day, and so that perhaps skewed her outlook. But during my research I frequently saw inductions on the Board. I went on to encourage this midwife to talk about this phenomenon I had witnessed – social induction.

Maureen: I overheard a discussion between several midwives and several physicians during report, during shift change about induction. And I got the sense that some of the physicians were more supportive of induction. They used an interesting term that I hadn't heard before: "Social induction".

Midwife: Yes. It's used when an induction is considered but there is not a medical indication. Maybe the patient is tired. They're... People come up with all kinds of things. My husband works. He can only be there on this day. I'm afraid it's going to

snow. Now that it's winter, that will be a big one. What if I can't get here? I have childcare issues.

Maureen: So you're saying that you hear this a lot.

Midwife: Yes. But I don't find it tiresome. It's like people are begging to have the baby.

Maureen: This concept of social induction... I find it of great concern. If you watch some of the shows on TV that women watch. Like *Baby Story*. One of the story lines is leaving home for a scheduled induction when it's right around your due date. So women have gotten it into their minds that if you go over your due date...

Midwife: The due date is an end point.

Maureen: It's an end point. There is not an understanding any longer that this date is just an estimate.

Midwife: Here it's better though. I've worked places where the women are much more educated. For me, part of the magic of it is that it is something in which you have no control. You don't know when it's going to start. It's anxiety provoking for some people. I've seen some women, more affluent, career women, for whom if it goes past this date it's like "Oh my God."

I find that women in this practice... I explain to them that the due date is just an estimate. Most women have their babies anywhere from 10 days before to 10 days after... that's when your baby is due. And if I tell women that it's so much easier on your body if you go into labor on your own, I feel that women here are so much more accepting of that than... maybe their lives are not as controlled... women here have so many hard issues to deal with. Transportation here is such a large issue. And that is a big issue. "I'm not sure how I'm going to get there but I'll figure it out when it happens." I find that that does happen here. The transportation with the more affluent, it's like. "Oh my gosh."

People would ask for inductions based on the weather when I worked in (City X). I couldn't stand it. And it's not the time to be discussing this... teaching them to let it go. You can't control. Instead they're freaking out.

Maureen: Something that (Midwife X) and I have talked about... and I'm sure that you're correct that this is an even greater problem among the affluent... this need to have control over the situation. You want to feel control even to the extent of being able to control when to have the baby. I think like many trends, it makes its way into the less affluent.

Midwife: People complain. "I want to have my baby now" and they are 37 weeks. And they will go to another hospital. But to me... I find myself having to explain and explain

and explain. Because it is good practice. It is not good practice to induce at 38 weeks. It's crazy. And you don't give into that.

Maureen: And even if it is your due date. It's still not good.

Midwife: Right. Absolutely not. It's so much better to go into labor on your own. And if someone comes in and they are 2 centimeters but they are not contracting, they are not in labor. They are not in labor. And I have done my job. Some of the midwives worry that we are *losing* patients. I don't have that responsibility so it doesn't bother me. Because I feel that in the end we are better off doing the right thing.

The pressure on the midwives to give in to routine induction came not only from patients but also from some of the physicians who held the philosophy that inductions were an overall positive for the service. This was born out in a debate that occurred at a staff meeting between one midwife, who sent a patient home after refusing to carry out an induction, and a physician. I was present for that debate but it is best to let one of the midwives describe the context of the discussion. She first argued that the problem is that the physician at times makes the decision that a patient will be induced without consultation with the midwife. Yet, it is the midwife who is responsible for carrying out the induction and is held responsible for any outcomes that may result. And finally, it comes down to the issue of efficient utilization of labor beds.

Midwife: [The midwife has the right] to know if someone is coming in for an induction. And they have the right to know what the reason is. And if there is no medical reason... In my way of thinking there will be times when it makes sense but it should not just be willy-nilly. Well, we've learned our lessons there. So we're less likely to do the willy-nilly. But we still do inductions from time to time. And some of it is the private docs sending their patient in for induction. Partly because of the numbers, we're not going to turn it down.

Maureen: Yes. That was what Dr. X said to me. The service can't afford to turn away patients.

Midwife: Midwives wind up doing some of the management of the induction and get feisty about it because it's never for the reason that is put in the book. LGA [My note: large for gestational age]. Postdates. And then they [the mothers] are neither when they come in. It's for the Doc's convenience. But we try to hold the line at 39 weeks at least.

But it's really fun when people come in and say, "Hi. I'm high-risk." And I say, "Um... And why?" Because it affords so many little more enrichments.

Maureen: It was interesting, this interchange in the meeting. Who was it that said they had sent somebody home saying, "No. I'm not going to do an induction." I think the patient was 39 weeks.

Midwife: Was it busy?

Maureen: I think it was (Midwife X) and she said it had been very busy. And Dr. X said, "That should never be an excuse. We're underutilized."

Midwife: ... We have sent people home because we pride ourselves on our low C-section rates and not intervening. However, there have been patients not in active labor sent home. They might be multips at four or five centimeters but if after several hours it's judged that there hasn't been any changes or their labor hasn't picked up, they were sent home. And subsequently we find out that they go to another hospital and are admitted.

I observed numerous instances of the agency of mothers who were determined to give birth in *their* way and the difficulty some of the midwives had when faced with the contradiction between their own beliefs and that of the mother who demanded interventions. I observed one young seventeen- year-old mother with her first birth take over control of the birthing room. In this instance, she had the typical epiduralized birth and having reached full dilation of the cervix was encouraged to start pushing. This young mother decided she was not going to push. She lay back on the labor bed, sipping her water, and just refused to push. "I have maternal exhaustion," she said. "Call the doctor. Tell her that I have maternal exhaustion. Tell her to bring the vacuum. She is going to have to vacuum the baby out." She is referring here to vacuum extraction, a procedure used during second stage when a mother has not been successful in delivering the baby. The use of instruments to deliver the baby, either forceps or vacuum extraction, is one of the potential risks with an epidural.

It was close to shift change and the midwife on duty, a midwife of many years experience, was quietly and patiently encouraging the mother to try to push but to no avail.

Finally, she threw up her hands and left the room. I turned to the young woman's mother and asked, "Where did she learn these words?" The mother just shrugged and said, "I knew I should have gotten rid of cable."

I said to the young woman's mother, "Midwife X is coming on shift and she will not put up with this. Just wait and see." The mother said, "You've got that right." Sure enough, the midwife I was referring to came in and having been apprised of the situation looked at the young woman, placed her hands on her hips and firmly said, "You are going to push and you are going to push *now*." And push she did with the baby delivered thirty minutes later.

As I have mentioned earlier, the stage of pushing is the bane of the staff's existence. It is difficult because a nurse and the midwife have to actively talk the mother through the mechanical motions of pushing, giving instructions. For the mother it can be frustrating because it is difficult to make progress, pushing the baby through the birth canal when they can't *feel* what they are doing. This is in opposition to the way that a woman's body, without an epidural, has spontaneous and ultimately uncontrollable urges to push. With the epidural so much of the pushing becomes a matter of position and mechanics. There is no fetal ejection reflex where the body takes over, pushing out the baby despite any effort on the part of the mother.

During my observations I was struck by the fact that patients knew medical terminology in a way that patients did not twenty years ago. Like the young mother discussed above, patients would use words such as rupture of membranes. Dehydration. I am high-risk. Maternal exhaustion. Vacuum extraction. Induce. Dilation. Effacement. It was not unusual to hear patients comfortably use these terms. They even spoke in terms of weeks of gestation instead of months, as was common in the past. The use of medical terminology by patients was a means of

negotiating their way through the birth system. One midwife said to me, “People know the buzz words to get themselves into the hospital, to get themselves onto the monitor.”

This midwife who took over the situation with the obstinate young mother was herself young and the only midwife of color on staff. She was extremely popular among the patients and held much credibility with both patients and families. This was true for the other young midwife on staff. Odent (2002) speaks of the importance that the midwife should be an older woman who has gone through childbirth. However, in the case of Community Hospital, the mothers seemed to be able to relate better to the younger midwives.

Some manipulation of the system by the mother extends to their instance on the timing of the epidural. As previously noted, 80% to 90% of women choose to have an epidural and it is an intervention about which they were most adamant. It is *my* epidural. While the vast majority of women receive an epidural, there is often a delay in when a mother might receive her pain relief. Community Hospital contracted with an anesthesia practice to provide hospital-wide anesthesia service. When the anesthesia department receives a call from the labor and delivery unit for an epidural to be given, the timing of when the anesthesiologist will arrive depends on the overall demands of the hospital, particularly what is going on in the operative suite. At night there is only one anesthesiologist on site and if he is tied up in an emergency operation there can be a time lag in his arrival to the labor and delivery unit. In addition, blood work has to be drawn and the results received before the anesthesiologist will administer an epidural.

One incident I witnessed illustrates the extent to which the mothers at Community Hospitals worked at getting “my epidural.” A woman had come to the unit during the evening, diagnosed as being in early active labor and admitted. It was not her first baby. As she was wheeled towards her room she was screaming and writhing in pain. “I want my epidural *now!*”

You call that little Indian doctor and tell him to get up here *now* and give me my epidural.” The nurses were respectful but at the same time teasing the mother. “Now Miss X,” one nurse asked her teasingly. “How do you know that Dr. X is on duty tonight? And you know we have to draw blood and wait for the lab results before we call Dr. X to come give you an epidural. He’s going to want to see your results.”

As the mother was helped into the bed she continued to scream in pain and rock back and forth in the bed, screaming that she was in excruciating pain and needed her epidural. A family member took hold of the rolling bedside table, positioned it, and placed upon it a camcorder that he proceeded to turn on. One of the nurses informed him that he could not tape the birth: that it was against hospital policy. He turned off the camcorder but within several minutes the red light was back on. Another nurse told him to turn it off. At this, the mother sat up in bed. There was no screaming and no rocking in pain. She was furious and said to the nurse, “Girl. You can’t tell him what to do. He is going to tape my birth.” Gone was the screaming pain. Her entire behavior seemed to have been an attempt to speed up the process of obtaining anesthesia.

What I observed were mothers actively influencing the system to receive the care that *they* desired. This is far different from the representation by Bridges (2011) of pregnant patients as “powerless” victims of an overly excessive prenatal care system mandated by New York State, a system where women of color represent “despised fertility” (p. 18) and are treated with belligerence. I did not observe excesses of care. However, Bridges (2011) claims that excesses of care is a characteristic of Medicaid in New York and shows the “heaviness of the government’s hand when it comes to managing the health of the poor (p. 78).” This excessiveness of care represents a “surfeit of diagnostic tests and high technology on the pregnant bodies of their indigent charges (p. 79).” Bridges lists the various criteria in prenatal

care mandated by New York Medicaid. It is the same care that women at Community Hospital received and they certainly did not come across as “powerless.”

The Significance of the Midwife/Mother Relationship

Women strive to establish a relationship with a single midwife, thereby sabotaging the team approach of the midwifery service used by the midwifery service at Community Hospital. The young, black midwife mentioned above was a particular favorite. Other midwives and doctors shared with me that her prenatal visit schedule was always filled up and she had a very low no-show rate compared to other midwives. When she was on duty at night, the doctors complained. One doctor openly stated, “She tells her patients when she is going to be on. I know she does. We are going to be so busy during the night. No sleep tonight.”

It was not difficult to see why she was a favorite. On labor and delivery she did not sit, choosing to go from room to room spending as much time with each laboring woman as possible. Numerous researchers have discussed the significance of a one-to-one relationship where the mother develops trust in her provider. British researchers, in particular, have looked at this element of care and point to the relationship between mother and midwife as a significant aspect to a successful vaginal delivery and to promotion of maternal satisfaction and maternal-infant bonding (Sandall 1997; Sandall et. al. 2009, 2010, 2012; Walsh 2006a, 2006b, 2009).

One of the limitations of the team approach to maternity care is that it is difficult to establish an intimate relationship between midwife and client, yet it is just within an intimate relationship that a mother can feel cared for and have the feeling of safety that is so important for physiologic labor. Hunter et. al. (2008) uses a metaphor, the “hidden threads in the tapestry of maternity care,” in describing the significance of midwifery/client relationships. “The quality of

relationships is fundamental to the quality of maternity care. Although this might appear to be stating the obvious, it is notable how rarely relationships are overtly identified as casual factors, particularly in macro-level discussions of maternity care (Hunter et. al. 2008:132).”

In addition to the relationship, continuity between midwife and other, Huber and Sandall (2009) have identified the element of “calm,” the “freedom from agitation or excitement” as another important element of physiologic birth. They point out that the two are intrinsically related. When a pregnant woman has established a relationship of trust with her provider, information is more likely to be provided in a way that is accepted and heard. This helps to create a feeling of calm, a relief from the anxiety that is so often the cause of abnormal labor. It is one thing to say to a mother, “This is your show. You do it your way.” However, there needs to be a balance because the job of a midwife is to provide accurate information during informed consent and to control the birth environment so that the mother has the calm and privacy so necessary for the progress of birth.

The fragmentation of care seen in a team approach to maternity care, the model of care I observed at Community Hospital, makes it difficult to establish these intimate relationships between provider and patient. A mother may come to the hospital in labor and be cared for by a midwife she has never seen. The midwifery service did try to have each midwife see every patient but due to scheduling that was difficult to carry off. One strategy used at Community Hospital was for the midwives to share information about clients informally and at staff meetings. Additionally, the careful documentation that I observed helped in communication between midwives about patients. When a mother arrived at the labor and delivery unit, the midwife on call usually knew about her. This does not take the place of the continuity of care

and the trust that develops when each patient is assigned a primary midwife. However, caseload organization of care, where a patient has a primary midwife, can be costly.

McLachlan et. al. (2000) showed that caseload care, the organizational term for when a mother has a primary midwife, resulted in decreased augmentation and epidural rates when randomly compared to mothers who received the traditional team, or shared-care approach to maternity care. Another positive aspect of caseload midwifery, where a patient has a primary midwife, is what Walsh (2006a) calls matrescence, the process of becoming a mother. This process of matrescence is “relationally mediated.” In traditional childbirth, this process of becoming a mother involves practices where a pregnant woman is surrounded by and cared for by other women. The traditional period of “lying in” as described by Leavitt (1986) and Wertz and Wertz (1977) served a dual purpose. First, it created a period of time for the mother-to-be to prepare mentally for the birth, to limit stimulation thereby beginning the process of shutting down the cerebral cortex (Odent 2002). It also provided a time for nurturing and care, a mothering of the mother so to speak.

I described above how mothers-to-be at Community Hospital subverted the system by doing their best to have their care provided by a single midwife. This happened with all the midwives but in particular the one young midwife I described above. Her clients maneuvered to have their appointments and birth with her. She once said to me, “My patients start to think that I am their friend, so much so that many of them Facebook me. And I have to tell them, ‘Take me off your Facebook.’ I am glad they trust me so much but I can’t have them seeing parts of *my* life.”

What I took away from this is that race matters. This point is one that seems obvious to many of us. For this one midwife, herself an African-American, the trust she developed with her

patients enabled her to say the tough things that I did not often hear other midwives telling their clients. Here are her words.

Maureen: One thing I've noticed in observing you, *you* can say things to people that other midwives don't or won't. Why is that? What do you think it is?

Midwife: I don't know. Midwife X says I have street credibility. I don't have street credibility. I don't know... I took the subway when I first moved here. But I don't *know* my way around. I don't know what people do. I sure haven't been to jail like some of them have. It gets to the point sometimes that you just have to tell people straight. Because if you sugarcoat it they don't get it. They don't get it.

So it's been part of my frustration lately that you need to just be like, "Knock it *off*." It's what I tell people. If they look at me and they say, "Well marijuana isn't going to hurt the baby." And I say, "Look. Here's the deal. You smoke weed. You come up positive for marijuana. We have to call social work. Do you really want that kind of drama? Think about it."

And they'll say, "Well. That sounds annoying.." "Yeah. So *stop!*"

Maureen: Which is what I use to tell people when I was working at the health center. If they came up positive for whatever... marijuana, cocaine, whatever... my shtick was... rather than wasting my time talking about why they shouldn't be doing it, I would say, "Look. This is the deal. If you don't stop and then you have your baby, they will test the baby." In Syracuse they did.

Midwife: They do here also.

Maureen: "Do you want to be able to take the baby home with you?"

Midwife: And when you spin it that way... It's the truth. And it makes more sense than this abstract concept of how the fetus is being affected by this drug. That's like a bunch of mumbo jumbo in their head. But if you tell them, "You are going to have social services coming to your home," then I get a reaction. ...

Maureen: Sometimes I think it's being straight. It's the way you do it.

Midwife: Like talking to them rather than down to them.

Maureen: Yeah.

Midwife: Well I know if someone talks to me like, "You shouldn't do this." I'm going to be, "Whatever."

Maureen: When I interview patients on their postpartum day, there is one midwife I have heard complaints about. It's the *way* she says things. She is being blunt, but it's the way she says things that is seen as insulting. People don't feel that way about you. So that's what I'm trying to figure out.

Midwife: Well you have to be nice. You have to be straightforward. But if you want people to listen to you, you can't talk down to them. Because I'm a defiant person by nature. If you tell me I can't do something, I'll do it just to prove to you that I can. It's "you're not the boss of me" type thing. But yeah...if you want people to take you seriously and listen to what you have to say, you have to say it in a way that doesn't piss them off.

I learned that from my uncle. My uncle is extremely blunt. But the nurses love him. The patients love him. Not everybody loves him. But he's extremely blunt. He will say to people, "Here are the facts. What we do here in the NICU is to keep your baby alive long enough so that what we do doesn't kill them." He just tells them as it is. It's the truth. I see that they appreciate him for what he says and does.

Maureen: You can be blunt and yet have the caring come across at the same time. It's a skill that I think you have.

Midwife: Part of it is that I *do* care. I do care. I do care that these women aren't getting what they need and it makes me mad. Maybe it's something having to do with championing the underdog. But I do care. I do want them to have a good experience. They deserve to have the best experience just like any woman at some highfalutin hospital. But they have to meet me half way. Just don't be an idiot. Don't be stupid. Again, don't be stupid. "If you do crack, guess what? Your baby is going to be investigated."

This is an example of what Walsh (2006a) is talking about when he discusses that matrescence is a distinct feature of optimal maternity care. Often, mothers-to-be, particularly younger women but also women who have never been nurtured, need to feel cared for and along with that care comes the trust that the provider can provide guidance and prepare the mother to mother her child.

Odent (2002) also talks about the importance of creating an environment of quiet and safety as a means of facilitating physiologic birth. Some of the midwives had difficulty managing the environment of the birthing room. Again, the perceived right of the autonomy of the mother, her choice of whom to have in the room and the extent to which social media would

be brought into the birthing room, came into conflict with the midwifery value of physiologic birth. The young midwives seemed to have less difficulty in resolving this conflict. One young midwife, coming into a room with numerous people sitting around creating commotion, simply told people to get out. “This is not a sport event,” she said. “Only two people can stay.” The same midwife came into a room where a mother was pushing. “Turn that TV off,” she said in an authoritative voice. “No baby deserves to be born hearing Jerry Springer in the background.” She would also reprimand family members who would be busy - talking loudly on their cell phones and busily snapping pictures. “It is the mother who is important here. Put that away.” “You can take pictures after the baby is born. No crotch shots.”

Another young midwife described walking into a room where a mother was having difficulty with a prolonged second stage. “There were numerous family members in the room just sitting there doing nothing. One family member was sitting in front of the TV, his legs propped up, eating Cheetos and watching the movie Scarface. I had most of the family leave and had the TV turned off.”

I commented to one midwife over how amazed I was at the behavior of many of the families – numerous people in the room, people talking loudly and ignoring the mother, watching TV, running around screaming when the baby was born, trying to get crotch shots of the baby crowning and then sending the pictures out on their cell phones. The midwife commented to me, “It’s almost as if they [the family] is modeling [the birth] on what they see on TV, acting like they are on a reality show.” Another midwife agreed. “I forget the really nice birth that I last had because there aren’t that many these days. ... There was one. It was just constant. People were on their phones and talking and Facebooking and notifying the entire city. And I was like, ‘Uh. There is a mother and baby here.’ ”

Another young midwife discusses the importance of taking some control and managing the environment to facilitate birth. She also describes a significant difference between midwifery care and obstetrics, even with epiduralized birth.

Midwife: I don't like directed pushing, with all the pushing. I always prefer laboring down. I give it two hours and if nothing is happening, I'll come in to see what is going on. Because laboring down is so much better. When they get the urge they will push and there is no need for all this yelling.

... With the epidural, they don't feel the same urge. But they do feel some pressure. Especially at change of shift, there is some reaction when a woman has been complete but you haven't delivered the baby. If you say we'll she's resting and she doesn't have the urge to push yet, they'll say, "Huh?"

... There is the science in what we do. For example, with labor management there is the science aspect. But lately I've been thinking about this. Maybe 70% of what we do is not scientific. For example, some of it is family management. Sometimes I come into the room and I might not know the woman. With Dr. X she doesn't know the woman. She just knows that she has been complete for two hours and hasn't delivered. That's all she wants or needs to know. But for me, I try to figure out what is going on with this woman. What is holding her up? It's hard to explain but I feel that this is such an important part of it. For example, the family member that is there, are they being helpful? You can see it so many times, the mother might not want the person there but the person is there.

Maureen: I have a real problem with what I see going on. All the family members there and activity going on that has nothing to do with the laboring mother. People making phone calls.

Midwife: It's true that family members can be demanding. And they have an idea of how things should go. They don't know you. You've walked into the middle of this. And it takes being able to say, "I need to make a change."

... It's important, particularly with pushing, to try to figure out what is going to work with this person. What do I need to do? What is the magic that works for you? What kind of talking would work for you? What person should be present? Just what are the conditions that are right for you? Figuring her out, what she needs to get the delivery done. I don't know if this is making any sense.

Maureen: I think you are describing to me an important part of midwifery care.

Midwife: You start out know these situations, x,y, z... you have certain scenarios you learn. And then when you get that down. Then you learn that my job is to meet you where you're at. I had this other patient recently who had a problem... maybe there had

been trauma. It was impossible to examine her and pushing was difficult. But I needed to figure out how to help her do this in a way that worked for her. The right words. The right rhythm. Am I making sense?

Maternal Choice and Control

It was during prenatal care that the midwives at Community Hospital were able to really shine and the values of nurse-midwifery are most evident. During prenatal care the schedules of patient visits with midwives allowed for only fifteen minutes during a routine prenatal visit. During these visits, midwives listened; they shared of themselves, providing important information and education. Most importantly, patients were treated with great respect and dignity.

I would go further and state that the care provided to women at Community Hospital was as good, if not better than, the care given to women with private insurance. Women with private insurance, in my experience, have less choice in their care than do the women I saw at Community Hospital. Childbirth activists blog on the internet about what happens when they attempt to question the dictates of their physicians, for example by refusing testing for elevated glucose, questioning the need for a routine induction, or refusing a repeat cesarean. They talk of receiving letters where they are “fired” or “dismissed” by their obstetrician, often with little notice prior to delivery.

In fact, during my fieldwork, several mothers delivered their babies at Community Hospital after having been dismissed by their obstetricians. In both cases, they had told their physician at their initial prenatal visit that they did not want to have a routine induction. In both cases the physician ignored their stipulation and without their knowledge scheduled a routine induction for 38 weeks. At their thirty-six week visit, they were informed of the day they were scheduled for induction of labor. In both cases they told the doctor that they would not come to

the hospital for the induction. When they received their letters informing them to find another physician, they came to Community Hospital – they had their natural birth with no induction and no interventions as they had chosen.

At Community Hospital, and I would say any hospital that serves women on Medicaid, there is no such power to fire a patient. Certainly it is difficult for a patient at many hospitals to opt out of a test or an intervention without meeting resistance by staff. However, at Community Hospital that was possible. I have seen women come to the midwives at Community Hospital requesting births with little or no intervention and those choices were honored whenever possible within the context of safe practice. Water births were a favorite for the midwives at Community Hospital as it gave them a break from the routinization of epiduralized birth and they were able to be in sync with their true values and belief in physiologic birth. VBACs were not uncommon and I witnessed one twin vaginal birth by a nurse-midwife with the obstetrician close by in the hallway. The epiduralized births that were the norm at Community Hospital had more to do with the social environment in which we find ourselves, not the authoritative hand of the medical professionals at the midwifery service.

Academics have long criticized the medical concept of risk. Bridges (2011) follows this tradition but takes it further, stating that the “excess” of prenatal care mandated by Medicaid represents an attempt to control the “unruly bodies” of women of color and to arbitrarily assign the category of “high risk” to poor, women of color. I would argue that poverty does, in reality, place some patients at risk during pregnancy and that every single test mandated by New York Medicaid, all of which were also provided by Community Hospital, represents good practice and quality medical care.

For some of the mothers, their pregnancy represented the only time that they had medical insurance. For the women who were cared for at Community Hospital, basic primary care assessment was very important. For many of the mothers, it is only during pregnancy that they receive basic preventative health care as Medicaid in many states has expanded eligibility rules for pregnancy. The nurse-midwives at Community Hospital were very aware of this. For example, the nurse-midwives made it protocol to have every mother see a dentist during their pregnancy knowing that for many, they would not be able to access dental care once their Medicaid coverage ended at six weeks postpartum.

In some states, the strictly mandated prenatal protocols by Medicaid are a response to prior years where Medicaid patients received inadequate, inferior care. The mothers I observed appeared to welcome the expanded prenatal care that updated Medicaid has brought. Gertrude Fraser (1995, 1998) has written about the fact that the experience of women of color in their interface with our health care system is particular to their experience. She further discusses how women of color can perceive health care quite differently than white women of privilege.

A good example of this is the Medicaid mandate for routine testing of altered glucose metabolism twice during pregnancy, including at the initial prenatal visit. Some childbirth activists see this as an example of medicalization. I would argue that it is good preventative care. With the growing obesity among pregnant women, early testing of glucose levels catches undiagnosed cases of true diabetes, not just gestational, early in pregnancy at a time when a woman can be placed on a special diet and put on insulin if necessary, resulting hopefully in a healthier pregnancy, an optimal situation for both the mother and the baby.

The work of Gertrude Fraser is significant in any discussion of birth and race. Gertrude Fraser (1998) in her seminal work, *African American Midwifery in the South: Dialogues of Birth*,

Race and Memory, reliably makes the point that when discussing the pros and cons of the medical model of childbirth it is important to recognize that this care can look very different, and provides a different balance of benefits and limitations, to the white, middle-class woman as compared to an African-American woman. For example, homebirth and/or a midwife delivery may be a form of resistance to the hegemony of modern obstetrics among some white, middle-class, and self-aware women. For the equally self-aware, middle-class, African-American woman, looking at the medical model of childbirth through a social and historical prism, homebirth and midwifery may symbolize the humiliating and dangerous health care disparities present during the era of segregation. More relevant to this discussion, relief of pain during childbirth with an epidural is seen by many women of color as a right, not a hegemonic intervention. Poor and minority women can see the denial of such pain relief as a discriminatory policy and health care disparity – because they remember the time not so long ago when the epidural was available only to a few elite women with a cushy insurance policy.

At Community Hospital, women overwhelmingly chose to have an epidural. There seemed to be little doubt in their mind that this is what they wanted. It is important to understand the historical disparities surrounding the access to epidural, disparities that had to do not only with race but also the type of insurance, to have a sense of why the access to pain medication, especially the epidural, is held by mothers to be so important - a *right*.

In the context of epiduralized birth in American hospitals, most women take for granted the right to choose an epidural. This has not always been the case. In the latter decades of the twentieth century, epidurals were a feature of premium insurance plans. Throughout the 1980s and 1990s, Champus (now Tricare) would not pay for an epidural unless the provider documented a medical indication, i.e. prolonged labor, documented abnormal lie resulting in

increased pain, etc. Many insurance companies did not include an epidural as a routine reimbursement and families would pool together money to directly pay the anesthesiologist. I personally witnessed husbands handing cash to the anesthesiologist outside of the labor room in order that their wife would receive an epidural. In some states, Medicaid did not cover epidurals. In states where Medicaid did cover epidurals, some anesthesiologists would still refuse to administer epidurals during labor, asserting that the reimbursement was inadequate.

In many states, the practice of demanding cash from Medicaid patients by anesthesiologists in exchange for administration of an epidural was not uncommon. In 1999, the *New York Times* exposed this practice in New York City hospitals (Pear 1999). Similar stories were reported in California. Health and Human Services (HHS) officials acknowledged that the problem was widespread (Ciment 1999). Push back from women and obstetricians changed reimbursement as well as policies regarding access to epidurals. However, the disparities in access to care are memories that stay with families for a long time. It is easy to see how, and why, women of color hold accessibility to an epidural as a right.

I have earlier stated that my postpartum interviews with mothers revealed an overwhelming satisfaction with their care. Even if they were not forthcoming to me as to their true feelings, the stories I have shared above also reveal how active the mother's were in demanding the care *they* wanted, even if we may consider that their decisions are ill informed. Yes, there are social forces at work that many mothers do not recognize or understand. For the mothers at Community Hospital, however, it seemed that what was important to them was that *they* were making the decisions.

It is important here to problematize the concepts of choice and control as both are used widely without adequate definition. Namey and Lyerly (2010) discuss how the word control is

used quite a bit in childbirth literature and that the literature states that control is important to childbearing women. However, they show that the term is “rarely defined” and there is ambiguity in the ways that the term is utilized. They suggest that the word control, used frequently by women, holds numerous meanings for women in the context of childbearing. Namey and Lyerly attempt to deconstruct the term in their various meanings. The word control variously refers to choice/options, self-determination, respect, personal security, attachment, and knowledge. Each of these words, in turn, holds various meanings for different women. Nurse-midwives tend to justify their engagement in epiduralized birth using the concepts of control and choice. The justification is that they, nurse-midwives, are honoring the choice of mothers and the need of mothers to have autonomy and control over their birth experience when they accept the status quo of epiduralized birth.

I would argue that choice is an illusion in the absence of knowledge.⁵² The nurse-midwives I observed failed to emphasize significant information regarding the potential adverse effects of both the epidural as well as pitocin administration. I believe that the choice made by women for epiduralized birth is often not a genuine choice. In many situations in our complex world, we are frequently not presented with the complete information and knowledge needed to make a true choice. In the face of complexity and uncertainty, individuals often accept the information given to them by authority figures as being truthful, particularly in vulnerable situations. In the context of a set of givens in a certain environment, available choices are often limited or unclear.

⁵² In choosing epiduralized birth, women are not misled in the sense of the sense of the Marxist concept of false consciousness. While there are larger forces at work, what we are looking at is the neo-liberal concept of the patient as an individual consumer. I think that American women have become extremely welded to the epidural and to routine induction. Even with thorough informed consent, I think it will be difficult to convince women that the risks outweigh the benefits in epiduralized birth. What will need to take place is a shift in the whole emphasis our society places on choice and control.

In the context of the modern hospital, mothers are not making a true informed choice to have an epiduralized birth. Informed consent, as I observed, involved holding back information as well as the trivializing of information that is given. In the face of the normalization of medicalized birth by society as a whole and in the face of experts deemphasizing the risks, it is easy to see the rationality in a mother choosing the ease of an epiduralized birth. Nurse-midwives then use the mother's choice as their justification for acquiescence to our birth system of epiduralized birth.

Choice has become an empty word in the context within which it is used in the modern world. As Taylor (2007) states, choice is often a "bare choice" and of little value because it is so often used outside of the context of what we are choosing between. No society allows unfettered individual choice. It becomes a meaningless concept when thought of outside the context of social life. Taylor (2007:479) puts it best:

It is clear that to have any kind of livable society some choices have to be restricted, some authorities have to be respected and some individual responsibility has to be assumed. The issue should always be which choices, authorities and responsibilities, and at what cost. In other words, falling back on slogans... hides from us the dilemma we have to navigate between in our choices.

It is unfortunate that the term choice came to be used in the context of reproductive rights because the question must be asked whether there is truly anything as an absolute right to individual choice. Choice has come to be used as the ultimate justification for almost anything. For example, is it in the interests of society that women have the right to choose an elective primary cesarean, a position supported by the American College of Obstetricians and Gynecologists (Committee on Obstetric Practice 2013)? We do need to ask the question – to what degree are women truly choosing their epiduralized births. Given the fact that the safety of the epidural and pitocin administration as routine interventions has been shown to potentially

poses significant risks, to both the mother and fetus, should women have the right to choose an epiduralized birth? Should they at least be advised as to the literature surrounding the safety of epidurals?

The issue of informed consent goes to the heart of the right to the autonomy of women to birth as they choose – a core value of nurse-midwives.

Informed consent is a legal process central to the protection of patient autonomy. The idea of shared decision-making is an ethical correlate to the legal term of informed consent, both of which exist to enhance patient participation and control in his/her medical care (Cahill et. al. 2010:125).

In other words, without true informed consent, where all information is provided, there can be no true autonomy. Shared decision making is a separate process from informed consent. When a medical decision involves a high-risk intervention, and I would argue that epiduralized birth is a high-risk intervention, it is imperative that a patient receives all relevant information. Without full disclosure of risks and benefits, the decision to have an epidural becomes normative, accommodating the convenience of the maternity care system while abdicating the rights and autonomy that the patient believes is present (Whitney et.al. 2003).

Chapter Six

Nurse-Midwifery – A View from Community Hospital

“I think we did women a disservice by suggesting that there can be birth without pain, as for ...
We live for the unmedicated births.” (A nurse-midwife.)

American nurse-midwifery is in a phase of liminality. From its conception, the profession has continued to be in transition but never more so than the present. It is a profession in the process of becoming, of crafting itself. In this state of liminality, there can be seen within the profession a sense of crisis in self-definition as it hangs on the threshold of becoming an independent profession. The profession is going through a process of determining the place it wishes to make for itself in a social field, the American medical system, which is itself in a state of flux.

How nurse-midwifery self-identifies has enormous implications for the role that the profession will fill in the maternity care system throughout coming years. Helen Varney Burst (2010:406) has spoken about the issue of professional identity, and the conflict of belonging to two professions simultaneously –in essence the internal conflict inherent for the reality of a hyphenated profession.

How nurse-midwives self-identify has a direct effect on our licensure, accreditation, certification, practice, education, legislation, reimbursement; indeed, our very being. My plea is that we understand the implications of how we self-identify. Specifically, if we wish to be licensed, labeled, and identified as advanced practice nurses/advanced practice registered nurses (APNs/APRNs) and therefore as a subset of nursing, then we need to do it understanding what this means both in relation to our history and our autonomy. ...

How nurse-midwives self-identify has been a source of painful discourse throughout our history. How did we arrive at this dichotomy in our professional identity that divides our loyalties and confuses our issues?

I discussed in Chapter One the history of childbirth and nurse-midwifery in the United States. What I discuss in this chapter is how nurse-midwifery's culture and crisis of self-identification is significant in the context of my observations of maternity care during my year of fieldwork at Community Hospital.

The care provided to mothers at Community Hospital was intimate, personal and caring. At the same time I saw a routinization of maternity care, the use of unnecessary medical interventions, on a regular basis to an extent I had not seen when I last worked as a hospital midwife. So many births were uniform, involving the same routine of interventions; they each blurred into one another. The concept that each mother births differently: "You birth as you live" – seemed to be gone. The ambiguous role of nurse-midwives – the delicate balance between attempting to maintain the normality of birth in the face of increasing use of technology and interventions – was borne out to me. What I also recognized for the first time was the extent to which individual women are active players in this routinization of birth. In most of my observations, women were actively demanding the technological birth that has been critiqued within academia. In this arena of institutional childbirth, the steady industrialization that has evolved in this significant life event became obvious to me. Nurse-midwives play a delicate balancing act in this process, engaging in industrialized birth while at the same time, through its professional culture and practices, smoothing over the hardest edges of industrialization, giving a human touch to an ever technological process.

A look at both the historical record, as well as the individual words of nurse-midwives, shows the crafting of a modern profession steeped in ambiguity and paradoxes from its onset. Through the decades since its inception, nurse-midwives have shifted, negotiated and re-crafted their identities around three axes.

1. The relationship of nurse-midwifery to the profession of obstetrics.
2. The relationship of nurse-midwifery to the profession of nursing.
3. The relationship of nurse-midwifery to traditional midwifery and later its relationship to the cultural-social movements of the sixties and seventies resulting in a critique of obstetrics and the formation of a new midwifery - direct-entry midwifery.

To illustrate this point I again quote Helen Varney Burst, editor of four editions of *Varney's Midwifery*, the clinical guide for American nurse-midwifery, and past president of the American College of Nurse-Midwives (ACNM). These words are from a presidential address, *Our Three-Ring Circus*, given in 1978 at the twenty-third annual meeting of the ACNM in Phoenix, Arizona.

In order to be able to function as best we can in whatever system we're in, we find ourselves in the constant, and tiring, position of having to negotiate, balance, and compromise; be skilled politically and in interpersonal relations; and take put-down with a smile, coolness of response, and outward negation of pride...

Maternity care is a political issue and our purpose [is] one of identifying recommendations, which would address the redistribution of power pertaining to maternity care... Now I, like most of you, am for progress and against impotence; but I do not believe in annihilation. There must be a way. When I was a student nurse I frequently heard a great deal of pride given to an attribute, which was presented as characteristic of nurses. This attribute was ingenuity, i.e.; figuring out how to create necessary items out of materials not before considered for that purpose. As we are *nurse-midwives* I call upon us, individually and collectively to create the modes of practice that will take us out of our binds and conflicts without destroying ourselves in the process. (Journal of Nurse Midwifery. Fall, 1978 23:13-14).

This description of the conflicts in which nurse-midwives find themselves holds true as much today as in 1978. Nurse-midwives face a daily conflict between their professional philosophy and the realities of clinical practice. Varney articulated well the professional values held by nurse-midwives as they have crafted together two professions – nursing and midwifery. They are attributes that I will argue are still well entrenched in the profession even as it shifts

identity and attempts to re-craft itself into an independent profession, identifying with traditional midwifery and embracing a non-interventionist approach to childbirth. The skillful use of negotiation, taking putdown with a smile, utilizing a pragmatic approach to problems – these are cultural values that are still highly valued, even among those nurse-midwives who have come to embrace a more traditional, non-intervention, approach to their clinical practice. The commitment to mother and babies so clear in Varney’s words and in the history of the profession continues to be heard in the voices and actions of nurse-midwives today.

The ingenuity, the ability to create “necessary items out of materials not before considered for that purpose,” referred to above by Varney, is a form of nurse-midwifery resistance to the overwhelming presence of the technocratic model of childbirth within which nurse-midwives, against great odds, find themselves working daily. Within the unavoidable hospital constraints on the midwifery model of care, nurse-midwives look for small and subtle means of subversion to bring midwifery care to mothers and babies. This daily resistance runs as a thread in the voices of the nurse-midwives.

Nurse-midwives are well aware of this conflict between the values held by the profession - care of women, the right of women to self-determination and autonomy in decision-making and an independent midwifery – with the reality of working in an epiduralized birth environment that is still controlled by medicine. That awareness came through loud and clear in the words of the ACNM President Kathy Comanco Carr in a speech given to the May, 2007 annual convention. Referring to the rising cesarean rate and to the “tragedy” of the medicalization of birth, Comanco Carr stated to the assembled membership, “Our job must be to prevent that first cesarean.” She went on to state, “I leave you with a sense of urgency and facing many challenges.” Threats to the existence of nurse-midwifery, she stated, included lack of autonomy, resistance from the obstetrical

community to the growth of the midwifery profession, denial of hospital admitting privileges, a decrease in educational programs and funding, and the increasing reliance on technology during birth. At the same time, she left with a positive note expressing confidence that “we will keep midwifery care alive and thriving. . . . We are a profession of passionate, articulate women, all of whom have large personalities. (Quotations from my personal notes.)” In her speech, for the first time, I heard a nurse-midwifery leader publicly challenge the authority of the obstetrical profession over midwifery.

The debate that ensued during the first membership meeting at this convention, the first of three meetings to vote on a new set of bylaws, was emblematic of this liminal state for the profession of nurse-midwives. The first bylaw presented for a membership vote stated that the name of the college would remain “The American College of Nurse-Midwives.” This was met with an amendment from the floor to remove the word “nurse,” making the name of the organization “The American College of Midwives.” A two-hour debate ensued with passionate words for both positions – to keep the hyphenated name vs. removing nursing from the name, thus declaring an independence from nursing. The amendment was voted down. The following day the Board of Directors stated that, after consideration, more long-term, ongoing discussion was needed among the membership before there could be a vote on a change in the name of the College. A subsequent mail vote of the entire membership resulted in the profession continuing to call itself nurse-midwifery.

This sense of crisis within the profession of nurse-midwifery has not occurred overnight but has been obvious to those who have observed the profession over the past several decades. A social drama has played out between nurse-midwives, the nursing profession, obstetricians, as well as direct-entry midwives. Even more significantly, there has historically been the debate

within nurse-midwifery itself as to its identity with regards to definition of scope of practice. American nurse-midwifery now defines itself as primary care providers of women beyond the childbearing stage, a self-definition more in line with midwives in developing countries. In contrast, the self-identity of direct-entry midwives is that of serving women during the period of pregnancy and birth, an identity more in line with midwives in other developed countries. As Varney Burst (2010) has pointed out, this debate as to self-definition has implications for education, licensure and credentialing standards.

Nurse-midwives, who once shunned direct-entry midwives for their lack of professionalism, and direct-entry midwives, who once denounced nurse-midwives as “mini-docs” or “medwives,” increasingly find common ground in philosophy and clinical practice. Some nurse-midwives wish to separate entirely from the nursing profession. Some nurse-midwives who argue for separation from nursing also wish to work towards a common organization with direct-entry midwives. Other nurse-midwives adamantly oppose such a move arguing that the profession of midwifery requires a credentialed, accredited university education for the sake of credibility in a modern society. Some of these same nurse-midwives point to the realities of our educational system. Nursing is a well-established discipline within our institutions of higher education. The argument is that it perhaps behooves nurse-midwifery in this time of limited educational financing to remain within the domain of nursing,

Some direct-entry midwives push for credentialing and accreditation of their apprenticeship education in an attempt to professionalize. Others are adamant that this will remove direct-entry midwifery from its social movement roots. Fundamental differences between nurse-midwives and direct-entry midwives involve ACNM’s rejection of apprenticeship education and the lack of an independent credentialing agency for direct-entry midwives. In an

ironic twist, many of the direct-entry midwives who resist professionalization are conservative Christian midwives. Abortion and contraception have become taboo subjects within much of the direct-entry community, while nurse-midwives, who once held a formal anti-abortion position, now maintain a neutral organizational stance on abortion, while welcoming pro-choice organizations to their convention.

This professional discussion among nurse-midwives as to their identity is significant; it is in this discourse that history and narrative merge. There is a place for combining narrative and history, as the border between the two are interrelated as well as fluid (Behar 1993). In order to determine what it is that midwives do, what it is in their day-to-day activities that make a difference, it is important to look at the meaning they give to those activities. This must come forth through their own words and I wish to combine meanings with actions in this description of nurse-midwives. I am interested in how these professionals conceive of themselves in relation to the world around them, the meanings given to their actions by others, their interconnectedness to their clients, and to each other. Only by looking at how these professionals have crafted a new health care profession that survives against great odds, can we begin to arrive at an understanding of what it is they do that makes a difference to the mothers and infants whose lives are touched by these women.

The desire for independence and autonomy is in conflict with the realities of daily practice. In most clinical settings nurse-midwives work side-by-side with obstetricians, many of whom still believe in a staff hierarchy where they are in a supervisory position. This remains a difficult situation when nurse-midwives and obstetricians do not agree on how to carry out care. I will talk about this professional discord later in the chapter. The way that I saw some obstetricians essentially trump the decision-making of nurse-midwives has led me to see that

despite the desire for collaboration, physician hegemony (Teasley 1983) is still the reality for many nurse-midwives. There remains for nurse-midwives a “conflicting claim to occupational jurisdiction (Teasley 1983:1).”

Teasley (1983), in her study of nurse-midwifery in Vermont, argues that nurse-midwives within the hospital setting are still essentially “subordinate.” Following my observations, I reluctantly agree with her, at least as it pertains to the maternity service at Community Hospital. Not all obstetricians interfered with the decision-making of nurse-midwives in the care of low-risk patients. Most of the physicians were respectful and genial. Each nurse-midwife had her own strategy for dealing with interference and control by some of these same physicians. The point is that the concept of collaboration, an ideal maintained by the ACNM, only works to the extent that each individual obstetrician does, in fact, see the nurse-midwife as an equal professional player. That is not always the case.

In some cases, collaboration is an escape clause from taking responsibility. A CNM with a homebirth practice discussed with me the conflict between CNMs and physicians around the issue of independence. Surprisingly, she expressed sympathy for the position of obstetricians in these collaborative relationships. She was critical of the entire concept of a back-up physician and written practice agreements – describing the requirement of a written practice agreement in order to practice independently as “a permission slip from your father.” On the other hand, she was critical of the approach of some independent midwives who see the practice agreement as a form of protection, a way to “pass the buck” if something goes wrong.

We want to be independent but at the same time we want the physician to take the ultimate responsibility. It’s what they are accusing us of, that we want them to be our deep pocket. If that’s the midwife’s attitude, then we are never going to be an autonomous, independent practitioner. . . . And until midwifery schools start teaching midwifery as an autonomous profession, we’re going to continue to have that hierarchical relationship.

This same midwife, who had a homebirth practice, criticized nurse-midwifery education for not exposing students to homebirth, where she believes midwives learn independence and see what physiologic birth looks like.

Homebirth is the gold standard. It is only in the home that you truly see physiologic birth. How many [nurse] midwifery students actually see a physiologic birth in the hospital? And it is only in the home where you learn to be truly independent. ... When I go to a mother's home I have everything I need with me. ... In the hospital they have their securities, the safety net, the sense that there's a doctor down the hall five minutes away. The machines... And that's what they rely on. ... That's what makes them feel safe.

A midwife at Community Hospital made a similar point, that there is tension between independence and subordination and that some midwives feel they need permission to make decisions that are actually within their professional purview.

Midwife: ...It is unfortunate that we avoid the issues rather than having a conversation. I feel like saying, "You know. We have good outcomes here. And we get these good outcomes by acting this way. So just leave us alone."

It's just several physicians who act that way. The other ones let you do what [you want] with inducing somebody. [In one case] a midwife had started with one agent. [for promoting cervical ripening]. And the patient wasn't making any progress. So I wanted to switch to something else. And I asked her, "What do you think?" And she said, "Yeah, if Dr. X is okay with it." And I wondered, "Why would I need to ask?" I personally felt that I didn't need to ask. I didn't. I just felt, "What the hell." And nobody had a problem with it in the morning.

Another experienced midwife spoke to me about the stress she was experiencing after years of providing care but still not having the impact on maternity care that she had hoped for.

Midwife: It is a frustration, the difficulty in getting mothers to breastfeed. I know I hear a lot, "Well I'm going to give it a try" or "I'm going to do both." And I think to myself, "This is not going to happen."

... If they can get the latch right, they can avoid pain. The biggest problem is we have an RN during the day who spends her entire time working with them to breastfeed. Then they don't get the kind of push during the night shift that they have during the day. And

during report we hear, “Well, they’ve decided they want the bottle. It’s their decision.” And the baby might wind up on the bottle.

Maureen: And then they rationalize it by saying that it’s her choice. I am beginning to look at this theoretical question of choice: It can be a double-edged sword.

Midwife: Then maybe we need to frame the choice differently. Wouldn’t the baby’s father want the baby to have the best beginning? How many ER visits do you want to make in the baby’s first month or two? This is a major booster shot to give to the baby in its beginning. ...

Maureen: We might also be giving them a mixed message... you place a six -pack of formula into the going home bag “just in case.”

Midwife: I don’t think we’re doing that anymore.

Maureen: Who’s not doing that?

Midwife: The hospital is not doing that anymore.

Maureen: But I’ve seen it. The nurses place formula into the mother’s take-home bag. I’ve seen it frequently.

Midwife: You’ve seen them still? The idea being that you give them those cute little bags, and the freebies and...

Maureen: And the mother is saying to you, “Yeah, I’m going to breastfeed.”

Midwife: We hear a lot of “I’m going to do both.” And it’s not good enough. It’s almost as if they are telling you what you want to hear but it isn’t completely the plan.

This same midwife goes on to describe her frustration with her position, having a great deal of responsibility but little institutional support.

Midwife: ... Sometimes I feel that I’m spinning my wheels. Or, once again, I find these new expectations and deadlines. Because there are certain admin responsibilities that are difficult for me. Sometimes I find myself bumbling around in the dark. I’m learning now to start out thinking about what a great collaborative service we have. We support each other. The doctors are supportive. We have great outcomes. All of that.

Maureen: You feel it’s a very good service.

Midwife: Correct. Then, looking at the admin angle that I’ve been pressed into. OMG. Where’s the support? Where’s the communication? Why am I learning all the time about one more committee meeting, or one more pass through to get someone credentialed.

And why does it take four to six months to get people on board. And why don't we have better staffing? Why is the clinic so disrupted? Why do they keep changing leadership? Why don't we have adequate supplies? Who does the ordering for supplies because half the time it's somebody who is out sick and the stuff isn't there. And I feel like I'm spinning my wheels sometimes. ...

The midwife above lists a series of problems that reflect a lack of commitment to the nurse-midwifery service. Problems she mentions include a lack of support by the hospital administration, a lack of communication, the lack of consistent support staff resulting in a disorganized clinic setting, and the difficulty in being resupplied in a timely fashion.

The problem with a disorganized, unstaffed prenatal office was significant. The nurse-midwives and obstetricians wanted the office to look and feel like a private office as opposed to a clinic. This was in line with their hope that eventually they would begin to attract women with forms of insurance other than Medicaid. Theoretically, the office was organized like a private office. It had a comfortable waiting room and clean exam rooms. Patients were given specific appointment times. Yet the patients, 95% of whom were on Medicaid, continued to behave as if the office was a clinic, ignoring their appointment time and showing up at their convenience, expecting to be seen. In contrast, at many private obstetrical offices, if a patient is fifteen minutes late they are required to reschedule their visit.

The hospital sabotaged the service in various ways. The hospital administration had the prenatal office on the same floor as that of a HIV clinic. Mothers shared the elevator with men who were perceived by patients as threatening. Disheveled men hung outside the entrance to the building. Worse yet, the staffing of nurse assistants was sporadic with no permanent staffing assigned to the prenatal office, relying instead on floating staff. These nurses were often not familiar to the routine of the prenatal clinic. It was not unusual for me to come into the office and find the Service Director in the chart room preparing the charts for that day's clients – a job

that could easily be done by a clerk. When I later met this midwife at an ACNM annual meeting, she stated to me. “I’m not sure why but I’m losing my passion for it all.”

Care, Normalcy and “The Calling”

Culture is about identity and so it is helpful to find hints of nurse-midwifery’s professional values in the words of members of that profession. Part of my preliminary research involved sending out a random survey to 600 nurse-midwives from which I received 138 responses. The survey was a free-listing survey where they were asked to list activities that they engaged in, which they believed made a difference and differentiated their care from that of obstetricians. The responses were informative.

I had expected a certain number of responses to reflect activities of a clinical nature. For example, in the prenatal period there are routine clinical activities that go on – blood pressure checks, taking weight, ordering routine labs, listening to fetal heart tones, measuring fundal height to assess fetal growth – the list can go on. During labor and delivery midwives pay attention to the status of the baby. I expected the usual mention of education, providing expectant counseling on a variety of issues. What surprised me was the extent to which respondents named activities that I could not easily place into clinical categories. I was also surprised by the ease with which the respondents seemed to go back and forth between listing clinical activities with activities that would not be found in a clinical protocol.

Overwhelmingly, their responses reflect this transformative period within the profession. A number of nurse-midwives have come to embrace midwifery in the sense that they see what they do in the clinical setting as “different” from that of obstetricians – they increasingly use words such as “therapeutic presence,” “protecting the normalcy of birth,” “empowering” the birthing mother.

Their responses showed the ease with which they move between the medical/midwife continuum. They speak about placing mother and baby first and foremost in their thinking. They “listen,” they “touch,” they “educate,” they “encourage,” they “empower.” Overwhelmingly they talk about advocating for the normalcy of birth.

Nurse-midwifery places a high value on “care” and “normalcy.” This has been verified in the research of Kennedy (2000; 2002), a nurse-midwife and qualitative researcher. In one study by Kennedy, videotaped narratives of eleven nurse-midwives discussing their clinical practice reveal what Kennedy cites are “alternative approaches” to care and “processes of caring for women [that] may have significant health effects (Kennedy 2002:1759).” “The art of doing nothing well” is also a value identified by Kennedy (2002:1759). She describes the voices of her nurse-midwife informants as speaking as if they themselves are an “instrument of care.” Furthermore, she describes a “selective use of interventions,” the creation of an environment conducive to supporting the natural process of birth as much as possible, and a “vigilant stance” on the part of the nurse-midwives as guardians of the birth process in the face of working in a medicalized environment.

What is even more telling are the stories of the midwives I observed, the stories of becoming a midwife. It is important that the voices of my informants are not lost but rather come out loud and clear. At the same time, their story needs to be placed in historical context. How has American nurse-midwifery come to be at this point in time? There is representation of a specific experience, a “site of memory” as described by Visweswaran (1994) in each voice presented here. In these narratives I do not see merely personal constructions that have no claim to reality beyond that of the narrator. I choose to see these narratives as clues, albeit constructed ones.

Narratives give us a sense of the crafted identity of a person and that identity is a conjunction of history and community. Visweswaran (1994) says it best: "...Identities are stories we tell about history, a retelling of the past. Thus, the narrative is not just a reflection of self, but another entry point into history, of community reflected through self (p. 137)."

Furthermore, "The process of narrating a personal experience that can be understood as part of a shared history or community memory is also empowering, not only for the speakers but also for the listeners... (p. 139)."

The social analysis of first person narratives assumes that the narrative reflects a relationship of the self to the world, an interpretation of one's own history through memory and testimonial. It is in this sense that I claim that narrative is not merely text, as in fiction, but is one more form of data, which we as social scientists can use in our quest for concrete answers. During my interviews, I placed life histories as a major focus of data collection. I wished to find out what it is in the life experience, in the personal character of each of my informants, and what they each personally bring to their work, that may explain clinical outcomes. Just as nurse-midwifery has shifted and crafted itself, the life of each individual midwife is one of twists and turns. The profession is not a monolith but made up of unique individuals, each with a story to tell.

These testimonials, these life histories, woven together provide a powerful insight into the profession as a whole. As Kondo (1990) asserts, people do craft themselves. Personal identities are constructed and shift over time. The story of nurse-midwifery involves a multiplicity of voices and experiences that can only be touched upon by getting at the life story of the women who are a part of the profession.

The use of life history in this project is particularly meaningful because as Kondo (1990:48) states, "...work and personhood are inextricable from one another. As individuals transform the world around them, they themselves become transformed." Furthermore, Kondo makes the point that "Identity is not a static *object*, but a creative process, hence crafting selves is an ongoing – indeed a lifelong – occupation." She goes on to state that "human beings create, construct, work on, and enact their identities, sometimes creatively challenging the limits of the cultural constraints which constitute both what we call selves and the ways those selves can be crafted." So the story of how nurse-midwifery has crafted itself, and continues to craft itself, is also the story of how numerous nurse-midwives have gone about the work of crafting their identities.

Visweswaran (1994) also discusses the symbolism inherent in the presence of the hyphen in the emergence of identity. What does it mean to take on a hyphen when one sets out to establish a new identity? "It is a hyphen," she says, "that signals the desire (and the ability) to be 'here' and 'there' (p. 116)." At the same time the hyphen signals an attempt at legitimizing existence. The parallels to this hyphenated profession that I have studied– American nurse-midwifery– are provocative.

Nurse-Midwifery, this hyphenated profession, was created quite consciously in the second decade of the twentieth century. From the beginning, the title given to this new profession represented a rejection of a midwifery steeped in tradition. The hyphen represented an embrace of the belief in the progressive and modern nature of medical science through identification with nursing. Nurse-midwifery, with misgivings, chose to keep the term midwifery in its title despite the belief that the term "midwifery" was identified as retrogressive. The decision to merge professional nursing, with its respectability and identification with

emerging biomedicine, with the tradition of midwifery was highly pragmatic and yet created inherent conflict within this newly crafted profession. At the same time, nurse-midwifery, by choosing to keep the term midwifery in this new hyphenated name, co-opted midwifery, abetting the elimination of the traditional midwife, both symbolically and in reality – all in the name of progress and modernity.⁵³

The survival of nurse-midwives involves maintaining a carefully crafted place, a betwixt and between position. The professional culture of nurse-midwifery demands a comfort with ambiguity and contradiction, as well as pragmatism, in decision-making. It is a professional culture that places high value on flexibility, moderation, and negotiation while at the same time nurse-midwives carry out a survival strategy that involves intricate everyday acts of resistance, similar to that described by Scott (1990; 1985), to obtain what they need to bring midwifery care to clients.

The value placed on care and holding a place for normal birth runs through the stories of the nurse-midwives at Community Hospital. I had expected that the decision to become a nurse-midwife would be different for the younger midwives but that was not the case. I came to understand that it was difficult to separate the value placed on care of mothers and babies, along with holding a place for normal birth, from the concept that for most nurse-midwives choosing to become a midwife is in a sense a calling. When I asked one long-time midwife if she thought midwifery is a calling, her immediate response was definitive.

Definitely. It has to be a calling because we're not doing it for the money. We're not doing it for the easy hours. Because we're not doing it so we can punch a time card and then leave for home and forget about what you've done during the day. With midwifery you really feel it is something that you have to do... something that you are giving to society.

⁵³ I have discussed in greater detail the place of nurse-midwifery within the overall history of American Childbirth in Chapter One.

This midwife began her career as a childbirth educator and it was in that context she decided to become a midwife. Like so many of the midwives, what comes out clearly is the value of serving women, a value that was partially based on her own experience with birth and wanting women to have the opportunity to experience normal birth.

Maureen: Earlier you had talked about how before you became a midwife you had been part of a birth activist support group early on. You talked about being in a study group. Could you talk about that? How did you come to become a midwife?

Midwife: I became interested in the eighties. I never was actually in the study group. I was in an organization called "Support for Midwives" that was more of a support group. We met once or twice a year but we were never actually a study group. It was more of a support group because most everybody in the group had a goal of becoming a midwife by that time.

Maureen: Did you have children by that time?

Midwife: Yes. It was after I had been a childbirth educator for a while. I was certified.

Maureen: And what made you want to become a childbirth educator?

Midwife: I wanted to help other families who were going through childbirth. My first baby was born in 1978 in [City X] but the next baby was born at home in the States. And that is when I was looking for some way to become more involved. By that time I became interested in becoming a nurse midwife.

My first baby in [City X] was born in a hospital. Not really in a hospital like here. There it was more like a freestanding birth center but run by doctors.

Maureen: So when you came back here, what drew you to homebirth?

Midwife: I had always been healthy. I didn't have much experience with hospitals. I just wanted to have more control over the situation. I had other friends who had delivered at home and I just thought it was a sensible thing to do.

Maureen: So you were involved in the whole homebirth cultural thing?

Midwife: [My homebirth attendant] was a family medicine physician who had been practicing medicine for a long, long time and she had hospital privileges. She was doing homebirths. Dr X, she was the doctor doing homebirths. And later on we heard about a midwife who was doing homebirths. But again that was a situation where she didn't have

a backup. But there was a Dr. X in (City X) who had originally been one of the backup doctors at a Maternity Center.

So I decided I wanted to be able to deliver babies, not just talk about it. I decided to go to nursing school. We have always had an association with nursing. Whether you consider it a compromise or a cop out, that's where it stands. I only went to nursing school because it was a necessary route to get to midwifery. I went to point A to get to point B and then I had to go to point C to get back to point A. I never had dreams of being a nurse, that's for sure. It was a means to an end.

Maureen: There were so many like you.

Midwife: Some of us did see it as a copout but some of us saw it as professionalizing. We tried to figure out what we wanted to do with our lives and we did nursing then so we did what we had to do.

Maureen: Looking back at those times, would you have called yourself a feminist at the time?

Midwife: [She laughs] No. Was the term in use yet?

Maureen: Oh yes. The first edition of the book *Our Bodies Ourselves* was in 1971. That was the seminal work. And then there was Barbara Ehrenreich's book *Witches, Nurses and Midwives*.

Midwife: I did have that book.

Maureen: That was sometime in the early 1970s.

Midwife: I did have a copy of it.

Maureen: I'm asking how you identified yourself within the social movements of the time. You didn't think of yourself as a feminist?

Midwife: No. I saw myself as part of the counterculture. Because when I thought of feminism I thought of Gloria Steinem and who was the other woman? Germaine Greer. Those were the feminists. I was still a hippie. I was a hippie. I didn't identify as a feminist.

Maureen: You got turned on to the homebirth movement not as a feminist but more as part of the counterculture.

Midwife: Counterculture. Turn in. Turn off. Drop out. Or I guess it was the other way... Turn on. Tune in. Drop out. That was the motto. [She is laughing here.]

Maureen: During those years I did see myself as a feminist. But there were different types of feminists. There were the equal rights feminists... Betty Freidan types. Then you had the radical feminists many of whom looked upon reproduction as the fundamental problem and biology as the basis of our oppression.

Midwife: Keep them barefoot and pregnant.

Maureen: Right. And biology itself had to be overcome in order to free ourselves from our oppression. I'm referring to Shulamith Firestone and to some extent Germaine Greer. And then there were the socialist feminists who looked at women's oppression more in Marxist terms. At the time that is where I was. Women's oppression was based on capitalism - women as private property. And then there was the counterculture where women were involved in communes for example. I don't think many of them saw themselves as feminists. At the time there seemed to be a world of difference between these groups. For example, what was going on at the Farm⁵⁴ at the time was a romantization of birth.

I was in a socialist feminist study group and I brought the book *Witches, Midwives and Nurses* to the group. And I said to the group, "You just have to read this." They thought I had totally lost it. At the time issues of childbirth and feminism were disconnected.

I'm bringing all this up because I'm trying to get a sense of where people, you included, place themselves in terms of women's rights, feminism and childbirth.

Midwife: I was not... I guess I believed that women should be able to work outside the home. And women should receive equal pay for equal work. But at that time I just wanted to be home with the children, seeing motherhood as an important job. When I started working outside of the home I worked for a nonprofit. I was a secretary there. Then my third baby was born and I started a day care at home so I could be with my own children. In my mind feminism was something that saw staying at home as old-fashioned so I didn't identify myself as a feminist at the time.

Maureen: Did you ever do homebirth?

Midwife: Not as a midwife. Because once I started nursing school, my orientation became hospital. So that is what I became comfortable with. I started working in labor and delivery. I didn't have the ability to be on call all the time. I realized that I wanted to work with the underserved population and that was not the women who were having homebirths.

⁵⁴ The Farm is a commune (what has come to be called an intentional community) founded in 1971. Led by Stephen Gaskin, it began with an exodus of advocates of alternative lifestyle who left San Francisco together to live in a rural environment in Tennessee. It quickly attracted others and at its height had hundreds of members. Removed from mainstream institutions, women at the Farm chose to deliver their babies on the commune. Out of necessity as well as philosophical commitment, some of the women members, led by Ina May Gaskin, began to teach themselves midwifery skills. The Farm, especially Ina May Gaskin, quickly became a focal point for the growing homebirth and direct-entry midwifery movement. Although the commune is much smaller, The Farm still maintains a small midwifery service.

It took me awhile to find something. So I moved up to (City X) partly so that I could work at a primary health care clinic where they were setting up a birth center. That was my out-of-hospital experience. They went through some rough times. Just as I was hired, within one month, they lost their privileges so they all left. That was in the early 90s. And they closed the birth center.

It wasn't that I didn't approve of homebirth. I just couldn't be on call 24/7. It takes a special person to do that. I decided I wasn't capable of it.

I've been in practice for 18 years. Incredible. It seems like a long time. Some of those years I was at University teaching. So during those times I wasn't actually delivering babies.

Maureen: Could you talk a little about changes you have seen over the years in the hospital?

Midwife: One job I had was doing triage at a University Hospital... They were still separating the mother and the baby. The idea that the baby should stay with the mother was seen as quite radical. And husbands weren't allowed in the room.

I would say that since the early 1980s, every hospital has given lip service to certain things – creating a more home-like environment. Hiding equipment. Allowing the husband in the room. So that has been in place. But there are also certain underlying principles of medical management that haven't changed.

Maureen: Keeping that in mind... The whole concept at the time was emphasis on the family and the self-care model. The whole idea was that the family would get involved in the care. In reality, rather than having nursing care... the family often doesn't have the ability to know what to do.

Midwife: Well she has her family with her. The husband is expected to be there and be supportive... once it was accepted the idea was that the husband would provide care... be the coach... hold the baby afterwards... I think that was supposed to be the focus rather than the abdication of nursing care. I don't think the idea of the family involvement was meant to give up nursing care.

Maureen: I don't think it was meant to do that. My question is whether it might have unintentionally led to less nursing care and support. One question I've had, how many husbands are really prepared to provide that kind of support?

Midwife: Well at least they have the opportunity to be there, to be part of the experience and to be with the newborn in a way they didn't before. They weren't just out in the waiting room, pacing, worrying about what was happening.

[My comment: We have discussion about the relationship of having the family in the room, expected to provide support and unprepared for that, and the lack of bedside care by nurses. She had worked at a hospital where the expectation was that the baby stay in the room at all times, which led to swinging back to keeping the mother in hospital for two days. This followed a short period of time when hospitals were sending mothers home within 24 after birth but it was found that many mothers needed more time to adjust.]

Midwife: I have been thinking that the pendulum has swung back.

Maureen: Swung back to...

Midwife: Swung back as to many women believing that the doctor is right and they don't have any choice or options regarding their choices. Especially regarding VBAC. I've talked to mothers about repeat sections for example and I may ask, "Why have you chosen this?" And a lot of reasons they give is, well the doctor says the first one was so big. Or the baby had a cord around its neck and I don't want that to happen again." "The doctor said I should have another cesarean again this time." The attitude is "Whatever the doctor says." And I couldn't really say, "Did you question that? Did you look at the alternatives?"

Maureen: Why can't you say that?"

Midwife: In most circumstances I didn't feel comfortable. [My comment: She is talking here about her past position as a Professor of Midwifery.] Often it was someone who had been NPO⁵⁵ since midnight and ready for her C-section. ... So I think the pendulum has swung back.

Maureen: Do you think the women are not questioning the doctors? Or do you think perhaps this is what women want... they would rather not give birth vaginally.

Midwife: Well. That's another discussion. But I think it's mostly due to the trending of the doctors who have never seen a normal labor and delivery. They have all seen 90% of the labors that have been epiduralized. They see a heart rate dip down and they're ready to do a C-section. So of course they think that labor has to be managed.

But in terms of what women want. That is a very pertinent question. There are women out there who want their delivery scheduled. They want their mother there. They want things organized.

Maureen: With VBAC... During my training in the early 1990s, a lot of women were on Champus [now Tricare] and Champus would not pay for a repeat C-section unless it was medically necessary. A woman had to go through a trial of labor. And the numbers of women... some of them made it. But there was a mindset, "Well. I didn't make it the

⁵⁵ NPO is a medical term that means "nothing by mouth". It is used in a variety of ways but usually in the context of having no food or liquid for certain number of hours prior to a procedure such as surgery.

first time. I'm not going to make it this time." And with those labors we had to document the lack of progress. Then you could do the cesarean. I came to understand a little bit the mindset, "I don't want to go through this and wind up with a C section."

Midwife: When women think they prefer a cesarean, I don't think they realize what they are asking for. There are awful things. Have you been following [My note: she mentions a listserve] recently? There has been a series of posts about how terrible midwives are in the hospital, calling us "medwives". I think it was Person X who talked about these terrible midwives who are giving patients epidurals and doing medical management... how terrible it is because after all we are midwives and we should be giving midwifery care.

Maureen: How do you feel about that?

Midwife: I'm tempted to put in a devil's advocate posts, along the lines of we give informed consent and women choose. We can acknowledge that there are women who want epidural. Not everybody wants to go through labor without pain management. So why not? If a woman chooses to have an epidural, and understands what she is getting...

Maureen: This does bring me to one of the issues of what I'm thinking of.... I think the idea of choice as a concept is a conundrum for midwives.

Midwife: It *is* a double edge sword.

Maureen: How far do we take choice? Some people would say that for women to be truly liberated, they should be able to have a baby outside of their body. Should that be a choice? Where do we go with it? When you have almost every woman coming in saying, "I want my epidural."

Midwife: Right.

Maureen: For me, observing this, it is an amazing phenomenon. What has happened here? The nurse-midwives offer this incredible, amazing humane care, the care... respect for patients. The women are so happy with their care. But for me... walking into every room... each woman looks the same. Each labor goes the same. She has all these tubes coming out of her. For me it's been shocking. I think people get use to it so it doesn't seem as shocking.

Midwife: Right. I don't think we're *forcing* anything on anybody. There is the expectation that... Women are asking for this.

Maureen: I see a few women coming in refusing anything – Hispanic women, women from Africa, Jehovah' Witnesses. That's their decision and I see the nurse-midwives and the nurses honoring those decisions.

Midwife: We live for the unmedicated births. This is not coming from the nurse-midwives. We had a fifteen year old who had an unmediated birth. She did great.

Maureen: How did this develop, do you think? What is going on?

Midwife: With what? The demise of midwifery? Increased use of epidurals?

Maureen: Well let's start out with the increase in epidurals?

Midwife: I think you're right. It is a cultural phenomenon. The question is how it has passed through so many different cultures. Because on the one hand, there are the women with private insurance, educated, primarily Caucasian, who one would think would be more of the... have more of the ability to do research, consider the pros and cons of every single intervention that can happen at birth. And yet they are opting for epidurals. And then women, like at our hospital, who are not going to read about every single procedure. And they start opting for the same things. It is an interesting phenomenon.

Maureen: When did you start seeing it happen?

Midwife: When did the natural childbirth movement start to fade away? I'm not sure.

The above interview brings up so many interesting questions. This midwife, with years of experience, is dedicated to providing safe, humane care to her patients. She chose hospital birth so that she could bring midwifery care to underserved women. At the same time, her decision to become a nurse-midwife was quite pragmatic – go to nursing school and then become a nurse-midwife so you can practice legally and make money. It is the same decision making shared by thousands of nurse-midwives.

One comment made by this experienced midwife gave me pause: “I don't think we're forcing anything on anybody. There is the expectation that... Women are asking for this.” I question the reliability of the informed consent given to women regarding epidurals. To what extent can anyone state that women are “asking for this” in the absence of careful, extensive informed consent? Certainly the risks were not emphasized. It should be noted here that most women at Community Hospital valued vaginal birth and wanted a VBAC following a primary

section. Some did not go on to have a VBAC but the staff was dedicated to do everything possible to make that happen. Few women opted for an elective repeat section.

What I have left out of the above transcription is this midwife's personal sacrifices to become a midwife: the hours of travel to nursing school and then midwifery school. When she obtained her first midwifery job, it put incredible strains on her relationship with her husband and three children. That is a theme that runs through many of the interviews of midwives that I have done over the years. As some midwives will say, "Just like it takes a special kind of woman to be a midwife, it takes a special kind of man to be a midwife husband." When Community Hospital's maternity service closed, she and one of the other midwives joined with two of the staff physicians and entered into private practice. They deliver babies in a suburban hospital.

Another midwife, also with many years of experience, spoke of becoming a midwife through her own homebirth and her involvement in the alternative birth movement. I had asked what had motivated her to choose nurse-midwifery as a profession and she related to me how midwifery had become her "cause" in life.

Midwife: To answer your question as to how I became a midwife. We were living in (City X) in 1974. ... and I became pregnant. My husband immediately came up with the idea of having a homebirth because his college roommate had somehow become interested in homebirth and gave him a book, Suzanne Arms' book *Immaculate Deception*. And had given this book to him who gave it to me and he said, "Why don't we have a homebirth?" And I said, "Are you out of your mind? No." But I read the book. And we had always been political activists and so it immediately grabbed me. So we had a homebirth. And it was a transformative event. It put me on the path of midwifery and I decided that's what I wanted to do. For me it was the cause.

Maureen: How did you become a midwife?

Midwife: It was actually a midwifery center in (City X). I went to a couple of homebirths not just as an observer, a layperson... actually I helped one homebirth with a lay attendant to confirm my feelings. I thought long and hard about it. There were a lot of lay midwives in (State X) in that period at that time. I debated a long time as to

whether I wanted to go the lay path after reading Suzanne's book but I knew I would be limited to out-of-hospital birth. After thinking long and hard about it I realized I wanted to do nurse-midwifery because I wanted to be able to support my family. The people I knew who did lay midwifery, they weren't able to really practice openly. They were operating out of the radar. I wanted to have a legal, legitimate credential.

It was so much about my own sensibilities of doing something in the world that might... even though I had done some alternative things in my life and I'm sure my children think we're very alternative given our age and where we have been in our lives, but we are very traditional. I don't think in my twenties I was thinking about the finances piece about it as much as the credentials. I just felt that the status of the lay midwives path were a little bit sketchy. Not really knowing what you were doing with everyone on your back or where you were going to live. I wanted to go a more traditional route. ...

Maureen: This issue of going legal vs. illegal in the seventies was something a lot of midwives were thinking about, what they were wanted to do and what they were willing to do.

Midwife: And that cohort. I graduated from high school in 1970 and went to college in the early seventies. That type of subscribing to Mother Jones magazines and Sojourners and things like that.

Maureen: Well, we were living outside of the establishment.

Midwife: Exactly.

Maureen: It was the times we were living in. So I get it.

Midwife: I think for me midwifery is a political thing. The spiritual piece of it is a calling but it is also a political issue. It is about reclaiming childbirth. It's about not letting medicine have control over what is a physiologic process. My own personal motivation about having a homebirth, after reading Suzanne Arms' book I thought, "Oh my God. I don't think I can do this." But we did the responsible thing. We had backup. I had transportation to get to the hospital if we needed. So when we lived in (City X) I already had a degree in criminology and went to social science. ... We made deliberate choices. [My comment: She goes on to describe how she and her husband quite systematically looked at nursing schools and midwifery schools and moved to a city where her path to midwifery would be facilitated.] I never wanted to be a staff nurse. I went to nursing school just so I could go to nurse-midwifery school.

Maureen: Tell me how your homebirth was a transformative experience.

Midwife: Well, I was one of those women who prior to moving to (State X) I was reading *Our Bodies Ourselves*. [I was] meeting with a group of women, looking at our cervixes with speculums and mirrors in an apartment. And I realized... When I thought

about it later, and I was talking later about why I became a midwife, that was a transformative event.

[My comment: This was a common phenomenon at the time – the consciousness raising groups.]

Just when I thought back on that and realized that I was never afraid to take on women's health. I was always philosophically involved in the feminist movement. When I got married, I didn't change my name. That was a big deal in the seventies. Had to go through a lot of pressure a lot of pressure with my in-laws and other about that at the time. And in fact, in (State X) it was not legal. ... You would not be issued a driver's license by the state unless you changed your name. That got me riled up. I was definitely not going to change my name.

Maureen: How did they even know?

Midwife: I don't know. That even predated my birth transforming experience. To answer your question. I remember feeling strongly after delivering that baby. We had gone to the hospital, gotten pitocin, which probably took twelve hours off my labor... I remember thinking how amazing it was and "I can do anything. If I can do that, I can do anything." So I do think that natural childbirth is empowering for women. You can't do it alone from a spiritual sense, which is why you need a doula.⁵⁶

Maureen: You need that social support. ...

Midwife: I think the newer generation of midwives; their stories are so different. I also have the experience in my early twenties with older midwives in this women's health movement. All of us granny midwives... It was the trajectory.

Maureen: I used to have the first edition of *Our Bodies Ourselves*.

Midwife: I did too. I gave it to my daughters when they went off to college.

Maureen: It was a pamphlet form when it first came out. I was part of a women's rap group. One of the women volunteered at Planned Parenthood and ripped off a bunch of plastic speculums so we each had our own. So I had the experience of looking at my own cervix and that experience was imprinted in my brain. It was so much a part of my experience. The childbirth movement grew out of that.

Midwife: It did. And it talked about Lamaze and the 30's and 40s.

⁵⁶ Doulas are a recent health care provider. Their scope of practice involves providing the bedside support (i.e. massage, offering water, providing emotional support) during labor that is no longer found in most American labor and delivery units. In most cases, a doula is paid by the mother, as doula support is usually not covered by insurance. Some doulas are certified although many are not.

Maureen: One of the commonalities I have found in the interviews that I have done, even with the young midwives, a book is often mentioned as being significant in their decision to become a midwife.

Midwife: Yeah. *Our Bodies Ourselves*. For me, it was Suzanne Arms' book, *Immaculate Deception*.

Maureen: Midwives usually mention a book and that is very interesting.

Midwife: Have you read *Baby Catcher*?

Maureen: Yes. It's one of many narratives in my library. ... It's a rather sad story. She was a nurse-midwife. That's a sad part of the story when she gives up her homebirth practice because her liability insurance was dropped. Then her decision to go to work as a staff midwife going to work for Kaiser as a hospital based nurse-midwife. I think she talked about that transition a little at the end of the book.

Midwife: I went from having homebirths myself. Going through the discernment process of how do I want to live my life. How do I want to provide for my family? ... I was often the major breadwinner.

Later in the discussion I try to elicit her opinions about the epiduralized environment at Community Hospital.

Midwife: I think natural childbirth can be empowering. The population here, so many of them want epidurals I think, because it's a way of detaching from their life. The pain process, it takes you to the other side of something. They don't like what they see or they're not prepared for it.

I think [natural childbirth] is empowering. I can speak for myself; if I can do that I can do anything. It gave me the courage for the things that came to me in my life. But not everybody sees it that way. I've come to see in my practice that I can't impose. Even with my daughters, I can't impose my thinking on them, although I think you try as a parent.

This midwife went on to describe the various sites that she has worked in, some better than others. I had entered our interview with some trepidation because she had not been particularly friendly. Yet, as we talked I realized that she truly cared with a passion for her work with mothers. Her attitude at work reflected her frustration with the epiduralized environment. I

also realized that our experiences in life gave us much in common. When Community Hospital closed, she and another midwife went on to open a freestanding birth center in the community.

Not all the older midwives came to midwifery through a calling but their commitment to mothers is no less. One midwife is in her early sixties and describes her trajectory to midwifery. She finished midwifery school in the late 1970s. “I did twenty deliveries.⁵⁷ I wasn’t ready to be a midwife. And I was pregnant.” She was forced to go to school in a city apart from her husband and then went to another city where she was offered an internship to get more experience. She got up to 39 deliveries. “When I came back I had a difficult time getting a job. Then the very school that turned me down as a student hired me on to teach.”

She speaks about this period of time when nurse-midwives were finding it difficult to find jobs delivering babies. This midwife worked in a variety of cities and then opened up a small private practice with two other nurse-midwives. When I asked her about the stresses involved in maintaining a private practice, she responded:

I had fabulous childcare. And the job kept me somewhat anchored during the tumultuous years of my marriage. [She describes the deterioration of her marriage during these years.] We sent patients to (Hospital X) but our patients still were admitted under the name of our backup physician. We did several homebirths but focused on hospital births. When it came to the homebirths, our backup physician said, “I don’t want my name on these charts. I will be stigmatized and ostracized.” So we had to keep homebirths at a minimum and quiet. Again it was political. We had to keep our backup physician happy. It is all about our survival instinct. Obviously we have done various give and take to keep our foot in the door.

I asked her about the stress on her marriage. Did her schedule impact on her marriage? “Did that play a role?” I asked.

I’m pretty sure it did. Childcare had switched. Even after we separated. He did agree to come in when I got called in at night. ... He was into sticking to the letter of the law and not sleep in the same house. But I’d be out the door and he’d come in. He’d take the kids to school. But eventually he said that was wearing him out. So I eventually found teenage girls who were willing to spend the night at my home.

⁵⁷ My comment: The requirement now is 40 deliveries to graduate from nurse-midwifery school.

The stories of the younger midwives were compelling to me, as I had not expected the same themes. However, even from the younger midwives I heard the same theme of wanting to serve mothers. One midwife in her early thirties, a young woman who graduated from an Ivy League School and comes from a long line of doctors and professionals, described to me how she decided to become a midwife, to the dismay of her family. Her decision has left her in debt with many thousands of dollars in student loans representing an enormous sacrifice.

Midwife: I've known since I was fifteen that I wanted to deliver babies. I went to a health careers high school in (City X). A cousin's husband was an obstetrician. My mother felt that, because (City X) had a high teen pregnancy rate, that it would be a good idea for me to shadow this obstetrician while I was in health careers. I got to scrub in my first C section when I was fifteen because I had been taught how to scrub in. And that was... that's it. I'm going to deliver babies. ...

[She went to a high school focused on science and describes seeing a birth during a visit to a hospital] I got home at 1:00 am and I yelled "Mom. I'm going to deliver babies." And she said, "Yeah. Whatever. Go to bed. You're fifteen." It took ten years to get there but I got there.

Maureen: How old are you now?

Midwife: I'm thirty-three. It took me ten years. I was fifteen in my junior year of high school. Then I went to college and grad school. Then I went to midwifery school. I think I was twenty-five when I did my first birth during midwifery training. It was the mom's fourth baby. It was really cool.

Later in the interview she comes back to the same theme of having been called to do what she does.

Maureen: I think I have observed you more than any other midwife here. And I've noticed that you so clearly enjoy doing what you do.

Midwife: I think that it goes back to the "I want to deliver babies" thing. My mother said that when I was really young, I'm not sure where it was, and I was watching TV and a woman was screaming and wailing and I said, "Oh my God. Is she having a baby?" And my mother thought, "What does this five year old know about having babies?" She brought that up a few years ago and I thought it was very interesting. But I come from a long line of physicians. So the whole midwifery thing did *not* go over well.

Maureen: Who are the physicians in your family?

Midwife: First generation – my mother’s brother is a neonatologist. My grandfather is a retired general surgeon. My cousin is a gastroenterologist. My cousin’s husband is an Ob/Gyn. On my grandfather’s side I’m the twelfth doctorate in the family. We have traced it. There are a lot of dentists also in the family. There are just a lot of healer type people in the family. My uncle, the neonatologist, said, “You can be a midwife Great. Just don’t be stupid.” And I thought, “What is that supposed to mean?” As a neo, they see the worse.

... My father’s family is very bright. He had one sister who owns a nursing company. ... Another sister was a lawyer. Then another was an engineer. These are not dumb people that I come from on both sides. So the whole midwifery thing did not go over well. It was like, “You want to be a *what?*”

Maureen: A *what?* [We are laughing together over this.]

Midwife: It was a big choice. During college I was having a crisis of spirit. I was sitting in chemistry and thinking, “This is *crazy*. I’m not *feeling* this. And I don’t think any of this is going to get any better.” [My comment: She was a pre-med major.] I learned some things. But as far as taking people down to their molecules and organs and they become the sum of their parts, it just didn’t make sense to me. The more holistic view worked for me. Fortunately, the idea of midwifery came to me when I was having this crisis of spirit. I went to the pre-med Dean at my school. I told her it [pre-med] just wasn’t for me. And she said, “You’ll never make it through medical school. You should be a midwife.” And I was like, “What?” And then the following year... I met this outside person who I was talking to, to get some clarity on life. And I was telling her this story and she said, “My best friend is a midwife.” She had gone through the Yale program. And this person said, “It’s a noble profession. It’s unfortunate that she spun it that way.”

Maureen: Oh, so the first lady, she meant it as an insult.

Midwife: I don’t know if she meant it as an insult. I found out later that when she became pregnant she went to a midwife. But I took it as an insult having come from this long line of physicians. And I was talking to my uncle. And my uncle, the neonatologist... he went to school on the West Coast. He had turned Harvard down, which the family did not like. But I talked with him about it and in one week I had researched all the midwifery schools in the country. I looked at how it was a more holistic approach but I still get to do the women’s health and deliver babies. But I wouldn’t have to be a surgeon. I have no desire to be a surgeon. I don’t mind helping out with first assist. I don’t mind. I really don’t. And I’m not that bad when it comes to makings repairs. Some of the doctors even ask me to close. But it’s not something that I want to do. And Ob/Gyn is a surgical specialty because Gyn is where you make your money. I just didn’t think it was something I wanted to do.

The first two years of nursing school, I thought, “This is crap because it was so easy.” [She describes the educational challenge of the Ivy League School she had attended.] So when I got to midwifery school, I thought, “This is crap.” ... So when I got to nursing school, it was a piece of cake. I was sick but still aced my final even though I barely studied. And I thought, “I hope I didn’t make a mistake. Maybe I should have gone to medical school.” There were portions of the program that I liked. I liked the part that used the humanities... healing with music and healing with literature. But when I got further into the program I began to like it.

Maureen: Tell me what your crisis of spirit was all about?

Midwife: It was just that I wasn’t happy in the study I was in. I was a neuroscience major. I was miserable. It wasn’t interesting. It made no sense to me why I should have to do linear algebra from recall. I just did not understand.

It wasn’t just the memorization because I can memorize stuff. Nobody told me that I didn’t need to take two semesters of calculus. Calculus II just blew my mind. I just didn’t get it. And there wasn’t anyone to explain it to me well. So it was just awful. And I was thinking, “I could be learning something and I am not learning anything.” And I did not appreciate that.

I had other personal things going on in my life. I wasn’t happy. ... I made some very good friends, people who are still my friend today. But it was hard. I needed to find something I could work for. Something I could believe. And I did not *believe* in linear algebra. So I dropped neuroscience as a major. ...

I commented on the high degree of energy she appears to have and her dedication to her work.

She is clearly the most popular of the midwives with very few no-shows in the prenatal clinic on the days she works the office.

Maureen: Where do you get all this energy? Everything that I see you do when you come on shift?

Midwife: It’s the drive. I figure I can do anything for twelve hours. My last position I worked twenty-fours. And it’s hard being first call for twenty-four hours in a private practice.

[My comment: She starts talking about the long shifts she puts in and how she will stay past her shift when people ask her too. She is describing an amazing dedication to individual patients. She is talking about one woman who needed a repeat c-section – it was her third pregnancy and she had two previous sections with a classical scar. “She just wasn’t a candidate.” The woman was about to leave the hospital; she was scared of

another operation. This midwife decided to stay beyond her scheduled shift to stay with the mother.]

Maureen: Where does that come from?

Midwife: I don't know. I'm just loyal to a fault. My mother calls me a sap. I just didn't want her to disappear because she's the kind of person who would disappear. But it was a *hard* c-section. It lasted two hours. There was scar tissue everywhere. And I kept telling her, "It's almost over." She had kept cancelling her appointments. And I had told her, "You can't just run away. We will track you down."

I can't save everybody. I don't know where this knight in shining armor thing comes from. But if I can help somebody... When I left the private practice they made me write a letter to all the patients telling them that I was moving out of state. Because they were afraid that people would try to follow me.

She then goes on to talk about the frustrations, particularly student debt, regarding the sacrifices involved in becoming a midwife.

Midwife: They [Community Hospital] haven't given us our raise. Here we are in a recession and my rent has gone up. I had to move in with my boyfriend. The thing that kills me... I make decent money but I use to work two jobs. And I was teaching for an undergraduate program, teaching their maternity course. I got one girl so hooked on midwifery she actually went to midwifery school at Frontier. [The school wanted her to be full time and be a clinical instructor but it would mean going to other hospitals that she did not know and they only gave her two weeks notice.] I don't think [Hospital X] is that midwifery friendly. I was afraid that the nursing staff there would not be supportive. So I had to quit that job. Not having that second job has destroyed me financially. I had to finance my education. I make good money but I do not make nearly enough to off set that.

Maureen: I think a lot of midwives wind up in deep debt. It's hurting. It's hard to convince someone to be a midwife when it costs so much.

Midwife: I'm frustrated. I love what I do but I am really, really, really frustrated as far as getting ahead. You would think that this hospital would qualify for the National Health Service Corp but it doesn't because there are multiple hospitals in this area. It has to be a medically underserved area. So even though our population is impoverished, it's not an underserved area. ... But I have to work really hard because of my loans. I have to make sure I get my overtime because if I don't, I'm in trouble.

Maureen: Midwives do not make enough money.

Midwife: We do not make enough money. I'm thinking about getting a second job in January. I'm just hoping I get a refund and that I don't owe. And with my situation –

I'm single, have no kids. I don't own. So thirty percent of my income is gone. And I paid eight to nine thousand dollars in interest last year. It annoys me.

Maureen: So you're still paying off your student loans.

Midwife: Oh yeah. I'll be paying it off... I tell people, "I have a mortgage but with no house." One of my loans is \$150,000.

Maureen: Wow.

Midwife: And that's with me getting nowhere. I'm not even paying on the balance. Because if I paid what I should be paying, I would be paying over \$1,200 per month in loan repayment. I can't do that. On this income? Can't do it. ...

Maureen: So tell me. Explain it to me. This debt is weighing on you. Why do you say to me that you would still make the same decisions? [Earlier in the interview when I asked her if she would still choose to be a midwife she replied, "Absolutely."]

Midwife: Because I get a lot of personal satisfaction helping people. Helping a woman through the transition from pregnancy to motherhood, especially the first time mother. Helping a woman who is in need try to stay out of that situation makes a huge difference in my life. So I get a lot of satisfaction. Otherwise I would be miserable right now.

I like what I do. It's fine when the baby is born. But I'm not a baby person. It's about the woman in trouble because they are forgotten in a lot of ways. Tell the woman that she has birth control options. Helping the teenage moms realize they don't have to be pregnant again. They just have to know certain things. It's huge. ...

I would ask [my teenage patients], "What do you want to do when you get out of school." "I want to go to college. I want to be a judge." "Really? Run with that. Run with that. Don't let anyone take that away from you." You know that is a lot of school but if I can just give someone some hope.

A little girl said to me, "I feel like I'm depressed." And I said to her "I'd be surprised if you're *not*. You're fourteen years old and you're going to have a baby. You can't drive a baby to the hospital, if you wanted to. You *should* be depressed."

Maybe I was just meant to do this. But I don't feel that I should have to be poor to do this.

Maureen: Right.

Midwife: I did not sign up to be a nun. I really didn't. I make good money but every single cent goes away. Quickly, I might add. It's annoying. At least I'm not salaried. I can put in and get paid for every single hour I work.

Another young midwife described discovering that she wanted to be a midwife. Unlike the older midwives, she did not have a specific calling to become a midwife but discovered midwifery during her nursing education and realized she was pulled to become a midwife.

Maureen: The first question I often ask is to have you tell me how or why you became a midwife. Some people talk about the process of becoming a midwife. Some talk about what motivated them. Whatever you feel comfortable talking about.

Midwife: Well. Let 's see. I first became interested in doing something health related in high school. I don't even know where the idea came from because no one in my family is in a health field. It was one of those aptitude tests you take. It came out with "This is a field you should look at." And it just made a lot of sense to me. I weighed out medicine vs. nursing. I was attracted to nursing being the care vs. medicine being the cure. Applied to nursing school. I wanted to focus on the care of the patient rather than the cure.

Maureen: That appealed to you.

Midwife: It appealed to me. I think that it's part of my personality. I have a high level of connecting and interacting with people, being interested in people's lives and also seeing it as a vehicle to another world. It's not that it was intentional, "I'm going to look into this and this and this and it will yield me being independent, free, and financially independent. It will give me the ability to do the things I want to do in life." But it just turned out that way. And I did have family and community support definitely to do something traditional like that.

I wanted to have a bachelor's degree and I wanted to be a nurse. So I went to (College X). Loved the school. Loved the city. Loved my first job. I started out in orthopedics and urology.

I first started thinking about midwifery in college. I didn't know what kind of nursing I wanted to do. But I thought it would be something with mothers and/or babies. It even turned out I was looking forward to my maternity rotation. It was actually the negative experiences that led me to midwifery. I saw routine episiotomies. Shouting at women to push. And I thought, "There's got to be a better way." ...

And so I was discouraged but I had a belief that there has got to be a better way out there. I didn't see a midwife delivery. There were midwives but there wasn't a midwifery practice at the hospital. But in my one day a week clinical I think I saw one vaginal birth and one cesarean. I did more postpartum and newborn stuff.

But the thing that really influenced me in midwifery besides having this negative experience and thinking that there had to be something better that coincided... I guess it was the same year. It was a course... here are the basic kinds of nursing. Here are the

different kinds of advanced practice nursing. Nurses in those different areas would come in and lecture.

Maureen: So it was a kind of professional issues course.

Midwife: Yeah. It was like... nursing as a profession. A nurse-midwife came to the class. I don't even remember her name. But...

Maureen: What year was that?

Midwife: I think it was my second year. My sophomore year.

Maureen: So how old were you.

Midwife: I think that was '90. So I was twenty.

Maureen: So you went straight into nursing school.

Midwife: I went straight from high school to college/nursing. I sat there listening to her talk about what she did and something just clicked and I thought, "That's me." And then around the same time, my sister went to a used book sale in our hometown. The library would purge these books out and have a book sale. And she was rummaging through and found the book, Ina May Gaskin's *Spiritual Midwifery* and gave it to me. She wrote in there, "This is so you." And I don't even know if I had told her that I was interested in being a midwife at that point. And so I picked up that book from cover to cover with all the birth stories. And I thought, "This is me. That is what I'm going to do."

Maureen: This is one of the most common threads that I find. Midwives, whether direct-entry or nurse-midwives, so often say they were inspired by a book.

Midwife: Interesting. I think a story connects. Like this lecturer, giving you a vision. This book just spoke to me. I really felt it was meant to be. Something had gotten that book into my sister's hands, which then put into mine. It was meant to be.

So that's when I decided, "Okay. That's what I'm going to do." But I didn't have urgency about it. At the same time, I was also becoming interested in public health, community health. One of the favorite things I did in nursing school was working at a clinic at a men's homeless shelter. I had a phenomenal mentor there. And even though I knew I wanted to be a nurse-midwife, my senior clinical had nothing to do with it. I chose public health, focusing on this homeless shelter, incorporating anthropology. I wanted to immerse myself in that. I wanted to be the white girl from (City X) sitting and sharing stories with drug recovering urban black men. It was fascinating to me. That we could be two people talking to each other and learn the differences and find the commonalities.

We continued to talk about her life and then an amazing interchange took place. We talked about the various cities she and her husband had lived in so that she could receive the education she desired. I shared with her some of my experiences. She seemed interested in the fact that I had been married for so long. Her own marriage, like others, had not survived her quest to become a midwife. Our discussion somehow drifted to how my husband was able to avoid the draft during Vietnam and how that war and the draft had influenced the lives of so many of my generation.⁵⁸ This seemingly unrelated topic resulted in an insight that she had not previously put together.

Midwife: Was your husband drafted?

Maureen: He was almost drafted. His number, when they implemented the lottery, was very high. I didn't know my husband at that time. It was during the Nixon administration... the war was becoming so unpopular and the issue of student deferments was becoming a political hot potato, the fact that it was poor and working men who were fighting this war. If you had enough money you could get out of service. And so... I don't know if it was Congress or Nixon himself, but they got rid of the student deferment and other deferments and they implemented a lottery. My husband's number was based on his birthday. It was done on TV. It was just like any lottery. They turned it and pulled out a number but the number was a birth date - a month and day. That was your number. My husband's number was number three. He got out of it. And again, it was very typical. People with means had ways to get out. He had a history of a bad shoulder from his days with football during high school. His shoulder would easily dislocate if you hit it just in the right spot. His father was an anesthesiologist and had all these connections with doctors. [I go on to describe how my husband received a medical deferment.] But after the lottery, the numbers of... I don't know how many men went up into Canada but it was in the tens of thousands if not the hundreds. And of course, the public discontent following the draft lottery became greater.

Midwife: I was a love child as a result of my birth mother seeing all these men not coming back. You just want to love the one you're with. I was adopted. I have a mother and then I have a birth mother. (She describes her birth mother as living in a small, Midwestern town and in the context of a small town being somewhat countercultural at the time.) I'll throw this out there. Me being adopted, it was really... I didn't understand it at the beginning but I have come to understand it. That I think there is a kind of healing for me in being a part of other people's births. And just having that... It's like in

⁵⁸ This is how I carry out interviews because I never know where it will lead and I have learned that a certain amount of reciprocity on my part leads to more openness on both sides.

every woman you see other women. And I think I've had the mother's who decide on adoption...

Maureen: They are special for you.

Midwife: They are special for me.

Maureen: Yeah.

Midwife: And also just being adopted, I've always been drawn to birth. It was this unknown in my life for a long time. I think I wanted some part of that in some way. I think there is relevance in it.

Maureen: Oh, very much so. I can really see that.

Midwife: I didn't really admit it to myself at first even though it was probably obvious.

Maureen: On a subconscious level. Somehow on some fundamental level, it had to do with your own birth.

Midwife: Yeah. I think maybe.

This midwife later told me that this was the first time she had articulated to anyone else the relationship of knowing she was adopted with her desire to care for mothers. She was adopted in 1971 and later during nursing school initiated through a state registry an attempt to find her birth mother. She discovered that her birth mother, although she had lived many hundreds of miles away when she gave birth, now lived within thirty minutes to her. They are now very close. Her birth mother's story of what she went through as a single pregnant woman and having to make the decision to give up her baby gave impetus to this midwife's life path.

The care and compassion that this midwife reveals in her words was common among all the midwives in the maternity service. Yet that care and compassion can only go so far when they are forced to negotiate how they carry out their profession with the doctors and nurses with whom they work alongside as well as the patients who demand care that is in contrast to their own professional values and beliefs.

Negotiating Birth

Negotiating birth is a daily reality for nurse-midwives as they work to establish their profession “within a highly articulated medical division of labor,” a jurisdiction, the modern obstetrical unit, that is ultimately controlled by physicians (Teasley 1983). Time and again nurse-midwives describe how they employ the skills of patience, negotiation and subtle manipulation of the technocratic obstetrical model to bring the midwifery model of care to the many women who birth in the hospital. One nurse-midwife described to me her relationship with “my guy,” her term for the obstetrician with whom she worked. Their relationship was difficult for her at first because he “micromanaged my care. But over time he came to trust my judgment, and I now can do pretty much what I want without his interference. When I want to do something that I think he might not go along with, I know how to handle my guy. I can call him and talk him into going along with just about whatever I think is best.”

This strategy - establishing a relationship with an obstetrician, “my guy,” the benevolent physician who then backs off enough to allow the midwife room to practice her model of care--is repeatedly expressed by nurse-midwives as key to survival in the hospital setting. The danger they note is that the instinct of flexibility and compromise, so intrinsic to nurse-midwifery, can turn into its opposite—hesitancy, a fear of rocking the boat. The relationship between survival and change remains a central theme in the discourse of nurse-midwives. Veteran nurse-midwives defend their culture in terms of surviving in order to bring about change. In order to bring about change one has to still “be there,” that being here involves “shifting and survival.” Future midwives need to be prepared for the “reality” that they must be “better than” and that reality involves having a clear view of what you have opposed to what you don’t have. These are words I have heard spoken over and over by some nurse-midwives. And yet others express frustration with what they see as an

ultimately self-destructive acquiescence to medicine. These two viewpoints continue to manifest themselves at professional meetings.

This recent shift to embrace a more traditional notion of midwifery is symbolized in a recent public slogan of the American College (ACNM), *Nurse-Midwifery: an Ancient Commitment, A Modern Success Story. Changing Health Care for the Better*. This is in stark contrast to a 1967 ACNM brochure entitled *What is a Nurse-Midwife* where nurse-midwifery distinguished itself from traditional midwifery with the words, “For centuries, women who assist at births have been called midwives. But other than a shared tradition of caring for mothers and infants, today’s certified nurse-midwives have little in common with their historical counterparts.” There have also been changes in attitudes regarding professional autonomy. However, the fear of direct confrontation with organized medicine remains strong among nurse-midwifery leadership. At the last ACNM annual meeting, a national leader was challenged by a younger midwife. “I am tired of seeing my profession play nice in the sandbox with ACOG.” The ACNM leader said, “Well, we still try to be nice but I can say that we are not playing as nice as we once did.”

Significant differences remain on the issues of education and regulation between direct-entry midwives and nurse-midwives. The ACNM, in its consensus statement with MANA, supports “physiologic childbirth” and calls on obstetrical providers, including nurse-midwives to “protect, promote, and support human childbearing physiology and... avoid overuse of interventions... (ACNM 2012a).” The statement points to “working within an infrastructure supportive of normal physiologic birth” as a factor necessary for the facilitation of physiologic birth. What the ACNM consensus statement does not recognize is that the vast majority of nurse-midwives do not work in such an environment, including the midwives at Community

Hospital. Nor does the statement provide any concrete proposals for how to bring about an environment under which physiologic birth can become the norm. The policy considerations suggested by the statement are general. Most importantly, it leaves out the most significant factor that stands in the way of nurse-midwives providing care that is congruent with their belief in physiologic birth – independence from the obstetrical profession.

Resistance to subordination does not come easy to some nurse-midwives but there are moments. I was at one nurse-midwife staff meeting where the midwives were complaining about a change in benefits. Hospital administration had decided there was a need to cut costs from the department budget. The nurse-midwives were informed that they would no longer be subsidized to go to professional meetings while the obstetricians would retain this benefit. The midwives were complaining to each other about this blatant inequality. I finally spoke up. “Why don’t you do something about this? You don’t have to just accept it.” Several days later, the Service Director told me that she had a meeting with the OB Chief and spoke strongly against the inequality in benefits. The benefit was given back.

This conflict between the ability to practice with independence and a long history of acquiescence continues to play itself out within the profession. Lawrence et. al. (2012) call for interdisciplinary “teamwork” in order to provide safer maternity care. The ACNM (2011a) has moved from its traditional concept of teamwork to advocating for “the principle of collaboration” among maternity care providers, even as they promote midwifery as an “independent” profession with collaboration involving consultation and joint management of care (ACNM 2012b). The reality of maternity care, however, is that the ability to practice as an independent profession, while working in a respectful, collaborative relationship among obstetricians, depends on the proclivity of the individual obstetricians. This was true at

Community Hospital where some obstetricians recognized the midwives as experts in normal birth, seeing their own role as that of specialists in high-risk obstetrics, while other physicians saw themselves as serving the function of supervisor of the obstetric team that included the nurse-midwife.

This illusion of the equality and respect between obstetricians and nurse-midwifery is not the only area in which the ACNM avoids the reality of clinical practice for most nurse-midwives. The position of the ACNM (2011b) in its position statement *Reproductive Health Choices* is that “every woman has the right to make reproductive health choices that meet her individual needs” in addition to the right to factual information. That right includes the right of the mother to choose elective induction of labor when provided with informed consent (ACNM 2010). The reality is that in most hospitals, certainly at Community Hospital, informed consent remains inadequate.

These positions, taken as a whole, create an inevitable conflict in the real life world of clinical practice for nurse-midwives who increasingly find themselves caught between the various demands of all players within the American system of childbirth. Kennedy (2010:199) admits that for many nurse-midwives, “normal as it pertains to childbirth, is problematic.” Interventions, she states, have been normalized. Women “bristle” when it is suggested that a cesarean or epidural is not normal. “Why have we made the normal abnormal and the abnormal normal in this perverse way?” Kennedy asks (2010:199). It is not only practicing nurse-midwives who face this conflict between the ideals of the profession and the reality of day-to-day clinical practice but it is quite pronounced for nurse-midwives. Kennedy (2006) revealed a “theory-practice” gap in her study of nurse-midwifery students, where 50% of the student respondents identified the divergence, or an incongruity, between what they were taught and the

reality of the clinical practice they had seen. Nurse-midwives *believe* in physiologic birth but in many clinical settings are unable to put into *practice* the values and beliefs they hold dear.

The midwives at Community Hospital had a very difficult time responding to my questions when I attempted to get them to talk about the theory-practice gap that was so apparent in their service. Their commitment to physiologic birth was clear in their focus on avoiding induction when possible, facilitating VBACs and working to keep down the hospital's cesarean rate. However, their ability to do so ultimately came down to the commitment and cooperation of the individual obstetricians.

I witnessed a discussion at a monthly staff meeting where ACOG's (2010) new position on VBACs was under discussion. This new ACOG position stated that in the case of a healthy pregnancy, women with two low transverse cesareans, as opposed to one, might safely attempt a VBAC. The obstetricians and nurse-midwives were discussing if this should become the policy for the maternity service at Community Hospital. The nurse-midwives all spoke in favor of changing the VBAC policy as did several obstetricians. Two obstetricians were adamantly opposed to changing the service's policy to allow for VBAC after two cesareans. Their clinical judgment was based on the fact that they did not "feel comfortable" with the change. The policy of VBAC after only one cesarean remained. The fact that only the obstetricians were allowed to vote on the matter corresponded to the reality that the relationship between midwives and obstetricians was not an equal one. I was left wondering what "comfort level" has to do with clinical policy that ought to be based on scientific evidence.

Another debate among the providers at a staff meeting had to do with induction of labor following rupture of membranes. The nurse-midwives argued for patient observation of these mothers as evidence shows that most will spontaneously go into labor within twelve hours and

that induction of labor increases the possibility of cesarean. On the other hand, prolonged rupture of membranes increases the possibility of maternal infection. One obstetrician argued for immediate induction stating that waiting twelve hours left only twelve hours for the mother to deliver.⁵⁹

When I discussed this staff meeting debate with one midwife, she expressed the frustration felt by the nurse-midwives because the decision to wait vs. induce labor depended entirely on the thinking of each individual obstetrician and was highly arbitrary. Decisions are made depending on convenience and arbitrary beliefs as opposed to scientific evidence as put forth in professional position statements. One midwife pointed to the “mediation” that becomes a part of midwifery in the relationship with obstetrics, a word that implies the reality of practice is not one of independence.

Midwife: There is a definite feeling I get at the meetings that the doctors would like to be able to tell the midwives what to do. They came up with their pap policy. Dr. X came up with a new policy following new recommendations on pap smears. He asked the physicians, “Are you comfortable with this?” But we weren’t asked, although we have to enact it.

[Regarding premature rupture of membranes (PROM):] The midwives wanted to give people 12 hours. People who wanted to wait, like for 24 hours, the midwives were comfortable with that. But the doctors were like, “No.” There was some discussion. Dr. X can be quite collaborative but sometimes in the meetings can be authoritative. But working with him he can often be quite good.

[My note: We continue discussing the departments approach to PROM.]

Midwife: It’s a problem. About 25% of women will rupture membranes spontaneously before labor begins. One midwife said in the meeting that 90% of these women go into labor within 24 hours. But then Dr. X, “Yes. But they will not have delivered within that 24 hours.” His concern was infection.

Maureen: And then we’re back to the old rules that you must deliver within 24 hours.

⁵⁹ The traditional clinical practice has been to perform a cesarean if a mother has not delivered within 24 hours following rupture of membranes. However, this practice is highly debated within the obstetrical community.

Midwife: I'd be fine with sending somebody home. But the hospital would have a problem with that. But we do have a lot of sporadic... no transportation. Some people don't even have a thermometer. We can't even go there. But I think all the midwives would be fine with, "Let's just hang out here and wait." And not examine until... I think the patient is thinking, "Why are we doing this, when I could get induced?" That is where we would have to do some education about what we are doing.

There is a mediation that goes on. Because Dr. X, he was the one who offered 12 hours, which believe me was like paradise in the OB world. [She is saying that Dr. X was suggesting that the practice have a protocol to wait for 12 hours after premature rupture of membranes before intervention.] Oh my God. We weren't even talking about patients who were GBS positive. But Dr. Y is more conservative about that. I work a lot with him. He works a lot on Friday nights. And I must say, he doesn't check up on me. I could be sitting on someone ruptured right now for the next twelve hours and he would be unconcerned. [She is stating that Dr. Y, in practice, changes his opinion about intervention in the case of rupture of membranes depending on day vs. night.]

Another midwife with many years experience described her frustration with the fact that there were still some physicians who believed they needed to "supervise" her work, literally being in the room as she delivered a baby. Ultimately, it was all about money – being able to charge Medicaid for the delivery.

Midwife: (The Doctors from Community Clinic X) claim that they're owed the money for all the deliveries they do on their shift even though they don't know the patient, they don't manage the patient, they don't deliver the patient. They claim that by stepping into the room at delivery time, they can claim the delivery fee. It's made us very upset.

But it's usually on weekends, and especially Sundays. It's having an impact on Midwife X, the new midwife... They tend to be hungry for deliveries. It's not interfering with deliveries. But they want to come into the rooms and claim that they are supervising and it's driving me crazy. And it's making me feel secondary. I brought this to (an administrator) and he's on my side. And he said, "How much do they have to do to claim this. This must be fraud." I'm doing all the work and they want to claim this.

So I go to the Chief and he says, "No. You're still doing what you're doing. It's just about money. We're making money on the admission, not the delivery. And we can't afford to kick them out the door." And I'm saying, "Why do you need a midwife there at all when they're the attending." I'm going to say, "Hey. If this is the way it's going to go, I'll be in the call room. You can call me for first assist. [That is helping with a cesarean.] You can mentor the resident. You can take the calls." I haven't done it yet. But I'm thinking this will be my scenario. But am I endangering the other midwives then?

In the previous chapter, I spoke of observing a growing number of inductions during my year of fieldwork. I have described how one midwife complained about the fact that often it is a physician's decision to induce labor but it is the midwife who has to carry out the induction. A midwife complained about what she called "sneak inductions" where the physicians coach a patient on what to say in order to be induced. Ultimately, it all became the work of the nurse-midwife to carry out what is essentially a decision made by a physician.

I observed physicians routinely order ultrasound at forty weeks for estimated fetal weight even though the predictive value of determining fetal weight through ultrasound at term is poor (Caughey 2012). More often than not, these ultrasounds resulted in a finding of decreased amniotic fluid index (AFI) and the obstetrician subsequently would order an induction. AFI is known to be highly inaccurate for the diagnosis of oligohydramnios (inadequate amniotic fluid) as opposed to the measurement of a single deepest pocket (SDP) and results in "an increase in obstetric interventions without any documented improvement in perinatal outcome (Magann et. al. 2007)." The only reason I could see for the obstetricians to use clinical tests that have been proven to be inaccurate and to result in unnecessary intervention is that they, in fact, needed or wanted a reason to order an induction. The mediation around inductions, and the fact that it was a physician order that had to be carried out by the nurse-midwife, added to the clinical conflict between nurse-midwives and obstetricians.

The conflict between nurse-midwives and obstetricians is likely to become even more problematic with the ACOG's (2013b) new definition of term pregnancy. Traditionally, a term pregnancy was defined as a gestation of 37 to 42 weeks, three weeks before and two weeks after the estimated due date. The growing trend to routine induction as early as 37 weeks has led to an evolution of thinking, certainly among mothers, that the estimated due date is not what it states –

it is an estimate. The EDC has come to be seen as “an end point,” as one midwife put it. This has added to confusion, with women thinking that they are late if they go beyond their estimated due date.

This evolution in the estimated due date as an end point has created confusion among physicians and mothers alike. ACOG (2013b) has responded to this confusion by changing the definition of term pregnancy. We now have *early term* representing 37 0/7 weeks gestation (37 weeks plus zero days) to 38 6/7 weeks gestation (38 weeks plus six days). 39 0/7 to 40 6/7 is now *full term* and 41 0/7 to 41 6/7 weeks gestation is considered *late term*. The recognition that term pregnancy has a true variation of 37 weeks to 42 weeks gestation is gone. As one nurse-midwife said to me, “What ever happened to 42 weeks?” ACOG justifies this change in definition on evidence that babies born between 39 0/7 and 40 6/7 weeks gestation have fewer adverse neonatal outcomes. What is likely is that this change in terminology will justify greater intervention during the latter period of the normal variation of term gestation. These interventions will inevitably challenge nurse-midwifery’s commitment to physiologic birth.

Each individual midwife had a different way of dealing with the inevitable conflicts with obstetricians with whom they work. One young midwife simply stated to an obstetrician who attempted to supervise her clinical activities, “Who is managing this patient, you or me? If you want to manage this patient’s care then you take over the care. If not, then let me do my job.” Another midwife described a more subtle way of dealing with this conflict and resisting interference by the obstetrician.

Maureen: I would like to talk about collaborative practice. I know that this midwifery practice defines its practice as a collaborative practice. What does that mean to you?

Midwife: Sometimes I don’t want collaborative practice. Because I don’t want... I feel I would like to be able to do what we do and be able to call in the physician when we

need to. There are some patients that are high risk, such as a patient with high blood pressure that should be seen by a physician. But I don't want them dictating our practice.

Maureen: Do you think that collaborative practice involves the physician dictating your practice?

Midwife: I can see how that can happen but it doesn't have to be. Although I've heard people say, "My resident." "My nurse." "My midwife." It's the person that I have who I tell what to do. I would want collaborative practice to be where they have their job, which is to take care of the higher risk or surgical situations. And the midwives are the experts in vaginal delivery. And that is our realm and we know how to handle that. That's how I would see the ideal. We can consult with each other. I like the fact that the midwives do the vaginal deliveries. That's an appropriate way of... but collaborative... I don't want collaborative to be that the midwives do the delivery the way we [the obstetricians] want them to.

Maureen: And do you think that in some ways that is the way it's done here?

Midwife: I think that there are things that the midwives have been able to do. But there are situations where the doctors ask, "Have you broken her water yet?" And you just ignore the questions and do what you're going to do. ... Or you lie and say, "It's high." [She laughs.] But it's unfortunate that you just can't say, "You know. I don't think..." Because there have been times where I will say, "You know. I don't believe in doing that." And I'll get a response. "What? What do you mean?"

Maureen: I agree with you. I do not believe in rupturing membranes unless there is a good reason.

Midwife: But it is unfortunate that we avoid the issues rather than having a conversation. I feel like saying, "You know. We have good outcomes here. And we get these good outcomes by acting this way. So just leave us alone." ...

Maureen: I think there is a fine line between collaboration and supervision and sometimes it's hard to know the difference.

Midwife: Now I would agree with that. And medicine has a culture of... what is it I'm wanting to say... "Dammit. I worked hard to get where I am. And somebody yelled at me. And now I get to go out and order."

Another strategy for dealing with the conflict between autonomy and subordination is that of acquiescence. The story I am about to tell is one that is difficult for me to share. It is not representative of the care provided by nurse-midwives at Community Hospital, care that was

overwhelmingly safe and respectful. There are times, however, when nurse-midwives are faced with negotiating decision-making with physicians where the obstetrician has made a decision based on convenience as opposed to safety. These moments reveal the mettle of the nurse-midwife. Does she stand up for safety? How do you make a decision when the desires of two mothers conflict?

It was evening shift, about 9:00 p.m. There was a mother in active labor, moving along nicely. I will call her patient A. Her labor had been nonmedicated as she was a Jehovah's Witness and she was making progress as would be expected in a multip – it was her fifth baby. Suddenly a nurse walked quickly into the station, clearly agitated. Another mother had just been admitted in labor, patient B, and had informed the nurse that she had changed her mind. She did not want to deliver vaginally but wanted to have a repeat cesarean, as was her right. The problem: She wanted her cesarean immediately even though she was still in early labor.

The doctor on call, Dr. X, who had been notified, came out of her call room. Anesthesiology was called but the only anesthesiologist in-house was currently involved in an operation. He made it clear that when he came to labor and delivery to help with the repeat cesarean, he wanted the operation to occur immediately. He wanted to be in bed by 12:00.

Most of the players were whispering about all of this and so it took a while for me to understand this kerfuffle. Patient A was progressing rapidly, while Patient B was demanding to know what was holding up her cesarean. She did not appreciate having her contractions becoming stronger when her plan was to have no pain. Dr. X kept asking the nurse to get an ETA on the anesthesiologist. In the meantime, the nurse-midwife and Dr. X sat in front of the Board, just staring at it as they watched the nurses change the numbers on the progress of the two mothers. They kept staring at the Board as if willing a solution, as if watching two planes collide

and not knowing how to stop the collision. I heard Dr. X keep mumbling something about “twelve o’clock.” I asked the nurse-midwife, “What’s with this thing about 12:00?” The nurse-midwife looked straight at me and said, “She is determined to be in bed by 12:00.”

Finally, the anesthesiologist arrived and there was a frantic movement to get Patient B into the operating room. In the meantime, a table with the equipment needed for a delivery had already been placed beside the door to patient A’s room as her birth was imminent. As the nurse-midwife entered the OR to first assist with the elective cesarean, she said to me, “Make sure that the nurse gives Patient A pitocin after the delivery. This is her fifth baby. Once I’m scrubbed in, I can’t break sterile.” She then walked through the double doors into the operating room to assist in an elective repeat cesarean.

A nurse who had never delivered a baby subsequently delivered patient A. Within minutes of closing the cesarean incision, the obstetrician and midwife came into Patient A’s room. The mother was lying in bed holding her baby. A pediatrician rushed in to assess the baby. This birth had become a high-risk incident because there was no obstetrical provider present at the birth. “Why weren’t you at the delivery?”, Patient A asked the obstetrician and the nurse-midwife. The obstetrician apologized profusely but told her, “We had an emergency cesarean” – an outright lie. The nurse-midwife stood there not saying a word. Later she said to me, “You know the two babies were born at the exact same time.” It did not have to be that way. An elective cesarean trumped the needs of a multip mother about to deliver vaginally.

I was shocked. The two doctors had made a decision to leave a patient who was to give birth momentarily in the hands of a nurse who had never before delivered a baby, although she had assisted in births. The repeat cesarean could have been put off until Patient A had delivered. After all, Patient A’s delivery was imminent while Patient B had some time before she was ready

to deliver. I thought, “What if there had been a hemorrhage? What if there had been a shoulder dystocia? All of this because the doctors involved want to be in bed by 12:00.” Convenience of the physician trumped safety and the nurse-midwife acquiesced, going along with something she knew was wrong.

Later as we talked about what happened, I gently pointed out to the midwife my take on what happened. What were the choices? How did they decide that the best solution to this problem was to have a mother delivered by an inexperienced nurse? If the team had waited for Patient A to deliver, the worst-case scenario would be that Patient B might labor slightly longer than she wanted before having her repeat cesarean. Which situation presented the greater danger? The answer was obvious. Everyone should have patiently waited for Patient A to deliver, which occurred fifteen minutes after the physicians and nurse-midwife disappeared into the OR. Both patients delivered at precisely the same moment but at the expense of the mother who delivered vaginally with an inexperienced nurse. When I presented the scenario in this manner, the nurse-midwife stated, “You’re right. I could have been more assertive.” I have not told this narrative to disparage the care provided by this group of excellent midwives for whom I hold great respect. I wish to show how difficult it is for a nurse-midwife with twenty-five years experience to stand up to a determined and aggressive physician.

The Normality Paradox for Nurse-Midwifery

As I have pointed out previously in this dissertation, nurse-midwives face an existential paradox; they hold a strong belief in the normality or physiologic birth while holding as a core value the right of a woman to self-determination and autonomy. The majority of nurse-midwives work in birth settings where epiduralized birth is now the norm. They are unable to provide the

type of care that is required to create the undisturbed birth that is essential for a physiologic birth. The ACNM is on record as promoting physiologic birth and states that its position is written “in the context of the current, widespread application of technological interventions that lack scientific evidence to a primarily healthy birthing population (ACNM 2012c: 1).” In its statement on normal birth *Supporting Healthy and Normal Physiologic Childbirth: A Consensus Statement by ACNM, MANA and NACPM*, the ACNM (2012c: 2) states that

A normal physiologic labor and birth is one that is powered by the innate human capacity of the woman and fetus. [Italics original.] This birth is more likely to be safe and healthy because there is no unnecessary intervention that disrupts normal physiologic processes. ... Normal physiologic childbirth is characterized by spontaneous onset and progression of labor; includes biological and psychological conditions that promote effective labor; results in the vaginal birth of the infant and placenta; results in physiological blood loss; facilitates optimal newborn transition through skin-to-skin contact and keeping the mother and infant together during the postpartum period; and supports early initiation of breastfeeding.

The report goes on to list factors that “disrupt normal physiologic childbirth.” Some of the factors listed include induction and augmentation of labor; time constraints placed on labor; an unsupportive environment that does not provide privacy, calm and a sense of safety; and lack of continuous support, among others. Interestingly enough, it does not mention the word epidural but does include “regional analgesia,” which I can only assume is referring to epidural. But why not actually use the word - epidural – the procedure that makes all the other disruptions inevitable? Why not make clear to their membership, nurse-midwives, that the epidural itself prevents physiologic birth?

What are nurse-midwives who work in our epiduralized birth environment to make of this? Holly Kennedy, past President of the ACNM, has written about the “problematic” nature of natural birth, or what she encourages midwives to call physiologic birth.

I suggest that our culture has situated childbirth fully in risk and normalized childbirth interventions. It is a paradox in which tremendous resources are poured into preventing rare events rather than supporting most women to avail themselves of resources to sustain

and improve their health. Fear of birth has become the foundation of childbearing in US culture. We do not usually fear things that are normal, and therefore childbirth has become culturally pathologic: it is something to be “fixed.” We live in a society where women are likely to have heard only birth stories that include epidurals and cesareans. It is a culture that deifies technology and control, with no room for uncertainty of any kind or for less than perfect outcomes (Kennedy 2010:299).

How is the average nurse-midwife to stand up against the pressures of our system of our system of epiduralized birth? Kennedy (2010) describes the problem of normal birth but fails to provide a way out of the nurse-midwifery paradox. She does suggest that a solution must include “midwifery-led” maternity units. These types of maternity clinics have become a cause for birth activists and midwives in England. In this country, freestanding birth centers, a U.S. version of midwifery-led maternity units, have been very slowly gaining ground, despite enormous political and economic pressures.

Scientific evidence leans toward the conclusion that routine administration of an epidural poses serious risks to the mother and the fetus. Without a leadership clearly stating this fact, CNMs do not have the strong backing of their professional organization to advocate for change. The ACNM report does recommend “introduction of policies into hospital settings to support normal physiologic birth (ACNM 2012c: 4)” but does not give any concrete advice to CNMs as to how to begin to make this happen in an epiduralized hospital environment. Without clear, strong leadership by the ACNM, staff CNMs will find it difficult to give assertive informed consent to mothers that the evidence clearly shows that routine epidurals have serious side effects.

In my interviews I found this a very difficult issue for the nurse-midwives to discuss. I can only describe their attempts to explain their involvement in epiduralized birth as a form of cognitive dissonance, at least on the part of some of the midwives. When an individual holds a

belief and then has to take part in activity that is contradictory to that belief, there is inner stress. The individual uses various rationales to relieve the stress and arrive at internal consistency (Festinger 1957).

One midwife who has practiced for many years and was previously a childbirth educator said to me,

I think we helped bring it on in a sense. We did a disservice to women. The birthing community was convinced that there should be as Dr. Lamaze originally said, there should be childbirth without pain. But breathing and relaxation really didn't do it. With the Lamaze movement we put it in women's minds that there could be such a thing as birth without pain. But that was not true. There was still some pain. And so women looked elsewhere for pain relief.

When I asked her how and when epidurals became so ubiquitous, she became thoughtful and said,

You know, it happened so slowly I don't know how it happened because often I wasn't involved in the decision. It was the doctor who had the discussion with the patient. I just knew that this patient was going to have an epidural and that patient was not going to have one. I was never sure why.

I asked her if at the beginning it had to do with reimbursement. "It probably was," she said. "But I was unaware of those issues back then." She then said what a number of the midwives said, a perfect example of cognitive dissonance. "There are other hospitals I've worked at where it's even worse."

She went on to say, "It's true that the epidural was first used in surgery on adults. And in the nineties the epidural was only given once the mother was quite far along in labor and so the exposure to the anesthetic was much less. Now we are giving it when the mother is two or three centimeters and that's unproven technology for sure. The mother is receiving the epidural for ten, twelve hours. We really don't know what it does to the baby."

When I asked another nurse-midwife how she resolves the incongruity of providing care that promotes a non-physiologic birth, she shrugged her shoulder and said, “People see it as a modern miracle. It does a job.”

In a different conversation, I got closer to the incongruity of the clinical practice of the nurse-midwives. This midwife described how the epidural has come to be central to the industrialized childbirth unit.

I’m not convinced it’s safe. It’s easier for the nurses. Even if a mother doesn’t have an epidural, if I get her out of bed to walk with her a bit the nurses get upset. “She’s off the monitor.” Because they want all the patients to be continuously on the monitor, otherwise they get nervous. ... But it’s interesting. People are expecting to be hooked up to all these things. So maybe I’m not being assertive enough. Maybe some of the fight has gone out of me too. ...

And two other midwives had quite practical responses to why they don’t do more to discourage the use of epidurals.

It’s tough. It’s hard. There are so many other issues these women have also. If no one has educated them about their choices... Sometimes just getting the baby out healthy becomes a top priority.

When I pointed out that most of the mother’s came in expecting an epidural, another midwife said:

Well I can’t hardly blame them. Their lives are so crappy. They have such crappy lives. They work hard. It sucks. It’s a way of escaping. Why add one more thing. Although some do surprise me. Especially our Jehovah’s Witness women, they don’t want epidurals. But it’s true. We know that the epidural causes that cascade of events.

Another midwife talked about how difficult it was to focus on education about epidurals when so much else is going on in the mother’s lives.

Midwife: I think a lot of the mother’s are not ready to consider not having an epidural. They just can’t go there. There is so much going on in their lives. They’re stuck. I don’t

fight. If I can figure out a way to empower a person in another way, then that's a good thing. To try to get them to feel proud of their bodies. Or to get their partner involved. Or to think about what they're eating in order to avoid later diabetes. Anything like that I consider to be a more important focus than worrying about the epidural. Even if I prep them, they come in with their minds made up. ...

Maureen: And that's discouraging.

Midwife: It is. And unfortunately, you've already lost time and you are playing catch up. To somehow make an impact on their lives. If you can get them to breastfeed, great. ... It's hard to talk about epidural. We tell them that they're perfectly capable of having the baby without pain medicine. If you can get them in the right time frame, sometimes you're successful. Often they just don't want to hear it.

There were places in the country... there was a time when a poor woman couldn't get an epidural. So they want it. It's "I'm going to get it" type of thing. They feel that it is their right to have all the bells and whistles.

At least we try to protect the rest of the process. You still have good birth outcomes. We still have the lowest c-section rate in our area. So something is going right. But the epidural... We're not pushing for an induction. We are trying to facilitate as long as possible not giving the epidural.

These comments reflect a true caring and commitment on the part of the nurse-midwives at Community Hospital for the mothers. However, the relationship of physiologic birth to maternal/infant bonding and the ability of the baby to breastfeed are somehow lost in the discussion. Or perhaps these midwives believe on a fundamental level that these are things they just can't control in the current birth environment. They sound resigned to the way things are and present an appearance of acquiescence. They are very busy, working hard, to provide humane, safe and supportive care. They want every woman to feel "empowered," several midwives said to me. They are so busy empowering their patients they forget to empower themselves.

Many of their comments also feel like excuses as to why they are unwilling to go against the tide of our epiduralized birth system and carry out true informed consent regarding epidurals,

even if it means going against the interest of physicians, both obstetricians and anesthesiologists, nurses and the mothers themselves. Ultimately they know that they have to go along with the assembly line or they will have to leave. Late at night one midwife was commenting on a newly trained midwife who did not last long at the service. “She just couldn’t get use to the way things are done. She would try to convince mothers to not have an epidural. She would walk her patients up and down the hall. She was a good midwife. She just didn’t fit in.”

The midwives I observed were passionate in their care of the mothers at Community Hospital and that care reflected nurse-midwifery’s tradition, their mission, of being with women where they are at. This paradox of having to implement medicalized care that is contrary to their own belief system is not an unusual situation. To a great extent women have been led to believe in the safety of epidurals and pitocin. The convenience of both is highly attractive to mothers. It is an illusion that the relationship between the physicians and midwives is one of collaboration. Community Hospital was ultimately an obstetrician led maternity unit and midwives relied on the benevolence of certain physicians to influence departmental policies. They in actuality had little impact on policy.

My own decision as a nurse-midwife to not work in a hospital setting has everything to do with knowing that I would not last long in a system where the obstetrician ultimately held the power to dictate the activities of the midwives. I am not alone in experiencing difficulty adjusting to industrialized birth. Peggy Vincent (2003), in her narrative *Baby Catcher*, describes her difficulty in adjusting to providing care in the hospital. A long-time nurse-midwife who provided homebirth service to the Berkeley community for two decades throughout the 1970s and 1980s (catching over 2,000 babies), Vincent was named in a malpractice lawsuit along with numerous other providers. After settling the lawsuit, her insurance carrier dropped her liability

coverage. Unable to obtain insurance elsewhere, she was forced to shut down her homebirth practice and began shift work as a nurse-midwife at a Kaiser Permanente maternity service.

Vincent (2002) describes, through many stories, the intimacy and attachment that occurs between the mother and midwife in homebirth during the course of prenatal care and how that translates into trust and working together for, in most cases, a successful vaginal delivery and maternal/infant bonding. She also describes her dismay at the differences she encountered between homebirth and hospital birth after she began the new phase in her career as a hospital-based nurse-midwife.

I love home births. I love their unexpected diversity. Women react with perfect freedom in the comfort of their own homes and I learned long ago not to try predicting who would be quiet or noisy, stoical or dramatic. ... At Kaiser, nearly all uncomplicated women were assigned to a midwife upon admission. I never met them till they came through the doors of Labor and Delivery. Most of them had no real interest in experiencing the raw passion of childbirth with a midwife to guide them. ... "This is an obstetrical factory," I said to my husband. "I check these women, order an epidural so they won't feel pain, delivery them, and move on to the next room. I'll never see them again (Vincent 2002:315,316)."

Vincent goes on to express succinctly the nurse-midwifery paradox, the attempt to practice based on her belief system against the barriers placed upon her by a system of epiduralized birth.

But some things hadn't changed. I still got my kicks from hanging out with women having babies. In the name of compassion and common sense, I still bent rules right and left, and I hadn't lost my appetite for drama. The rush of the unexpected, the thrill of living on the edge, the heart-stoppingly tender moments, the surprise of laughter in the midst of pain – these all charged my batteries with the energy to endure yet another sleepless night. I was no longer in charge of my own independent midwifery service, but at least I was still catching babies (Vincent 2002:321)."

The stress on midwives who work in birth environments that are controlled by obstetricians is well documented. Keating and Fleming (2007) interviewed midwives in three large hospitals in Ireland and focused on the strategies and feelings of the midwives in working within the medical model of obstetric care. Most Irish midwives work in large maternity units

with a very hierarchical organization. By statute, the obstetrician is the lead professional in all maternity hospital units in Ireland. Obstetricians hold a great deal of power and prestige.

Keating and Fleming describe “a logic of domination” that was revealed in their interviews.

Keating and Fleming identified strategies used by midwives to subvert the obstetrical approach: “... Some of the midwives avoided obstetric interventions during labour but did so quietly, avoiding direct confrontation with obstetricians about the rationale for the increased interventions used during normal birth.... Midwives may have difficulty promoting evidence-based practices where medical evidence and technology are highly valued (Keating and Fleming 2007:519).” It was found that the “Midwives inability to utilize their midwifery skills in a hospital.... [were] a source of frustration and stress (p. 520).” One midwife stated that it takes “strength” to stand against the medical model. “Sometimes you need strength... it does take a bit of guts really to be able to say, ‘I am happy enough to let her carry on.’ (p. 523).”

Another strategy used was to work nights, a time when the midwife would not be supervised closely. One midwife is quoted as saying; “You can make decisions on night duty. It is easier, less hierarchical (Keating and Fleming 2007:524).” Another midwife utilized the same strategy.

But it is much easier to facilitate that [normal birth] on night duty because you don’t have people coming in and saying, “why is this woman screaming?” and obviously you are not a good midwife if this women is, what they think is out of control.

A third midwife expressed a similar strategy.

I do try to facilitate normal physiological birth as much as I can. I find it easier in night duty, probably ‘cause there is not so may doctors and people around so you can get into your room and be with your woman and try to do as much as you can normally (p. 524).

“Some midwives did contest obstetric rationale discretely,” say Keating and Fleming (2007:525), “with the goal of maintaining a non-medical approach to birth, but this was difficult within the constraints of hospital practice. ... The midwife’s ability to facilitate normal birth was impeded by the culture of the birth environment and a hierarchy of health personnel who subscribed to the medical philosophy of birth.”

Nurse-Midwives at Community Hospital were subsumed into a culture of medicalization in conditions very similar to that described by Keating and Fleming (2007). However, in their study, Keating and Fleming present mothers as passive players in industrialized birth, which was certainly not the case at Community Hospital. The similarities are the inability of the midwives at Community Hospital to practice according to their belief system and practice in a way they knew to be true about the risks involved in epiduralized birth.

To conclude, the care of mothers and babies has been a central value in the profession of nurse-midwifery from its beginning. Also central to the professional culture of nurse-midwifery is the internal conflict described in this dissertation – holding physiologic birth as an ideal while having to survive within a childbirth system that has organized itself around epiduralized birth. I observed this cultural tension played out in the everyday clinical practice of nurse-midwives at Community Hospital as they attempted to practice with as much autonomy as possible within the confines of a collaborative relationship with the staff physicians. The fact that marginalization of nurse-midwives continues and that autonomy and an independent midwifery remains an ideal rather than a reality is revealed in the narratives found in this chapter.

Chapter Seven

The Business of Birth: The Closure of Maternity Care at Community Hospital

“I guess I was just naïve, but I really thought that the hospital cared about the mothers. I really didn’t believe they would close us down.” (A midwife from Community Hospital)

I wish that this account could end on a happy note and that I can say that this maternity service, so important to its community, is thriving. In fact, as I wrote this dissertation I became aware that the midwifery service at Community Hospital had been shut down, a victim of the centralization of maternity care that has occurred throughout the United States. Its space will be used as spillover by the medical center with which the hospital had merged. It will be used as space for patients who need to be discharged from the medical center but are not yet well enough to go home,⁶⁰ a skilled nursing care center for patients who have little support to recuperate at home. I will discuss in this chapter how regionalization of maternity care (referral of high-risk pregnancies to maternal-fetal centers), centralization of maternity care (fewer but larger maternity care units) and consolidation of hospitals impacts maternity care looking through the lens of the closure of the maternity service at Community Hospital.

The closure of Community Hospital’s maternity center is a part of a recent fundamental transformation of the American hospital system, a transformation that involves a shift away from small community hospitals, both urban and rural, to large tertiary medical centers. The small hospitals that have survived have often done so by merging into, becoming part of, a larger nearby medical hospital system. This merger usually involves the reorganization of services provided by the community hospital to meet the overall needs of the medical center system. A

⁶⁰ Hospitals are under increasing pressure from insurers, including Medicare, to discharge patients within a set given time. Transfer of patients to a physically separate “skilled nursing facility” as a transition to home is increasingly a popular means employed by hospitals to manipulate their statistics to conform to acceptable discharge criteria.

prime example of this trend towards centralization through the merger of hospitals is the recent merger of two medical networks in New York City, Mt. Sinai Medical Center and Continuum Health Partners (itself a network of smaller hospitals), into one entity. This merger will result in New York City, with the exception of the New York City public hospital system, served by only two large non-profit health care providers/hospitals. (Hartcollis, *New York Times*, 7.16.13).

Proponents of centralization and consolidation, such as what is occurring in New York City, have predicted that these large networks of interconnected hospitals and health care providers will result in greater efficiency, providing an integrated system that results in a single point of care for individuals. Doubters state that communities where intensive hospital consolidation has occurred have experienced increased medical costs due to lack of competition. Will the continued consolidation of health care institutions result in greater efficiency and access? In many areas of the economy, consolidation results in efficiency of scale, placing downward pressure on consumer costs. However, some scholars of the economics of health care have shown that the American health care system does not operate under the same rules as other areas of the economy. Consolidation, they say, promises efficiency but in actuality results in greater costs to the consumer. The debate remains unresolved. The impact on maternity care, however, is that in many communities mothers must travel long distances to access the nearest maternity care center.

This major reorganization of American hospitals that has seen the closure of small community hospitals, or their merger into larger hospitals, began in the last three decades of the 20th century. It is closely tied to the growth of medical centers with highly specialized services. In New York City, for example, 39 hospitals, one third of New York hospitals, closed between the year 1970 and 1981. This reorganization is fundamentally as much about health care

financing as it is about technological changes and demographic changes (McLafferty 1982). Financial pressures faced by community hospitals have included decreased reimbursement, the shifting of uninsured and underinsured patients to community hospital emergency rooms and the growth of larger hospitals with specialties that receive enhanced reimbursement. The lack of specialty clinical services and the residents that come with such services, which is the case for community hospitals, is associated with weak reimbursement (Shonick 1979).

Other factors are involved in hospital closure. According to McLafferty (1982), additional identifiers in hospital closures include occupancy rates, the socio-economic status of the neighborhood served by the hospital, infant mortality rates of the neighborhood and hospital size. Size matters: the larger the size of a hospital, the less likely that it will face closure. McLafferty proposes that the number of uninsured and underinsured patients included in a hospital's catchment area is an underlying factor in hospital closures, hence the association with infant mortality. "What we are seeing, in analyzing closures, is the result of a highly competitive process in which those facilities best able to adapt to the rapidly changing health environment are most likely to survive (McLafferty 1982:1668)."

Hospitals that are at a competitive disadvantage have used a variety of survival strategies, one of which is merger into a larger medical center that provides the sharing of staff and facilities. The advantages of such a merger for a small hospital include economies of scale in purchase of supplies and equipment, access and utilization of specialty services at the medical center and the use of residents from the larger facility (McLafferty 1986). All of these factors came into play in the decision for Community Hospital to merge with a nearby major medical hospital, a hospital I will refer to as Medical Center 2 (MC2) that is associated with a medical school.

The Closure of the Maternity Center at Community Hospital

I described earlier that the impetus behind the nurse-midwifery service at Community Hospital was the lack of an obstetrical residency program. As Community Hospital's maternity service transitioned to a nurse-midwifery service, it incorporated the latest technological advances while remaining small and intimate. The labor and delivery unit had twenty beds and at its apex in 2006 the midwifery service had almost 1300 deliveries. However, from that time onwards the service saw a steady decline in deliveries. I became aware of the problem of decreased patient numbers early on in my fieldwork. The Department Chair consistently talked about the problem of "underutilization" during department meetings. In my discussions with the Midwifery Service Director, she confided that she was under pressure from hospital administration to "do something about the numbers" but was offered no administrative support through marketing or in any other fashion. In fact, as the months went on I became aware of how the Midwifery Director's time was increasingly wasted on tasks that should have been taken up by lower level employees.

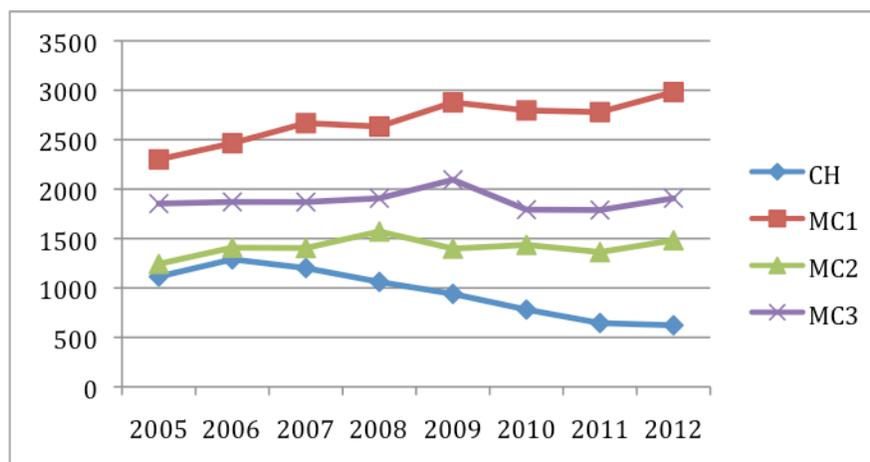
It was only after I gathered statistics from the state that I became aware of the degree to which Community Hospital steadily lost its clientele year after year. In 2013, not long after the closing of the service, I shared with one midwife the following chart comparing patient numbers between four hospitals, including Community Hospital. The numbers were a shock to her. "I had no idea," she stated to me. "I knew we were losing patients, but not to this extent."

The chart below shows a comparison of the number of deliveries for four hospitals from the years 2005 to 2012 - Community Hospital (CH) and three other hospitals in close proximity. MC1 is a large hospital, with a Level II neonatal unit and a service that is quite similar to Community Hospital in that it serves a low-risk maternity clientele. It was served by an

obstetrical resident service as opposed to the nurse-midwifery service at Community Hospital. MC2 and MC3 are both hospitals with Level III high-risk neonatal care units and are associated with medical schools.

Figure 11
Total Number of Deliveries From Years 2005 to 2012

	2005	2006	2007	2008	2009	2010	2011	2012
CH	1115	1289	1201	1061	940	781	645	622
MC1	2300	2464	2667	2542	2880	2796	2779	2981
MC2	1243	1408	1404	1571	1398	1436	1363	1482
MC3	1853	1870	1869	1907	2094	1792	1788	1907



The above Table shows an increase in deliveries concentration of deliveries for MC1, MC2 and MC3. By 2012, all hospitals, with the exception of Community Hospital, had deliveries at or above 1500 per year. The number of deliveries remained relatively stable for MC2 and MC3, the two hospitals associated with medical schools and both having maternal-fetal centers for high-risk mothers. MC1 shows the greatest increase in market share during these years. Community Hospital (CH) had its highest number of deliveries in 2006 (1,289 deliveries) followed by a steady decline to only 622 deliveries in 2012. Community Hospital was budgeted

for 800 deliveries and so within five to six years they were under budget. By comparison, Maternity Center 1 (MC1) had a steady increase from 2,300 deliveries in 2005 to 2,981 in 2012.

These numbers supported my suspicion that Community Hospital was losing its market share to MC1, a low-risk, high-volume maternity service. It appears that MC1 became the main competitor for Community Hospital during the years of the maternity service at Community Hospital. It is the maternity service that most resembled that of Community Hospital except that MC1 maintained an OB/GYN residency program. MC1 carried out routine and elective inductions. It did carry out VBACs during this time, although not to the extent found at Community Hospital. It did not have the same philosophical commitment to promoting VBAC.

MC1 had a more robust feeder system, probably due to its residency program, which made its service more attractive to private obstetricians. During my fieldwork, Community Hospital lost its referral arrangement with several community health centers. MC1 had a larger anesthesiology group and its delivery numbers were large enough so that it was able to provide dedicated anesthesiology to the labor and delivery unit. This made the epidural service for MC1's labor and delivery unit more timely and efficient – a matter of great importance to many pregnant women.

The decline in client base had a significant impact on the sustainability of the midwifery service at Community Hospital. Hospital administration spoke in terms of underutilization, code for increased cost per delivery due to lack of efficiency. This decrease in deliveries also placed the service under scrutiny with regards to safety – there were no statistics to suggest the service was unsafe but it has become accepted dogma within obstetrics that small maternity centers by their very nature are unsafe.

As mentioned above, two trends in health care have impacted small maternity units like Community Hospital. The first, regionalization, has involved the integration and coordination of prenatal care throughout a defined region. Ideally, all pregnant women identified as high-risk are referred out of small community hospitals to receive prenatal care and deliver at larger medical centers with specialists, including neonatologists and perinatologists, and a neonatal intensive care newborn unit (NICU). Regionalization, which has been rapidly embraced by most developed countries, is credited with a subsequent decrease in intrapartum newborn mortality rates.

Regionalization has also involved the reorganization of maternity units into three rankings based on the level of care available to the newborn - Level I, Level II, or Level III. Attempts at creating a uniform system for categorization of maternal and newborn care remain ongoing. However, regionalization brought with it centralization of maternity care with ever larger maternity units as hospitals compete to be considered a Level III hospital. With centralization of maternity care, there has also been “an increase in the number of neonatal intensive care units (NICUs) and neonatologists, without a consistent relationship to the percentage of high-risk infants” as well as “a proliferation of small NICUs in the same regions as large NICUs (Committee on Fetus and Newborn 2012:588).” This expansion of NICUs has made a consistent categorization of maternity services more difficult. Proponents of regionalization of care for the at-risk neonate see this proliferation of NICUs at lower volume hospitals as compromising an overall effort to direct at-risk neonates into the most advanced neonatal services. However, comparative qualifications of hospitals claiming to have NICUs have become increasingly difficult to determine, resulting in a subcategorization of Level III hospitals (Committee on Fetus and Newborn 2012).

What were originally considered Level 1 hospitals are few and far between in the United States. Level I hospitals are hospitals with basic neonatal care – the ability to resuscitate, stabilize and transfer the newborn with life threatening problems. Community Hospital was objectively a Level 1 hospital, although staff stated it was a Level II facility. Level II maternity units are those with a neonatal care unit and in house pediatric service. Level III maternity services are those having subspecialty care including the capability to carry out neonatal surgery. Level II and Level III hospitals have further subcategories. The significant point here is that the care of the newborn has become so specialized that even neonatologists have difficulty arriving at a consistent system for classification of neonatal intensive care units (Committee on Fetus and Newborn 2012).

The advantage of regionalization has been the transfer of mothers prior to delivery, who have been identified through prenatal screening as high-risk, so that at-risk newborns and mothers receive specialty care before, during and immediately after birth. Along with this trend of screening and referral to Level III maternity services during the prenatal period has been the development of the medical specialties of neonatology and perinatology, sub-specialties within pediatrics and obstetrics that focus on care of high-risk pregnancies and the newborn with life-threatening problems (Papiernik and Keith 1995).

Regionalization of maternity care has transpired in two distinct stages. The first stage involved the increase in number of transfer of newborns to Level III hospitals for treatment and/or evaluation. In the United States this regionalization stage occurred throughout the 1970s and 1980s. The second stage gained ground in the 1990s, where pregnant women were increasingly screened and transferred to Level III high-risk maternal-fetal services prior to delivery. Studies have shown that neonatal mortality and morbidity rates have decreased in

direct relation to shifts toward use of intensive neonatal care service through both increased neonatal transfers and increased maternal transfer in the prenatal period (Papiernik and Keith 1995). The consequence however, has been the closing of maternity units at smaller Community Hospitals. As I discuss later in this chapter, there are countries that are not convinced that the vigorous transfer of mothers out of smaller maternity units result in decreased perinatal deaths. France, for instance, has yet to embrace a policy of regionalization of maternity care and has a perinatal death rate similar to that of other European countries (Papiernik and Keith).

As a Level I maternity service, prenatal care at Community Hospital involved carrying out recognized standards of care with rigorous screening through physical examination, lab testing, and ultrasound at specified weeks of gestation. Appropriate screening at specific points in time during pregnancy has become a benchmark for measurement of quality of care during pregnancy. My observation of prenatal care by the midwives verified that the service carefully followed safe and consistent screening of patients. If anything, the service was quite conservative in its approach to screening and referral of patients who fell outside normal due to abnormal testing or observation. Quite a few patients were referred to the nearby high-risk maternal-fetal care center for a variety of reasons – screening with advanced 3-D ultrasound for fetal abnormalities; genetic counseling; assessment of the mother for conditions that can adversely impact on the mother or fetus such as diabetes or hypertension. Some of these patients were assessed by the high-risk center as appropriate for low-risk care and referred back to Community Hospital. Some were not. The midwifery service did not have statistics as to how many patients were lost to their care as a result of this aggressive referral system.

Size of a maternity unit is important to the quality of maternity care– the ability of all staff to *know* each patient intimately, know what is going on, the ease of communication. The

out-of-control use of technology is itself a major problem. However, it is the routinization of care made possible with ever larger numbers of patients that makes intensive technology efficient, where care is routine and comes to resemble the hospital equivalent of the assembly line. What we are seeing with the large hospitals and maternity units brought about by regionalization and centralization is the assembly line aspect of Fordism, as initially described by Antonio Gramsci (Walsh 2006b, 2009). It is also the industrialization/mechanization of birth as described by Odent (2002).

Level I maternity units have tended to be smaller and more intimate. Community Hospital was the only Level I maternity unit still in existence in the community. Its closure was characteristic of a nationwide trend toward larger maternity units. Regionalization and centralization of hospitals has resulted in a decrease in the number of hospital maternity services. This decrease in the number of maternity units throughout the United States can be attributed to a variety of factors. The relationship to regionalization of maternity care is apparent. 60% of maternity unit closures are at hospitals that are within thirty miles of another hospital that offers similar or higher level maternity service (Zhao 2007). Smaller units have found it difficult to maintain the staffing requirements, i.e. 24/7 onsite specialists such as pediatricians, obstetricians, anesthesiologists, neonatologists, and perinatologists, required of Level II and III services.

Reasons for this trend in closure of Level I maternity units are multifactorial. Obstetrics has become a highly litigious area of medicine and smaller number of deliveries present challenges in maintaining skills for all staff. For example, as all the deliveries at Community Hospital were low risk, I did not witness a neonatal resuscitation. The infrequent use of skills such as neonatal resuscitation can result in a perception of increased liability. A hospital with smaller number of deliveries has difficulty maintaining economy of scale and financial efficiency

when trying to keep up with changes in technology. Capital costs and staffing requirements enter into this problem of efficiency of scale. Hospitals that primarily serve mothers receiving Medicaid are particularly vulnerable to closure due to insufficient reimbursement. This was true of Community Hospital where Medicaid reimbursed for the care of 95% of maternity patients. Medicaid reimbursement in most states averages 50% of the actual costs of care.

Despite these rational factors involved in the closure of maternity units nationwide and the subsequent centralization of maternity care, units with a greater number of deliveries, there are other systemic factors at work. Zhao (2007) argues that the underlying reason for such closures primarily reflects changes in the medical profession itself. In his study he found that many hospital administrators at community hospitals consistently suggested that the decision to close their maternity service had much to do with the inability to attract family physicians and obstetricians to small maternity units. As an explanation of such closures, hospital administrators stated, "... it is more likely that other factors such as the 24/7 duty intrinsic to OB services and the desire of Ob/Gyns and family practitioners to maintain a more family-friendly balance between work and family/leisure are at work (Zhao 2007:v)."

A decision was made to close Community Hospital's maternity service and to transform its physical space into a skilled care unit – a unit that would be spill over from the Medical Center to which Community Hospital was associated. This decision appeared to be based on finances, or underutilization as it was continually referred to. At no time was it suggested that the midwifery service had a record of unsafe practice. A comparison of these four hospitals does bear out a relationship between number of patients and the cost per delivery. This cost by bed comparison is based on fiscal year 2011-2012. These figures show that with its dwindling

numbers, Community Hospital found itself at a competitive disadvantage from a financial standpoint.

Figure 12
Costs Per Delivery: Fiscal Year 2011-2012

	# Maternity Beds	# of Deliveries	Births per Bed	# Vaginal Deliveries	Cost per Vaginal Delivery	# Cesareans	Cost per Cesarean
CH	20	605	30.3	435	\$ 7,729	170	11,763
MC1	26	2,813	108.2	1,954	\$ 6,108	859	8,988
MC2	30	1,438	47.9	1,011	\$10,866	426	15,524
MC3	35	1,845	52.7	1,293	\$10,206	552	15,130

(Table based on "The Hospital Price Guide" of Community General's state.)

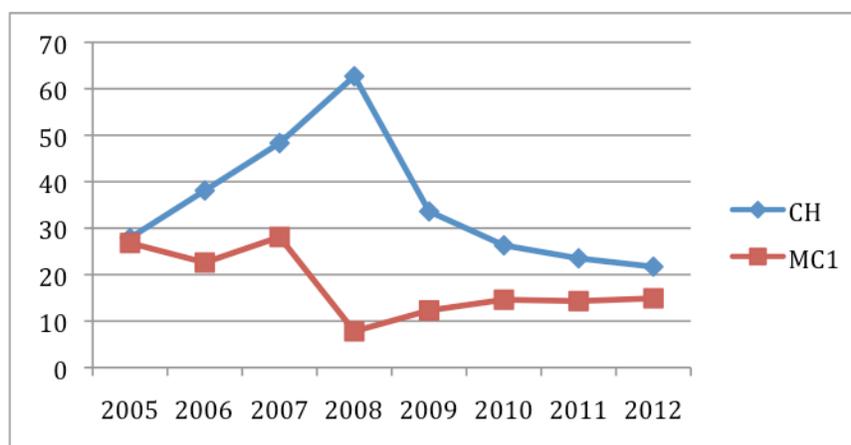
The cost per vaginal delivery at Community Hospital was \$7,729 compared to \$6,108 at MC1. MC2 and MC3 showed a cost per vaginal delivery of \$10,206 and \$10,866. Higher costs per delivery would be expected as many of the vaginal deliveries at the two tertiary care centers were high risk. However, the lower cost per vaginal delivery at MC1 does show a possible cost efficiency associated with its high number of deliveries per bed. Community Hospital had 30.2 births per maternity bed in fiscal year 2011-2012 compared to 108.2 births per maternity bed for its competitor, MC1, an astounding difference in efficiency. During my fieldwork, it was clear to me that the maternity service at Community Hospital often had empty beds.

The cost differential for cesarean births was similarly variable between the four hospitals. The cost per cesarean at Community Hospital was \$11,763 compared to its main competitor MC1, with a cost per cesarean of \$8,988. These are actual costs, not reimbursement. So we can see from fiscal year 2011-2012 the financial stress that Community Hospital's maternity service found itself under due to its lack of efficiency.

One factor in the increased cost and the poor competitive position at Community Hospital vis-à-vis MC1 can be explained by Community Hospital's VBAC policy. VBAC deliveries often require more time and more one-on-one staff to provide the emotional support required for a successful vaginal delivery following a previous cesarean. While MC1 did carry out VBACs during the years 2005-2012, the VBAC rate⁶¹ at Community Hospital was consistently greater – a direct result of an ongoing commitment and a strong pro-VBAC policy. That commitment to vaginal birth after cesarean is reflected in the following graph comparing the VBAC rate for the two hospitals. Community Hospital's VBAC rate actually climbed to 62.7 per 100 women with a previous cesarean in the year 2008. As seen in the chart documenting cesarean rates, 2008 was also the year when Community Hospital had its lowest cesarean rate – 20.1% of all deliveries.

Figure 13
VBAC Rates For Community Hospital and MC1: Years 2005-2012

	2005	2006	2007	2008	2009	2010	2011	2012
CH	27.9	38.1	48.3	62.7	33.6	26.3	23.5	21.7
MC1	26.8	22.6	28.1	7.8	12.3	14.6	14.3	14.9



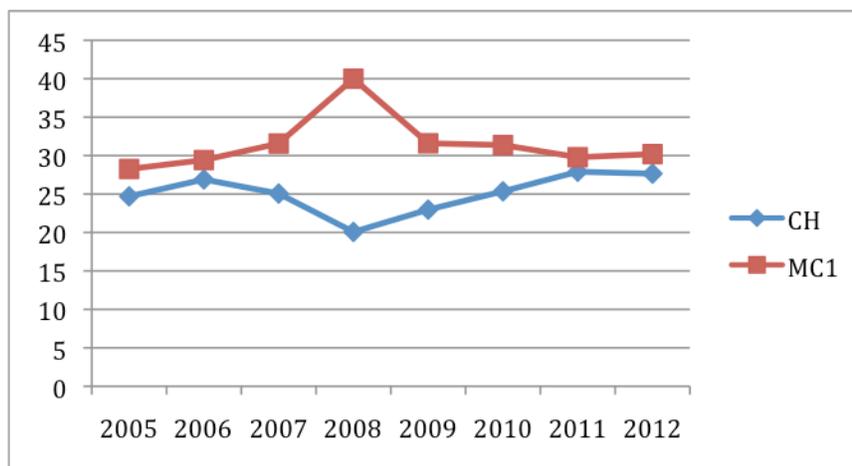
⁶¹ Vaginal Birth After Cesarean (VBAC) Rate: Number of vaginal births per 100 women with a previous Cesarean delivery. The VBAC rate is calculated as the number of VBAC deliveries resulting in a live birth divided by the sum of VBAC and repeat cesarean deliveries, multiplied by 100. (<http://www.marchofdimes.com/peristats/calculations>)

We see from the above graph that both MC1 and Community Hospital show a trend toward a decreased VBAC rate. It is important to look at the above trends in VBAC rates between these two hospitals in relation to their cesarean rate trends. Below is the data for the cesarean rates for both Community Hospital and MC1.

Figure 14

Cesarean Rates for Community Hospital and MC1: 2005-2012

	2005	2006	2007	2008	2009	2010	2011	2012
CH	24.7	26.9	25.1	20.1	22.9	25.4	27.9	27.7
MC1	28.3	29.4	31.6	40.0	31.6	31.4	29.8	30.2

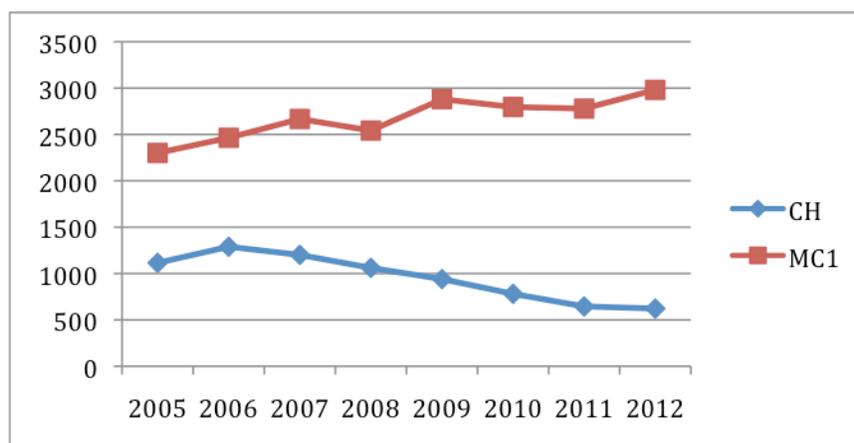


Now let us look at the overall trends in number of deliveries for Community Hospital and MC1.

Figure 15

Overall Deliveries for Community Hospital and MC1: 2005-2012

	2005	2006	2007	2008	2009	2010	2011	2012
CH	1115	1289	1201	1061	940	781	645	622
MC1	2300	2464	2667	2542	2880	2796	2779	2981



The above data, taken together, show an interesting trend. As Community Hospital's patient population decreased, its cesarean rate actually increased. At the same time, its VBAC rate also decreased. In contrast, as MC1 had an increase in actual deliveries, its cesarean rate remained relatively stable although its VBAC rate decreased.

The midwifery service did initially significantly decrease Community Hospital's cesareans with a rate of 20.07% in 2008, well below the national average. By comparison, that same year MC1 had a cesarean rate of 40%. However by 2012, the two cesarean rates had begun to converge with Community Hospital showing a 27.63% cesarean rate compared to 30.19% at MC1. What is bewildering is that the trend at Community Hospital, where the cesarean rate increased as deliveries decreased, is counterintuitive. It is actually contrary to what the

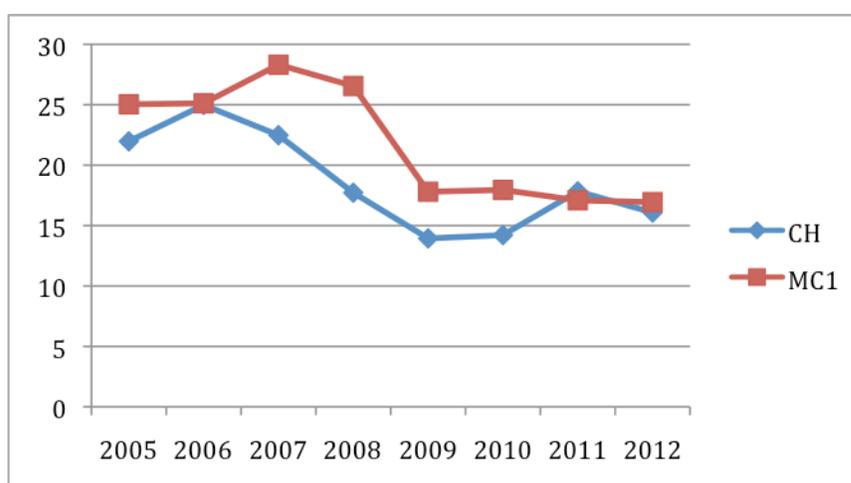
Midwifery Service Director thought was occurring. “Our cesarean rate is decreasing”, she stated to me. “As our numbers go down, we can give more individualized attention to each patient.”

One explanation for the convergence of the cesarean rates at the two hospitals may be found by analyzing the primary cesarean rates.

Figure 16

Primary Cesarean Rates for Community Hospital and MC1: 2005-20112

	2005	2006	2007	2008	2009	2010	2011	2012
CH	22.0	25.0	22.5	17.7	13.9	14.2	17.8	16.1
MC1	25.0	25.1	28.3	26.6	17.8	18.0	17.1	16.9



Primary cesarean rate is a very important measure because it is the main factor involved in the overall cesarean rate. Community Hospital accomplished a significant decrease in primary cesarean rates beginning in 2006 and reaching its nadir in 2009 where it was below 15%.

Following 2009, the primary cesarean rate began to rise at Community Hospital. MC1 showed a more significant decrease in its primary cesarean rate during these years. At the same time, the midwifery service at Community Hospital showed a significant decrease in its VBAC rate. One

midwife confided that she saw a change over time in physician attitude regarding VBACs and cesareans in general. There was a growing reliance on per-diem obstetricians during these years, obstetricians who may not have shared a commitment to preventing cesareans. As I described earlier, the physicians at Community General also began to undermine the service's commitment to avoid unnecessary inductions – a likely factor in increased cesareans.. Additionally, midwives and physicians alike observed a growing number of extremely obese mothers, another possible factor in the increased cesarean rates. All of these factors likely had an impact on the ability of the service to keep down its cesarean rate. By 2012, there was little difference between Community Hospital and MC1 with regard to measures related to cesarean.

The increased cesarean rate shows a subtle change in the culture at the midwifery service. It reflects the reality of ultimate decision-making in collaborative relationships between midwife and obstetrician. It also reflects the change in attitude regarding induction, as I have previously described.

Is Larger Safer?

Adding to the difficulty in discussing smaller, less efficient, maternity services is the issue of safety. Proponents of the centralization of maternity services have maintained that labor and delivery units with fewer than 1,000 deliveries per year have poor safety records that justify their closure. The trends toward regionalization (the channeling of high-risk mothers to regional hospitals with Level III neonatal services) and centralization (fewer maternity units with larger number of annual deliveries) have worked together synergistically in the closure of small maternity services at community hospitals. The two trends have advanced the shift toward fewer and larger maternity services, increased volume/number of deliveries per service. With

increased centralization of maternity services, discussion has taken place among researchers as to the comparative safety of larger vs. small maternity service. In looking at these studies, one perceives that in some ways centralization has been a solution looking for a problem.

Early studies during the regionalization phase of maternity service reorganization documented a direct correlation between improved neonatal death rates in low birth weight infants at large maternity units, which tend to have neonatal intensive care units (NICU) staffed by perinatologists (Moster et. al. 2001; Holmstrom and Phibbs 2009). There is overwhelming consensus that regionalization, with organized referral of high-risk pregnancies to perinatal centers, has resulted in a significant decrease in perinatal mortality in developed countries. There is less agreement on the issue of centralization of maternity services.

These findings have led to a logical question: Is there a correlation between neonatal death rates in full term, normal weight healthy babies and size of maternity unit? One of the first quantitative studies to look at this issue was by Heller et. al. (2002) analyzing birth data in Hesse, Germany from 1990-1999. The study has come to be referred to as the “Hesse Study.” Data from 582,655 births was collected retrospectively from the perinatal birth registry for the German state of Hesse. The Hesse Study had the advantage over earlier research by having the ability to look at a specific geographic area with a highly regionalized maternity care system thereby correcting for urban/rural bias.

During this period in time, a system of regionalization was in place in Germany with aggressive transfer of pregnant women identified as high-risk and newborns born with life-threatening problems transferred to perinatal centers (hospitals with a neonatal intensive care unit/NICU). As expected this study found that this system of referral had resulted in decreased early-neonatal mortality rates, newborn deaths within the first seven days of life. The Heller et.

al. study categorized maternity centers by number of births per year: very small units with 500 or fewer births; small with 501 – 1000; intermediate with 1001-1500; and large with more than 1500 births per year. Under this categorization system, the midwifery service at Community Hospital would be categorized as intermediate between the years 2005 to 2008 and small in subsequent years.

Heller et.al. looked at the question as to whether volume of births impacted the neonatal death rate of normal newborns, those born at term of normal size (weight > 2500 gms/5 lbs 8 oz). Infants born with congenital abnormalities were discarded from the study group, which ultimately included 95% of births during the ten years of study. When analyzing newborn mortality rates of low-risk, normal weight babies, there was shown to be an inverse relationship between the volume of a maternity site and newborn mortality rates. “Very small units showed the highest death rate...whereas in large delivery units the lowest early-neonatal deaths... was seen (Heller et. al. 2002:1063).” This relationship between size and neonatal mortality was found at all levels. The larger the volume of births, the lower the neonatal mortality rate for normal size, full term, and low-risk newborns.

The Hesse Study surprised researchers, as the deliveries at smaller maternity units were low-risk. One weakness of the study is that it excluded maternity services exclusively staffed by midwives. However, the Hesse Study by Heller et. al. began a vigorous policy debate as to whether there is a volume/outcome relationship in maternity care systems. Should regionalization and centralization of maternity care be aggressively extended to all pregnancies?

Moster et. al. (1999), in a study of perinatal mortality rates in Norway that also used birth registry data, came to the same conclusion as the Hesse Study. A similar 2001 study evaluating neonatal mortality in Norway (Moster et. al. 2001) arrived at the same conclusion: a small but

significant decrease in neonatal death is associated with larger maternity units. However, the differences in the volume/outcome relationship were not as significant as found in the Hesse Study. Moster suggests that issues of expertise, equipment and experience can ease the impact of volume on neonatal outcome in small maternity centers. Moster et. al. (2001:908) state that the improved outcomes seen in larger maternity sites may be explained by “better care and access to rapid intervention during delivery, resuscitation of the newborn, and identification and management of newborn infants with unexpected malformations and various illnesses...” Holmstrom (2009) suggests that although the Hesse Study and the Moster research utilized a large database, the perinatal mortality rate among normal weight low risk newborns is so low that the studies lack statistical power.

Phibbs (2002) warned against using the Hesse Study to establish maternity care policy without careful thought as to unintended consequences. Phibbs calls for replication of the studies using even larger study groups. If the Hesse Study is found to be valid, Phibbs also questions the ability of some countries and regions to safely concentrate all maternity patients into large regional units. What are the costs - social, personal and financial - for such a shift to occur? Are these costs worth the small number of potential lives saved? How large must a maternity unit be in order to gain the advantages that may account for a decreased neonatal mortality rate?

At this time, the Hesse Study has not been consistently replicated. An analysis of the relationship between neonatal mortality and size of maternity unit in Australia does not show adverse outcomes for normal newborns born in small units (Tracy et. al. 2006). In New Zealand, a small country with a tightly organized and regionalized maternity system, Rosenblatt et. al. (1985) found results directly contradictory to that of the Hesse Study. “...In New Zealand,

women who deliver in small, mostly rural Level 1 hospitals have the highest likelihood of bearing children who will survive the first week of life (p. 430).” They also state that, “It is also possible that there is an advantage, particularly for normal birth-weight children, in being born in smaller obstetric units. There is no evidence that a satisfactory outcome depends on a minimum number of deliveries (Rosenblatt et. al. 1985:429).” Studies that analyze the relationship of obstetric volume and perinatal mortality also ignore the increase in the unnecessary use of technological interventions. Coulm et. al. (2012), in a comparison study of maternity units by size, point to the fact that the larger the maternity unit the greater the use of interventions – for example, increased induction, cesarean delivery, episiotomy, forceps.

The issue of unintended consequences inherent in regionalization/concentration has been identified most notably in Quebec. A long-standing policy of evacuation of rural Inuit mothers to urban hospitals with high-risk maternal-fetal services resulted in poor neonatal outcomes and severe stress on communities and families. A radical change of health care policy has been implemented with most mothers cared for at community-based birth centers with trained indigenous midwives. These birth centers are truly midwifery-led. This public health policy, which runs contrary to conventional obstetrical practice, has resulted in improved neonatal and maternal outcomes. Mothers are screened for risk and a small minority of mothers, particularly those in preterm labor, are still flown out of the community to perinatal centers. However, the policy for this community states that risk involves more than biomedical markers.

Risk screening is a fundamental principle of safe care in this remote setting. The whole concept of risk in birth, however, is conceptualized in a much broader context than protocols or risk scoring systems. Risk screening is seen as a social, cultural and community process rather than simply a biomedical one (Van Wagner, Epoo and Harney 2007:387).

The Canadian experience of decentralization of birth within the Inuit community brings into question an inevitable correlation between regionalization/centralization of maternity care and improved outcomes. A Canadian report has shown that the overall perinatal mortality rate for the region where these community-based birth centers have been established is 9 neonatal deaths per 1,000 births. This compares favorably to the overall Canadian neonatal death rate of 8-10 deaths per 1,000 births (Van Wagner, Epoo and Harney 2007).

A study of regionalization in California (Snowden et. al. 2012) did find a relationship between unit volume and newborn asphyxia. This was true for all births, including normal birth weight newborns. However, no correlation was found between unit volume and neonatal mortality rates among low risk, normal newborns. The authors of this study point to the difficulty inherent in large cohort studies that draw exclusively on discharge data. Such data invariably miss significant but subtle and potentially confounding variables such as staff expertise, staffing levels and patient characteristics. They call for observational studies in order to gain a more nuanced understanding of the issue of safety in small maternity units.

Can There Be Safety in Small Numbers?

Studies that have claimed a correlation between small maternity units and poor outcomes have been methodologically weak, failing to account for important variables including:

- Staff experience and longevity.
- Protocols for neonatal resuscitation drills.
- Lack or presence of universal protocols within a region.
- Conformity of practice guidelines.
- Poor distinction between physician vs. midwifery-led maternity units.

- Not accounting for aggressiveness of referral for high-risk pregnancies nor uniformity in criteria for referral.

Given the international debate regarding the safety of small maternity units, I was interested in obtaining data regarding neonatal outcomes at the midwifery service at Community Hospital. I have been unable to obtain certain outcome data with regards to perinatal infant mortality or maternal mortality. The data I was able to collect that best reflects the issue of safety of the newborns born in a low-risk, small maternity unit is that of the measurement of the category “normal full term infants born with life-threatening problems.”

This data was maintained by the state and I was able to compare Community Hospital’s outcomes, using this measure, with that of the three nearby hospitals previously discussed. I obtained newborn data for the years 2005-2012. Each hospital coded newborns within specific categories. Because of Community Hospital’s aggressive referral of high-risk mothers, I felt that fair comparison could be made only of the outcomes of newborns that were born normal and full-term. In fact, Community Hospital, as to be expected, reported very few preterm newborns. The total number of deliveries for each hospital each year was too small to establish outcome statistics of any significance. What I have done is to look at the data in total for these seven years. The results are seen in the following table.

Figure 17
Percentage of Normal Full Term Newborns Born With
Life-Threatening Problems

	Total # of Normal, Full Term Newborns 2005-2012	Total # of Normal, Full Term Newborns Born with Life-Threatening Problems	% Normal, Full Term Newborns born with Life-Threatening Problems
CH	5160	223	4.32
MC1	9011	1658	18.40
MC2	2598	1487	57.24
MC3	4045	2172	57.70

The above data shows that large and efficient does not necessarily mean safer. MC1 is the largest maternity service as well as the service most comparable to Community Hospital with regards to the acuity level of its maternity patients. Despite a larger number of deliveries, the maternity service at MC1 does not provide improved neonatal safety when compared to Community Hospital. In fact, the data above shows that over a seven-year period, normal, full term newborns born at MC1 were greater than four times more likely to suffer life-threatening problems than similar newborns at the midwifery service at Community Hospital. Why? I can only speculate. Perhaps the very presence of residents, who are viewed by some as more highly skilled and knowledgeable, lures the service at MC1 into a false sense of security. I can say with authority that the aggressive protocols for referral I saw implemented at Community Hospital's midwifery service shows in its excellent neonatal outcomes. I can also state that during my fieldwork I did not witness a single case of newborn asphyxia or a newborn resuscitation. It is possible that in situations where safety is not a true problem, for a small maternity service the underlying reason for closure is in fact efficiency of care. I have to wonder if the midwives at Community Hospital, with their strict standards of risk screening thereby decreasing their numbers, ironically placed the service at a disadvantage and therefore played a role in their own undoing. The service was budgeted to break even at a minimum of 800 deliveries per year and they were well under 600 at the time of their closure.

The pace of centralization of maternity services continues throughout the developed world. The justification for this trend has been safety for mothers and babies. Due to the closure of most hospital maternity services with volume less than 1,000 deliveries per year, it is difficult to discuss the issue of safety with regards to volume size for hospital births in the United States. We can see that in the case of the midwifery service at Community Hospital, when compared to

a large low-risk hospital (MC1), centralization and increased size of a maternity unit does not necessarily lead to improved outcomes when comparing normal, full-term newborns. Another example can be found in the reported outcomes for freestanding birth centers in the United States, maternity services that best mirror that of the small maternity units in community hospitals that have closed down.

A recent study has analyzed outcomes at American freestanding birth centers using data obtained through a registry maintained by the American Association of Birth Centers (AABC), an agency that establishes national standards of care for freestanding birth centers. This study (Stapleton et. al. 2013) present 2010 data of neonatal outcomes at seventy-nine American birth centers cooperating in the AABC Uniform Data Set (UDS). Data included 22,403 client records with a final data set of 15,574 mothers – the other subjects having been lost through first trimester loss, or nonmedical transfer by mother's choice to a hospital setting. 13.7% of the subjects were transferred to physician care for medical reasons. The final study sample of birth center births represented mothers who were eligible for delivery at a birth center at onset of labor.

This study sample is of interest because it represents births where rigorous screening has occurred per protocols established by a credentialing agency – the Commission for the Accreditation of Birth Centers (CCBC) – protocols that are designed to identify medical or social risks that would preclude the probability of a safe, uncomplicated delivery in a birth center. Few of the birth centers engaged in a trial of labor after cesarean (TOLAC). The neonatal mortality rate in this sample of low-risk deliveries was 0.40/1000. Anomalies were excluded from this statistic.

The outcomes of credentialed freestanding birth centers compare favorably to other studies of low-risk vaginal deliveries. Stapleton et. al. (2013) contrast the neonatal mortality rate outcomes of freestanding birth centers in the study's 2007–2010 cohort, 0.40/1,000 births, to the U.S. neonatal mortality rate for normal weight newborns in 2007 - 0.75/1,000.⁶² The authors point out that the overall neonatal outcomes occur in a maternity environment that involves increased use of interventions and technology, including increasing cesareans. They also assert that their findings are consistent with previous studies of American freestanding birth centers. “This consistency speaks to the durability of the birth center model over time, despite increases in the rates of intervention and cesarean birth nationwide during the same period (Stapleton et. al. 2013:8).” Of equal importance, the authors highlight that “The cesarean birth rate in this cohort was 6% versus the estimated rate of 25% for similarly low-risk women in a hospital setting (p. 9).”

When normal deliveries occur outside the hospital setting, the financial implications for the American health care system deserves to be part of the discussion. Stapleton et. al. (2013) point to the fact that the cost of childbirth in 2008 accounts for 23% of hospital discharges. Childbirth is associated with five out of ten most common procedures performed in hospitals. “In 2008, hospitalization for pregnancy, birth, and care of the newborn resulted in total hospital charges of \$97.4 billion, making it the single largest contributor as a health condition to the national hospital bill (p. 3).” They claim that when their study is taken in conjunction with previous outcome studies of birth centers, 85% of pregnant women in the United States could be cared for and delivered safely with less intervention and greater patient satisfaction resulting in significant savings in health care expenditures.

⁶² Neonatal mortality rates were obtained from the CDC.

The high cost of hospital birth in the United States occurs in the context of our system that relies on highly technological birth according to Stapleton et.al. (2013). Specifically:

1. Our cesarean rate in 2010 was 32.8%.
2. Induction of birth has increased by 140% since 1990 and is now at 22.8% of all births. I would argue that this figure is likely underestimated.
3. 90% of births involve continuous electronic monitoring.
4. 75% of women receive epidural analgesia.

“The potential savings from the cost of care and lower intervention rates,” state the authors, “highlight birth centers as an important option for providing high-value maternity care (Stapleton et. al. 2013:9).” According to the authors, a review of the Cochrane Database shows that “British studies of place of birth, and US studies comparing midwifery and obstetric care... suggest that midwifery-led birth center care is a safe and effective option for medically low-risk women (Stapleton et. al. 2013: 8).” They also conclude that given the documented outcomes, “Birth centers and their midwifery-led, collaborative model of maternity care continue to offer an important solution to any of the issues affecting the quality and cost of maternity care in the United States (Stapleton et. al. 2013:9).”

It is sad and ironic that the midwifery service at Community Hospital systematically began to lose its client base, or as some would say its market share, despite its excellent outcomes. There are a variety of reasons for this. I have spoken previously about the intense competition that existed between hospitals for patients. Also, as I’ve discussed previously, observed that some women in Community Hospital’s catchment area were at odds with the midwifery service’s philosophy to not carry out routine, elective induction.

There is another delicate issue. At some point in time, Community Hospital came to be associated in the community as the “black hospital.” It was also associated as “the place where

people go to die.” Indeed, I can safely estimate that 95% or more of the maternity patients were African American, although the ethnic breakdown of patients is not a statistic kept by the hospital. Very few of the patients were privately insured; almost all were on various forms of Medicaid. In this hospital’s state, a mother on Medicaid had the right to choose which hospital to go to for delivery. The patients who chose to come to the nurse-midwifery service at Community Hospital did so knowing that they would have humane and respectful care along with the technological procedures they desired. There were other patients who held the view that the hospital was behind the times and desired the more technocratic model offered by nearby hospitals. They wanted their induction. They wanted their epidural as quickly as possible. In their minds, they would receive inferior care at the city’s traditionally black hospital.

Ultimately, the situation faced by the midwifery service was one of underutilization. The midwifery service was under immense financial pressure during the time of my study. This was partly due to the fact that almost all patients were on public insurance. It is difficult for any hospital to survive financially without a mixed payer base. Despite the fact that maternity care is relatively well reimbursed by Medicaid in Community Hospital’s state as compared to private insurance, the fact remains that Medicaid reimbursement in general is 50% that of private or commercial payers. Despite Medicaid’s decreased reimbursement, there is now competition among hospitals for maternity patients on Medicaid in some states unlike the situation in the not too distant past.

When I first began my fieldwork I became initiated into the new terminology of the modern obstetrical service, terminology that has been adapted from business and reflects the basic market orientation that has taken over modern medicine. People spoke in terms of “market share”, the percentage of patients served by your service within a given “catchment area.” Other

hospitals and maternity services are “competitors.” Reimbursement, payer mix, utilization, and efficiency – these are words that I had never before encountered. Like most nurse-midwives, the economics of providing maternity care was not within my scope of awareness or experience. These became topics of concern only as I realized early on in my study that the midwifery service was under intense pressure due to what they were told was underutilization.

It took awhile for me to understand what I was seeing – the nurse-midwives were attempting to keep their primary concern on providing optimal care to their patients all the while aware that larger forces placed their service at risk. In the end, the demise of their service had nothing to do with the quality of their care. The service provided an intimate maternity service with great patient satisfaction and excellent outcomes. The closure of the maternity service had to do with demographic changes as well as efficiency and underutilization. Their ground, literally their physical space, was needed for a medical service more in line with the hospital’s profit margin. A small intimate maternity center with good outcomes was not a priority for the centralization strategy of the hospital administration.

The first time I became aware that the hospital administration had plans to shut down the maternity service, I was walking around the unit with the Midwife Service Director. I commented on the fact that there were so many family members crammed into a patient’s room during a delivery. It seemed in many cases that the mother did not necessarily desire so many people to be present. It also interfered with care by the midwife and nursing staff. “Isn’t there a place for family members to wait,” I asked? The Director sighed and said, “Do you know what is on the other side of this wall?” She pointed to a wall we were standing in front of, the wall at the end of the hallway that I previously called “the wall to nowhere.” “There is nothing on the other side of this wall. Half of this floor is empty. When the hospital renovated this unit we begged

for a waiting room and we didn't get it. When they shut us down, this wall will come down and the entire floor of this hospital will be a skilled nursing care unit." This was at a time when the hospital administration kept telling the midwifery service that they needed to "do something" to bring up their number of deliveries. The hospital administration did nothing to help increase the census, complained of underutilization and then used underutilization as an excuse in order to justify shutting down the maternity service and using its space for another purpose.

The description of this one hospital and its position vis-à-vis the larger local medical system is by no means representative of maternity care throughout the country. In many areas, pregnant women must drive many miles to the nearest labor and delivery service. This picture of women being able to pick and choose between hospitals, and hospitals competing to deliver their babies, will likely seem bizarre to women in many communities. For many women there is no such choice. For many women, induction is a choice made by a family because the nearest maternity service is miles away and induction guarantees getting to the hospital on time.

What this picture reflects is the business nature of childbirth in the United States and the financial incentives involved in the American system of childbirth. Cesarean section has become the most frequently performed surgical procedure carried out in hospitals. Planned and unplanned cesareans, planned inductions along with the routine epidural and the interventions that accompany it not only account for rising hospital costs of childbirth. They also account for the growing importance of labor and delivery as a cash cow for hospitals. Dr. Jeff Thompson, a fellow within ACOG and a strong proponent of childbirth reform, has been quoted on the financial significance of American childbirth practices to our system of childbirth. "Birth", he says, "keeps the lights on in hospitals (Weeks: Huffington Post 08/29/2012)."

Throughout my fieldwork, Community Hospital was slowly hemorrhaging as patients chose to go to the large medical centers nearby to deliver their babies. This continued to happen despite the fact that it was a small, intimate, clean, maternity center – a service that also utilized the latest technology. With its spacious single rooms, led by empathetic, highly trained nurse-midwives, it was literally steps away from large maternity centers. The maternity floors of these medical centers were so busy that women would often be placed in a bed in the hallway waiting for a labor room bed to come open once a baby was born and a mother transferred. It was not unusual for a baby to be born in the hallway. Their baby would be delivered by a resident who would mark the delivery in his black book, counting the delivery as one more towards his necessary number of deliveries. An episiotomy? All the better. Another check. Low forceps or vacuum extraction? Check again. Another cesarean? Check again.

The women turning their backs on Community Hospital, taking these steps away from a small intimate maternity setting, choosing to give birth in a large, inhospitable, cold setting were for the most part African American women on public insurance. It was completely their choice and that choice was made quite self-consciously. I have earlier discussed this phenomenon: It is a complicated phenomenon, that American women including poor women of color are embracing epiduralized birth to such a large extent.

Community Hospital at one time had the lowest cesarean rate in the state at 22%, when the national rate is 33%. It can be argued that this differential is a result of self-selection – complicated pregnancies were screened out of the service and high-risk women referred to the perinatal service at a nearby medical center. At the time, the nurse-midwifery service held a high commitment to avoiding cesareans, a commitment shared by the physicians who provided

backup. Early in its history, it was the only maternity service in the city where a mother who had a previous cesarean birth could receive a VBAC.

The nurse-midwives worked hard to help a woman birth vaginally, holding this as a key mission on their part. On a conscious level, inductions were avoided and carried out only for clear medical reasons. Women would beg for induction, tired of being pregnant. The nurse-midwives attempted to refuse to routinely induce labor, carefully explaining to mothers the risks associated with unnecessary induction. Some patients presented to another hospital, as they knew that all the other hospitals surrounding Community Hospital would gladly induce them at their request. The nurse-midwife on duty could only sigh as the request for the mother's prenatal records came through on the fax. One nurse-midwife told me, "When I have turned a mother away for the second time who has walked into the service asking for an induction, I am so torn. I know we won't see her again. Instead, we will soon be receiving the request for her records come through by fax." This competition for deliveries and the willingness of obstetrical units to admit a patient for induction upon request, a patient who they had never seen previously, shows how complicated the concept of choice is when discussing the decision making of mothers. Certainly those hospitals admitting a mother for induction, who has received prenatal care elsewhere, are acting out of their own corporate self-interest.

At Community Hospital, women who wanted a water birth could take advantage of several large tubs in which to do so. During my months of observations, I did not see one episiotomy performed. Once during a difficult Stage Two, pushing, a doctor was brought in to perform a vacuum extraction. The service at Community Hospital was clearly progressive in serving the needs of women desiring a low-tech birth.

At the same time, I watched as birth activists in the community – overwhelmingly white, suburban middle class women - blogged about their struggles, their difficulty in finding a doctor who was willing to incorporate VBAC as an option in their clinical practice.⁶³ I heard them complain that their obstetrician demanded, and scheduled, a routine induction at 38 to 39 weeks.

I would point out to these birth activists the existence of an excellent service where they would be treated with respect and dignity; where they would be allowed the VBAC they so desired if all went well; where they did not have to accept an induction that would be carried out for no good medical reason but rather for the convenience of the hospital and the physician, an induction that would only increase their chance of a cesarean – the very thing they professed to want to avoid. When confronted with this option -Community Hospital - what ensued were criticisms of Community Hospital that did not attempt to hide the racism that lurked behind the comments. Community Hospital was “unclean” birth activists routinely claimed. This was not true. My observations showed that the maternity floor far exceeded standards. The labor and delivery rooms were as spacious and clean as I have seen in any other hospital. It was claimed that someone knew someone who was told by someone else that security guards at the emergency room entrance at Community Hospital were seen smoking marijuana. I saw nothing like this while I was at this hospital. And then would come the *pièce de resistance*: “I would not drive through that part of town to go to the hospital.”

Among the local birth activists these racist statements went unchallenged and accepted as reasonable reasons for not availing themselves of the very service that could provide the care they professed to want so badly. Essentially, the reasoning was: “I’ll take my chance at such and

⁶³ The American College of Obstetrics and Gynecology in 2006 changed its position on VBAC, stating that under certain conditions a VBAC was a safe birth option. In 2010, ACOG further expanded its VBAC policy to approve under certain medical criteria to allow for VBAC after two cesareans (ACOG Practice Bulletin 115, August 2010). Despite this official change in position, many obstetricians continued to refuse to offer their patients the option of VBAC. Routine induction and cesarean birth has become a ubiquitous part of the Gleichschaltung of American birth that I have described.

such a hospital knowing that they insist on inducing me, knowing that my chances at having a cesarean are increased, knowing that I will not be able to have the VBAC I so badly want – all because I do not want to drive through *that* part of town.”

The closure of the midwifery service at Community Hospital raises questions regarding risk and the underlying bias of evidence-based practice, both concepts that have recently become in vogue within the health professions. The service’s closure, and the growth of larger hospitals nearby, begs another question. Are there reasonable limits to regionalization and centralization of maternity care? By 2002, women in 44% of non-metropolitan counties had absolutely no maternity care as compared with 24% in 1985 (Zhao 2007). The continued concentration of maternity services along with the burgeoning of NICUs is not uniquely American. Other Western countries have seen similar trends but to a lesser extent. Our reliance on technology and NICUs as a disproportionate part of our prenatal and perinatal care, has translated into greater health care costs but without improved neonatal and infant outcomes (Thompson, Goodman and Little 2002).

Declercq et. al. (2001:8) provide a similar observation. Concentration of childbirth into larger and larger maternity units is justified not only by arguments surrounding safety for both mother and baby. It is justified as economical by the ability to capture the economies of scale. However, with the technological imperative that comes with centralization of care, childbirth has actually become more expensive.

The hospitalization of birth encourages the use of technologies that can only feasibly be applied in a hospital. As the twentieth century progressed, hospitals became centers where new technologies could be easily tested and then applied to large numbers of women. The concentration of women in one place made the training and staffing needed to maintain the technologies clinically safer and economical feasible: the presence of the latest scientific technologies (e.g. fetal monitors and epidural anesthesia) in hospitals served to enhance their prestige as centers of science.

Hospitalization of birth also has a variety of economic and social consequences. It makes feasible a larger client base for providers, a particularly important issue in those countries whose funding system rewards physicians for the size of their practice. It also eases the demands on providers and allows health planners to make care more “efficient.”

Bringing large numbers of patients to a central location is much more economical for providers and planners – than providing care in homes or in a series of small “cottage hospitals”. *If one considers birthing mothers to be economic units, the larger the site, the greater the potential for economies of scale. The irony of this approach is that it often leads to large birthing hospitals also becoming centers of elaborate, and very expensive, technology, the use of which make birth more costly. (Emphasis mine.)*

Does the continued concentration of maternity care into large medical centers serve well our mothers and children? The case of Community Hospital’s midwifery service suggests that it does not. The tragedy of it all was the lack of support for the midwifery service by the hospital administration. Hospital administrators, when presented by the midwives with strategies to improve the community impression of the maternity service, were intransigent. The initial decline in deliveries was precipitated by the closing of a community outreach by the hospital where free pregnancy tests were offered and referral to the midwifery service provided. I now realize that the decision to shut down the maternity service had already been made when I arrived for my year of fieldwork. The underutilization of the service was to a great extent a result of long term decisions made by health care bureaucrats who cared not a wit about what the midwives at Community Hospital were attempting – keeping hold of a safe place for normal birth within their community. Nor was the welfare of mothers and babies in the community a consideration.

At the 2014 annual meeting of the American College of Midwives in Denver, I encountered one the midwives who had worked at Community Hospital. I had interviewed her and had spent hours watching her provide dedicated care to mothers. We were standing in front of the elevators and I hugged her. “I hear you have moved to Hospital X and you are making

more money. You know the closing of the service at Community Hospital was inevitable,” I said. She looked at me with a bitter face and said, “I guess I was just naïve, but I really thought that the hospital cared about the mothers. I really didn’t believe they would close us down.”

Conclusion

In this conclusion I summarize what I have seen and learned throughout my research and the writing of this dissertation. At the same time, I believe it is my responsibility as a researcher to provide some direction and policy recommendations, to provide some thought as to the way forward.

When I began my research, I expected to focus my observations on nurse-midwives, attempting to determine the clinical activities that accounted for their positive outcomes that so many studies had shown. I found nurse-midwives who are dedicated to their patients, midwives who work tirelessly to bring humane, personalized, safe care to mothers. However, I was unsettled to discover the extent to which the American way of birth, including care by nurse-midwives, has come to be defined by the intensive use of technology. Our epiduralized birth system, our Gleichschaltung of birth, has taken medicalization to a new level.

At one time birth technology was life saving. Our understanding of aseptic and sterile technique, along with antibiotics, has made death from infection rare in wealthy countries. When faced with a postpartum hemorrhage, pitocin is life saving. However our intensification of technology has changed our use of technology where it is now a threat to ecological birth: All of it in the name of choice.

What has choice brought us? In the United States, epiduralized birth has been a result of market forces and the drive of Fordism to manage labor and increase the production line of the hospital maternity unit, to control the variance inherent in maternity care in order to maximize efficient staffing and bed utilization. Obstetricians want control over their schedule to maximize earnings and efficiency, all the while enjoying to the greatest extent possible a nine to five job rather than the 24/7 schedule inherent to birth – in physiologic birth babies come when it is their

time to come. ACOG formally supports elective cesareans, primary cesareans with no medical indication, in the name of choice (ACOG 2013). Mothers want epiduralized birth with the promise of a painless birth and to have control over when a baby comes – an advantage to families in our modern society. However, mothers are often not given the *evidence* that is available that shows the *extent* to which much of the technology they seek is very possibly unsafe.

A fundamental irony surrounding privilege and epiduralized birth is clear. There was a time when access to an epidural was limited to women of means, those who were most likely to be covered by generous insurance policies. For other mothers, those on Medicaid or uninsured for example, the epidural was a symbol of inequality. These mothers now embrace epiduralized birth as a right while white childbirth activists are questioning the safety of highly technological births. Childbirth activists are refusing induction, wanting to experience their pregnancy uninterrupted by induction and wishing to experience the existential moment of their birth without intervention. For most working women, spontaneous vaginal birth is a privilege. For these women, knowing the exact day that they will give birth enables them to find day care for their other children, arrange transportation, stay working as long as possible – all the parts of daily life that poor and working mothers bear.

Our intensification of birth technology is contrary to ecological birth. It runs contrary to the understanding that in most cases birth is physiologic and does not require such intense technology. With our practice of epiduralized birth, we are changing the hormonal balance in childbirth that has been so carefully crafted over thousands of human generations – a physiology of birth that has been finely tuned to promote the best results for the mother and newborn, particularly maternal/infant bonding. These changes have been implemented without evidence

that the technology being implemented is safe to for our mothers and babies. In fact, as I have shown in this dissertation, there is clinical evidence that much of the technology we use may be harmful to both the mother and fetus. Too often, convenience trumps evidence in the interventions that are carried out on mothers and babies.

Midwives are frustrated because they have little control over any of this and epiduralized birth runs contrary to their belief in physiologic birth. They find themselves caught between the demands of the players in this epiduralized system of birth. It is not only practicing nurse-midwives who face this conflict between the ideals of the profession and the reality of day-to-day clinical practice. Remember my discussion about Kennedy's (2010) findings on the incongruence between theory and practice expressed by nurse-midwifery students? Kennedy (2006) revealed a "theory-practice" gap in her study of nurse-midwifery students, where 50% of the student respondents identified the divergence, or an incongruity, between what they were taught and the reality of the clinical practice they had seen as students. Nurse-midwives *believe* in physiologic birth but in many clinical settings are unable to put into *practice* the values and beliefs they hold dear.

I observed that it is difficult for midwives to break with the Gleichschaltung of birth, the assembly line of birth of the American way of birth as well as the reinforced relationship of interventions held together by the epidural. The intensification of technology during childbirth is greatest in the United States with other developed countries following suit. What is clear is that in the United States, our fascination with technology and the lack of a strong consumer movement against epiduralized birth makes it difficult for nurse-midwives to practice according their beliefs.

The American system of epiduralized birth will not change without a truly independent midwifery. This will not be easy because I have found that even in the Netherlands, a place seen as Mecca by birth activists, midwives are not truly independent and are rapidly losing their share of births. Only an independent midwifery will have the power to carry out accurate, evidence-based informed consent where women are told the truth about the potential dangers of epidurals and pitocin, so central to our epiduralized birth.

Direct-entry midwives will be unhappy with my next assertion. I believe that a truly independent midwifery, a midwifery that holds the respect required within the modern health care system and among consumers, will only occur in the context of training within higher education. University training is a reality in the modern world in order to receive professional status. A highly trained independent midwife should have the education where her ability to decide when a mother requires transfer to the care of an obstetrician is unquestioned. This only comes with professionalization. Apprenticeship training, with its lack of transparency and standardization of education, will not withstand the modern standard of professionalization.

The American College of Nurse-Midwives will also be unhappy with what I have to say. As it stands today, nurse-midwifery has been subsumed into a culture of medicalization. It claims to believe in physiologic birth but the promotion of physiologic birth is not possible in the context of a subordinate midwifery. It is time for the ACNM to truly lead the way for an independent midwifery. For too long the ACNM has acquiesced to ACOG. At one time, this strategy of moving gently was necessary as the profession of nurse-midwifery worked to establish its position within our maternity care system. However, given the extent to which technology has taken over our maternity system, it is time for nurse-midwifery to change strategy and to declare its independence.

The American College of Nurse-Midwives does state that it supports an independent midwifery (ACNM 2012b). The leadership of ACNM needs to brush away the cobwebs from the past and recognize that collaboration in the context of a hierarchical relationship with obstetricians is an illusion. There can be no true collaborative relationship when the obstetrician has the right to ultimate decision-making. “Shared decision-making,” the latest term for the relationship between nurse-midwifery and obstetrics, is merely window dressing in the absence of real change. Reliance on a beneficial, friendly obstetrician is not true independence.

I hear voices from young midwives demanding professional independence. At the last ACNM annual convention I heard young midwives speaking truth to power at the meetings. “We are not empowered to practice midwifery.” “Our inability to practice independently is the greatest barrier to our providing normal birth.” One young student midwife criticized her educational program: “Some of us graduate without ever seeing a normal birth.” I saw an ACNM leadership struggling to hear the voices that are coming from these nurse-midwives. It has been announced that a strategic goal of the ACNM is to dispose of statutory requirements for a written practice agreement in all states. The leadership is attempting to develop a legal strategy for removing the barriers to obtaining admitting privileges. These are all significant steps forward.

It is not enough, however, for nurse-midwifery leadership, to speak rhetorically about physiologic birth. To be fair, the ACNM sees itself as making progress on promotion of physiologic birth. However, guidance by the ACNM to its membership is inadequate for true informed consent and counsel on how to convince women of the dangers of unnecessary intervention. A recent pamphlet published by the ACNM (2014) for use by nurse-midwives in educating their clients about physiologic birth states the following: “The norm for birth in the

US today includes the use of technology and interventions that are not proven to benefit healthy women and babies during childbirth.” This statement prevaricates and avoids the troublesome truth. It is inaccurate to state that many common interventions are not proven to be safe; we have clear evidence that common interventions may be quite harmful to the mother and baby.

Disruption of physiologic birth is harmful, as the pamphlet points out. At the same time, as my dissertation has shown, the medications used in the epidural and in induction/augmentation of labor have been shown to very possibly have a variety of dangerous side effects. Nurse-midwives who work in hospitals need to see it as their responsibility to tell mothers the unvarnished truth of what the evidence shows regarding epidurals and pitocin – neither of them benign interventions. Standing for the autonomy of the childbearing woman, the right to make choices is a positive attribute of the nurse-midwifery profession. However, there is no true autonomy without thorough informed consent (Whitney et. al. 2003; Cahill et al 2010).

For years I believed that there was no realistic place for freestanding birth centers in the United States: that there was only room for homebirth or hospital birth. I have made a 180-degree turn on this issue. I have come to believe that freestanding birth centers, or hospital maternity centers that are truly midwifery-led, are the incubators of independent midwifery in this country and in the Western world. Sandall et. al. (2010) define midwife-led care as an institution where “the midwife is the woman’s lead professional” as opposed to obstetrical led care or “shared models of care,” what we call collaborative care in this country. This study, as well as the Sandall et. al. (2009) study, both a Cochrane Review of midwifery-led maternity care, shows the superiority of midwifery-led care in normal birth. Women randomized to midwifery-led care show a decrease in fetal loss at less than 24 weeks gestation. There was no statistically difference in fetal or neonatal loss after 24

weeks. At the same time, the outcomes when women were randomized to midwife-led care included:

- Mothers needed less analgesia or anesthesia,
- Mothers expressed greater satisfaction with their care,
- Most studies showed a cost saving associated with midwifery-led care,
- Mothers were more likely to experience continuity of care throughout their pregnancy, a significant quality measure.

Freestanding birth centers struggle to survive financially and often exist in the face of opposition by the obstetrical profession. New York's Health and Hospital Corporation (HHC) recently shut down two midwifery-led birth centers, Bellevue and North Central Bronx Maternity Center (a model midwifery-led center). HHC has stated that North Central Bronx Maternity Center will reopen but with a Physician Director.

Unnecessary interventions are so imbedded in the obstetrical culture that I believe physiologic birth can only become the norm in true midwifery-led maternity units.⁶⁴ With true midwifery-led units, whether in-hospital or freestanding, there will be a possibility for a physician/midwife collaboration that is not hierarchical. There can be the continuity of care that is so necessary for physiologic birth. It will be in such units that women can have undisturbed birth - the calm, privacy and sense of safety so necessary for successful birth. We need more ethnographic studies of these maternity care centers, particularly the few that exist in the United States.

Ultimately, there is the need for a new paradigm. It may come about out of necessity as institutions come to recognize the dangers inherent in epiduralized birth. It may come about as

⁶⁴ Homebirth midwives are well acquainted with physiologic birth. I chose not to engage here in the discussion/debate regarding homebirth. I can say that under well-established guidelines, I believe that homebirth is safe. I am not optimistic, however, that homebirth will be brought into the mainstream of the American maternity system any time soon, allowing for ease of transfer. Time, however, may prove me wrong. I sincerely hope so.

insurance companies and the government come to realize that we can no longer afford the unnecessary costs of the technology upon which epiduralized birth depends. Also, we can hope for a new generation of activists who can grasp the need for change and take on the Gleichschaltung of our obstetrical institutions.

In the meantime, the profession of nurse-midwifery is entering into the mainstream of the American maternity care system. As it does so, it remains to be seen if the profession will change that system, managing to bring its core value of physiologic birth as a central element to that system; or rather, will the system change the profession? It is a question that nurse-midwifery faces. How nurse-midwifery responds to future challenges will determine the answer to that question.

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The Duality of American Nurse-Midwifery – A Cultural Analysis. Paper presented at the joint CASCA-AES Conference (American Ethnological Society), May 2009. Vancouver, BC.

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Care and Cure – Midwifery and Obstetrics: Nurse Midwifery on the Margins. Presented at the 36th Northeastern Anthropological Association Meetings. Plymouth State College. March 27, 1996.

Adolescent Pregnancy as a Fertility Pattern Among Poor, Urban, African American Women. Presented at the 32nd Northeastern Anthropological Association Meetings. Bridgewater State College. March 1992.

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