International Journal of Gynecology & Obstetrics 75 (2001) S25–S37

International Journal of
GYNECOLOGY
& OBSTETRICS

www.elsevier.com/locate/ijgo

Fish can't see water: the need to humanize birth

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Abstract

Humanized birth puts the woman in the center and in control, focuses on community based primary maternity care with midwives, nurses and doctors working together in harmony as equals, and has evidence based services. Western, medicalized, high tech maternity care under obstetric control usually dehumanizes, often leads to unnecessary, costly, dangerous, invasive obstetric interventions and should never be exported to developing countries. Midwives and planned out-of-hospital births are perfectly safe for low-risk births. © 2001 International Federation of Gynecology and Obstetrics. All rights reserved.

Keywords: Humanized birth; Unnecessary interventions; Out-of-hospital birth; Midwives; Evidence based practice

1. Introduction

Humanizing birth means understanding that the woman giving birth is a human being, not a machine and not just a container for making babies. Showing women — half of all people — that they are inferior and inadequate by taking away their power to give birth is a tragedy for all society. On the other hand, respecting the woman as an important and valuable human being and making certain that the woman's experience while giving birth is fulfilling and empowering is not just a nice extra, it is absolutely essential as it makes the woman strong and therefore makes society strong.

Humanized birth means putting the woman giving birth in the center and in control so that she and not the doctors or anyone else makes all the decisions about what will happen. Humanized birth means understanding that the focus of maternity services is community based primary care, not hospital based tertiary care with midwives, nurses and doctors all working together in harmony as equals. Humanized birth means maternity services which are based on good scientific evidence including evidence based use of technology and drugs.

However, we do not have humanized birth in

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PII: S0020-7292(01)00519-7

many places today. Why? Because fish can't see the water they swim in. Birth attendants, be they doctors, midwives or nurses, who have experienced only hospital based, high interventionist, medicalized birth cannot see the profound effect their interventions are having on the birth. These hospital birth attendants have no idea what a birth looks like without all the interventions, a birth which is not dehumanized. This widespread inability to know what normal, humanized birth is has been summarized by the World Health Organization:

> "By 'medicalizing' birth, i.e. separating a woman from her own environment and surrounding her with strange people using strange machines to do strange things to her in an effort to assist her, the woman's state of mind and body is so altered that her way of carrying through this intimate act must also be altered and the state of the baby born must equally be altered. The result it that it is no longer possible to know what births would have been like before these manipulations. Most health care providers no longer know what 'non-medicalized' birth is. The entire modern obstetric and neonatological literature is essentially based on observations of 'medicalized' birth [1]."

Why is medicalized birth necessarily dehumanizing? In medicalized birth the doctor is always in control while the key element in humanized birth is the woman in control of her own birthing and whatever happens to her. No patient has ever been in complete control in the hospital — if a patient disagrees with the hospital management and has failed in attempts to negotiate the care, her only option is to sign herself out of the hospital. Giving women choice about certain maternity care procedures is not giving up control since doctors decides what choices women will be given and doctors still have the power to decide whether or not they will acquiesce to a woman's choice.

Fifteen years ago in Fortaleza, Brazil, a World health Organization Conference recommended birth be controlled, not just by individual doctors and hospitals but by evidenced based care monitored by the government. Birth, which had been taken from the community and slowly but surely changed into hospital-based care during the last 100 years, is to be given back to the community. Now the present conference will consider the next step — giving birth back to the woman and her family. Doctors are human; birthing women are human. To err is human. Women have the right to have any errors committed during their birthing be their own and not someone else's.

Labor and birth are functions of the autonomic nervous system and are therefore out of conscience control. Consequently there are, in principle, two approaches to assisting at birth: work with the woman to facilitate her own autonomic responses — humanized birth; override biology and superimpose external control using interventions such as drugs and surgical procedures — medicalized birth.

In practice, care during birth may include a combination of the two approaches: facilitation of the woman's own responses usually dominating out-of-hospital management of birth while the superimposition of external controls usually dominates hospital birth management. However, whether the care is medicalized or truly humanized depends on whether or not the woman giving birth is in absolute control.

2. Why medicalized birth?

The past 15 years has seen a struggle between these two approaches to maternity care become intense and global. Today there are three kinds of maternity care: the highly medicalized, 'high tech', doctor centered, midwife marginalized care found, e.g. in the USA, Ireland, Russia, Czech Republic, France, Belgium, urban Brazil; the humanized approach with strong, more autonomous midwives and much lower intervention rates found, e.g. in the Netherlands, New Zealand and the Scandinavian countries; a mixture of both approaches is found, e.g. in Britain, Canada, Germany, Japan, Australia.

Today in developing countries there are usually medicalized maternity services in the big cities while in the rural areas medicalized services have not yet penetrated and humanized services remain. Prevalent medical opinion is that 'modern', i.e. Western obstetric-intensive maternity care

saves lives and is part of development and attempts to bring maternity care excesses under control are retrogressive. The present situation in developing countries reinforces the idea that the only reason out-of-hospital, midwife intensive birth still exists in places is because modern medical practice is not yet available.

However, we override biology at our peril. For example, if we stop using our bodies, they go wrong. It is 'modern' to get around in a car or public transport resulting in little walking much less running. Then science finds that our bodies need such exercise or we get cardiovascular problems. The post-modern idea is to go back to walking and running (jogging) and this is seen as progressive, not retrogressive. By the same token, humanizing maternity services is not retrogressive but post-modern and progressive.

Every change in the human condition, including development, has the potential for positive and negative effects. The positive effects of development overwhelm the negative effects until social and economic benefits reach everyone, then hidden negative effects begin to emerge. The negative effects of development on infant mortality, always there, have now emerged [2]. The negative effects of development on maternal mortality are also emerging. Obstetric interventions such as cesarean section sometimes save lives and sometimes kills — maternal mortality even for elective (non-emergency) cesarean section is 2.84-fold or nearly three times higher than for vaginal birth [3]. The maternal mortality ratio in the US, after decades of steady decline, rose from 7.2 in 1987 to 10.0 in 1990 according to the US Centers for Disease Control and Prevention [4]. While this ratio continued to decline in other industrialized countries, in the US the maternal death rate continued a slow but steady rise through the 1990s and according to the World Health Organization is now higher than at least twenty other highly industrialized countries [5].

Because WHO relied heavily in the past on obstetricians from highly developed countries with little or no experience in developing countries, their programs tended to emphasize the role of doctors in birth care. This is a double edged sword — when Safe Motherhood Programs started in Brazil, it was gratifying to see maternal mortality fall significantly but meanwhile cesarean section rates soared, even in the poorest states (see below).

Obstetricians often claim 'high tech' medicalized maternity care in rich countries is real progress but the scientific evidence suggests otherwise. There has been no significant improvement in highly industrialized countries the past 20 years in low birth weight rates or cerebral palsy rates. The slight fall in the perinatal mortality rate the past 10 years in these countries is due only to a slight improvement in neonatal mortality associated with neonatal intensive care and not with obstetric care. In highly developed countries, all attempts to show lower perinatal mortality rates with higher obstetric intervention rates have failed. A US National Center for Health Statistics study comments: 'The comparisons of perinatal mortality ratios with cesarean section and with operative vaginal rates finds no consistent correlations across countries' [6]. A review of the scientific literature on this issue by the Oxford National Perinatal Epidemiology Unit states: 'A number of studies have failed to detect any relation between crude perinatal mortality rates and the level of operative deliveries' [7].

We are now at the point in maternity care in industrialized countries where the positive effects of development and technology are approaching the maximum and the negative effects are surfacing. This helps to explain why advances in technology and in development cannot lead to improvements in health unless the technology is in harmony with natural biological processes and is accompanied by humanized health care. A simple example. If an elective cesarean section is done after labor has started, it may in some cases facilitate natural processes. But waiting until labor starts means doctors lose the possibility of scheduling the procedure at their convenience. But if, as is almost always the case today, the doctor tries to circumvent natural processes by performing elective cesarean section before labor starts, there is a greater risk of respiratory distress syndrome and prematurity, both leading killers of newborn infants. We override nature at our peril.

This is why international development agencies such as the World Bank now acknowledge that economic development cannot lead to improvements in the human condition unless accompanied by social development, including education.

The greatest danger with western, medicalized birth is its widespread export to developing countries. Scientific evidence shows giving routine IV infusion to every woman in labor is unnecessary but such a practice in a rich country, while a waste of money, is not a tragedy. I have seen routine IV infusion during labor in small rural district hospitals in developing countries where the same hospitals have so little money they are reusing disposable syringes. Routine IV infusion during labor in developing countries is a tragic waste of extremely limited resources. When developing countries adopt western obstetric practices which are not evidence based, the result is other women in those countries dying of cancer not found early enough because of lack of funds for such unglamorous but essential care as outreach cancer screening programs for poor women.

Obstetricians, like all clinicians, work hard helping one patient at a time. In balancing efficacy and risks, doctors desire to help puts their focus on efficacy rather than risks. For example, in US publications there are 41 randomized controlled trials (RCT) on misoprostol (Cytotec) for labor induction proving efficacy but not a single RCT is large enough to adequately measure risks such as uterine rupture [8]. So the Cochrane Library recommends not using midoprostol for this purpose [9]. But it works and is easy and cheap so it is used widely in the US, even though not approved by the FDA for this purpose. Now research is emerging showing serious risks for using misoprostol for cervical ripening or labor induction in women with a uterine scar [10,11]. But it is too late for the many US women with previous cesarean section whose uterus ruptured after induction with misoprostol and their many dead babies. Misoprostol for labor induction on women with previous cesarean section in the 1990s joins prenatal X-ray pelvimetry in the 1930s, diethyl-stillbesterol DES) for pregnant women in the 1950s and thalidomide for pregnant women in the 1970s as examples of obstetric interventions which have had tragic consequences because they went into widespread use before adequate scientific evaluation.

Most clinicians cannot understand how population based scientific data applies to individual patients, resulting in, e.g. objections to using recommended rates for cesarean section [12]. This failure of some clinicians to understand epidemiology is often combined with the failure of public health professionals to confront clinicians regarding excesses in clinical practice because of their fear of the power of clinicians and their loyalty to colleagues in the same profession [13].

Clinicians in most places still rely on peer review and community standards of practice. Using fellow doctors as a central element in developing and monitoring practice guidelines predictably has failed. ‘Community standards of practice’, based on leading clinicians practices on individual patients, still are the gold standard even though they have been revealed as nothing more than ‘that’s what we all do’, leading to a lowest common denominator standard of care rather than a best care standard based on evidence.

The one approach clinicians can understand is single case, anecdotal evidence. This approach leads to the ‘what if’ scenario in which applying population data to their practices is rejected by clinicians because ‘what if’ this or that goes wrong with an individual patient. There is no better example of this than planned out-of-hospital birth.

Many clinicians and their organizations continue to believe in the dangers of planned out-of-hospital birth, either in a center birth or at home, rejecting the overwhelming evidence that planned out-of-hospital birth for low risk women is safe. The clinician’s response to this evidence is: ‘But what if there is an out-of-hospital birth and something happens?’ Since most clinicians have never attended an out-of-hospital birth, their ‘what if’ question contains several false assumptions. The first assumption: in birth things happen fast. In fact, with very few exceptions, things happen slowly during labor and birth and a true emergency when seconds count is extremely rare and,

as we will see below, often in these cases the midwife in the birth center or home can take care of the emergency.

The second false assumption, when trouble develops there is nothing an out-of-hospital midwife can do, can only be made by someone who has never observed midwives at out-of-hospital births. A trained midwife can anticipate trouble and usually prevent it from happening in the first place as she is providing constant one-on-one care, unlike in the hospital where usually nurses or midwives can only look in occasionally on the several women in labor for which they are responsible. If trouble does develop, with few exceptions the out-of-hospital midwife can do everything which can be done in the hospital including giving oxygen, etc. For example, with shoulder dystocia, there is nothing which can be done in the hospital except certain maneuvers of the woman and baby, all of which can be done just as well by the out-of-hospital midwife. The most recent successful maneuver for such shoulder dystocia reported in the medical literature is named after the home birth midwife who first described it (Gaskin maneuver) [14].

The third false assumption is there can be faster action in the hospital. The truth is in most private care the woman's doctor is not even in the hospital most of the time during her labor and must be called in when trouble develops. The doctor 'transport time' is as much as the 'transport time' of a woman having a birth center or home birth. Even in hospital births, when a cesarean section is indicated, it takes on average 30 min for the hospital to set up for surgery, locate the anesthesiologist, etc. In one study of 117 hospital births with emergency cesarean section for fetal distress, 52% of cases had a 'decision to incision' time of over 30 min [15]. So during this 30 min either the doctor or the out-of-hospital birthing woman are in transit to the hospital. This is why it is important for a good collaborative relationship between the hospital and the out-of-hospital midwife so when the midwife calls the hospital to inform them of the transport, the hospital will waste no time in making arrangements for the incoming birthing woman. These are the reasons there are no data whatsoever to support the single case, anecdotal ' what if' scenario used by some doctors to scare the public and politicians about out-of-hospital birth.

Recently there is a desirable movement towards basing medical practice on evidence and many obstetricians work hard to bring their practices in line with the latest evidence. But still today many doctors are not familiar with recent evidence nor with the means to obtain it. In a 1998 British study 76% of practicing physicians surveyed were aware of the concept of evidence based practice, but only 40% believe that evidence is very applicable to their practice, only 27% were familiar with methods of critical literature review and, faced with a difficult clinical problem, the majority would first consult another doctor rather than the evidence [16]. This helps explain the continuing gap between clinical practices and the evidence.

Some obstetricians, as members of society, tend to blind faith in technology and the mantra: technology = progress = modern. The other side of the coin is the lack of faith in nature, best expressed by a Canadian obstetrician: 'Nature is a bad obstetrician.' In attempting to conquer nature, the 20th century has seen a series of failed attempts to improve on biological and social evolution. Doctors replaced midwives for low risk births, then science proved midwives safer [17–20]. Hospital replaced home for low risk birth, then science proved home as safe with far less unnecessary intervention [21–25]. Hospital staff replaced family as birth support, then science proved birth safer if family present. Lithotomy replaced vertical birth positions, then science proved vertical positions safer [26]. Newborn examinations away from mothers in the first 20 min replaced leaving babies with mothers, then science proved the necessity for maternal attachment during this time. Man-made milk replaced woman-made milk, then science proved breast milk superior. The central nursery replaced the mother, then science proved rooming-in superior. If more doctors experienced an earthquake or volcano, they would realize their ideas of controlling nature are nothing more than stories to rewrite insignificance.

3. Unnecessary cesarean section: symbol of dehumanization

The quintessential example of medicalization and dehumanization of birth is unnecessary cesarean section (CS) in which the surgeon is in charge and the woman no longer has any control. CS saves lives but there is no evidence that rising CS rates the past two decades in many countries has improved birth outcomes [6,7]. How can this be? As indications for CS broaden and rates go up, lives are saved in a smaller and smaller proportion of all CS cases. But the risks of this major surgical procedure do not decrease with increasing rates. It is only logical that eventually a rate is reached at which CS kills almost as many babies as it saves.

Women and their babies are currently paying a big price for the promotion of CS by some doctors. The scientific data on maternal mortality associated with CS suggest the rising maternal mortality rates in the US and Brazil may be, at least in part, the result of their high CS rates [3]. Both these countries need to carefully audit all maternal deaths to test the strong hypothesis that rising rates of maternal death are associated with high rates of cesarean section. The data on other risks for both woman and baby associated with CS mean both are paying a big price both in the current birth and in future pregnancies as well [27].

Why so much unnecessary CS? When maternity care is controlled by doctors, and midwives are marginalized or absent, higher CS rates are found. Many studies have shown lower obstetric intervention rates when midwives attend low risk birth than when doctors are providing primary birth care to low risk women [28]. It is no coincidence that in the US, Canada and urban Brazil, where obstetricians attend the majority of normal births and there are few midwives attending few births, the highest CS rates in the world are found. Having a highly trained gynecological surgeon attend a normal birth is analogous to having a pediatric surgeon baby-sit a normal 2-year-old child. High CS rates are a symbol of the lack of humanization of birth.

The overuse of elective CS and other unnecessary obstetric interventions also threatens the larger community. Not even the richest countries in the world have the financial resources to transplant all the hearts, dialyze all the kidneys, give new hips to all the people who might benefit from these procedures. Choices must be made about which medical and surgical treatments to fund and these choices will determine who shall live. A CS which is done without any medical indication but only because a woman chooses it requires a surgeon, possibly a second doctor to assist, an anesthesiologist, surgical nurses, equipment, an operating theater, blood ready for transfusion if necessary, a longer post-operative hospital stay, etc. This costs a great deal of money and, equally importantly, a great deal of training of health personnel, most of which is at government expense, even if the CS is done by a private physician in a private hospital. If a woman receives an elective CS simply because she prefers it, there will be less human and financial resources for the rest of health care.

This dangerous drain on financial resources, as noted earlier, is far greater when CS practices in places like the US are exported to developing countries with far fewer resources for health services. For example, in one State in Brazil, 59 hospitals have CS rates over 80%, three health districts have CS rates over 70% while an additional 13 health districts have CS rates over 60% and the entire State has a CS rate of 47.7% [29]. Clearly this is a huge drain on Brazil's limited health resources. While some doctors claim these high rates are because Brazilian women request CS, recent research proves this is not the case (Professor A. Faúndes, personal communication).

The women of Brazil are also paying another price. The data given above proving the higher maternal mortality with elective CS in the UK are further substantiated by data showing a recent rise in maternal mortality rates in those areas of Brazil with these shockingly high CS rates [30]. CS on demand is an expensive and dangerous luxury.

In the light of these issues, the Committee for the Ethical Aspects of Human Reproduction and Women's Health of FIGO (the international umbrella organization of national obstetric organiza-

tions) states in a 1999 report: 'Performing cesarean section for non-medical reasons is ethically not justified' [31]. There are also individual obstetricians and some medical organizations working to bring down CS rates and humanize birth.

4. Solutions

So far we have not been clever enough, in developed or developing countries, to take the advantages of medicalized birth care while avoiding the disadvantages such as the drift to obstetric excesses. Humanizing birth has the potential to combine the advantages of western medicalized birth with the advantages of redirecting the care so as to honor the biological, social, cultural and spiritual nature of human birth. There are several strategies for humanization of birth — strategies which will put the woman and the family back in control of the birth of their own child while empowering the woman to believe in herself through experiencing what her own body can accomplish.

The first strategy is education. Those who control information hold the power. In the past the medical profession often has maintained control of medical care through protecting and withholding information. Patient confidentiality, a legitimate excuse for limiting access to information on individual patients, is not an excuse for limiting information on grouped data such as hospital data and community data. The information revolution is profoundly changing medical care. The advent of the internet and world wide web is having a profound effect on bringing medical information to everyone. In the new millenium a global movement is demanding accountable and transparent health care practitioners and health care facilities (including hospitals) as a basic requirement of any democracy. Complete and honest information must be given to the public, even when it means doctors give up power and, in some cases, can threaten the continuation of certain obstetric practices — maternal mortality rates a prime example.

Full information on the good and bad results of medicalized birth must be given to health care practitioners, public health officials, politicians and the public. Everyone must see the water that many doctors and hospitals are swimming in and see that sometimes there are sharks that may not eat doctors but may eat some women and babies.

The need to broaden the horizon of doctors concerning maternity care is not a new problem. In a medical book from the year 1668: 'Doctors who have never seen a home birth and yet feel competent to argue against it resemble those geographers who give us the description of many countries which they never saw.' We must require doctors to look at the water in which humanized maternity care exists in order to get a physiological standard against which they can measure all their experiences. In an obstetric training program in The Philippines, every doctor must attend a minimum number of planned home births. Every obstetric training program should require visits to planned out-of-hospital births, including birth centers and home births. Midwives and obstetric nurses in training need the same experience.

The education of women, especially pregnant women, is of paramount importance but here the issue is: what the women are told. In some places prenatal education programs are controlled by a few obstetricians who insist on giving only doctor-friendly information to pregnant women. Many anesthesiologists in the US have managed to gain access to prenatal classes where they preach the wonders of epidural block and usually say nothing about the considerable risks of this invasive procedure.

More recently, for some doctors to succeed in promoting women choosing cesarean sections for which there are no medical indications it is necessary to provide limited, highly selected information [27]. It is highly unlikely women would ever consider choosing CS if they were given the full scientific evidence on the risks for themselves and their babies. The key ethical issue is not the right to choose or demand a major surgical procedure for which there is no medical indication but the right to receive and discuss full, unbiased information prior to any medical or surgical procedure.

A liberated woman correctly strives not to be controlled by men, an effort even more difficult if she lives in a male chauvinist society. There are many ways in which women giving birth in hospitals in 'macho' cultures are oppressed and given the message that they are not important and not free but controlled by often belligerent staff — for example they are told not to make loud noise with labor contractions.

But if a woman accepts the medicalized, male dominated obstetric model of care with its selective information, she gives up any chance to control her own body and make true choices. Volumes have been written about how liberating and empowering it is for a woman to give birth when she controls what happens. Without fully informed choice, she will give up any control and comply with the wishes of the doctors and hospitals. Sadly a few feminists who correctly fight for women's rights have been drawn into believing biased doctor-friendly information and as a result have unwittingly promoted the right of women to demand obstetric procedures which are dangerous to them and their babies.

A second strategy for humanization of birth is the promotion of evidence based maternity practices. Peer review and community standards of practice have failed to close the gap between present obstetric practices and the evidence. And in many places public health professionals and government agencies have failed to aggressively pursue closing the gap between obstetric practices and evidence, often out of fear of the power of the medical establishment [13].

When speaking to hospital obstetric departments, I present a simple table with their own rates of interventions (induction, episiotomy, lithotomy, operative vaginal, cesarean section) in a column on the left and the evidence-based rates opposite in a column on the right. The ensuing discussion is often characterized by more heat than light, always with at least a few doctors as concerned as I about the gap between their practices and the evidence. As we enter the era of post-modern medical care, the GOBSAT (Good Old Boys Sit Around Table) clinical practice guidelines of yore, royalist in sentiment and pompous in tone, will be replaced by evidence based practice guidelines approved by the community.

Another essential strategy in humanizing birth is: who is the primary care giver for women during pregnancy and birth. The tradition of doctors insisting on controlling their own practices with little or no interference from the community or its representatives goes back a long time. As long as doctors provide primary care to normal, healthy pregnant and birthing women, women will not be in control and humanization of maternity care will not happen.

Countries must work hard not to allow doctors to come from places with highly medicalized maternity care like the US and try to sell the system of maternity care of the visiting doctor. Maternity care in the US has extreme medicalization as doctors give primary care to over 90% of normal, healthy women giving birth. As a result, birth is a surgical procedure with high rates of unnecessary interventions. Women giving birth are disempowered and there are huge wastes of resources, financial and professional. In the US, twice as much is spent per capita on maternity care as any other country and midwives are marginalized. This is not a system to emulate — the US maternal mortality rate, perinatal mortality rate and infant mortality rate are much higher than the rates in nearly every other industrialized country.

By contrast, midwifery has a long tradition of placing the birthing woman in the center with all the control in the woman's hands and with the midwife providing the kind of support which will empower the woman and strengthen the family. For this reason, having primary maternity care in the hands of midwives is a central strategy in humanization of birth.

Countries might want to study the maternity care in countries much further along the road to humanization such as New Zealand, The Netherlands, and Scandinavian countries. In these countries, over 80% of women see only midwives during pregnancy and birth (in or out of hospital) and they have some of the lowest maternal and perinatal mortality rates in the world.

Considerable scientific research has demonstrated four major advantages to autonomous midwifery. First, there can no longer be any doubt

that midwives are the safest birth attendant for low risk birth. One meta-analysis of 15 studies comparing midwife-attended birth with physician attended birth found no difference in outcomes for women or babies except for fewer low birth weight babies with midwives [17]. Two randomized controlled trials (RCT) in Scotland [18,19] and six RCTs in North America all found no increase in adverse outcomes with midwife-attended birth [28].

The most definitive study of the safety of midwife-attended birth, published in 1998, looked at all births in 1 year in the US — over 4 million births. Selecting only singleton, vaginal births and removing cases of social or medical risk factors, they compared outcomes between midwife-attended low-risk births and physician-attended low-risk births. Compared with physician-attended low-risk births, midwife-attended births had 19% lower infant mortality, 33% lower neonatal mortality and 31% lower low birth weight rates [20].

After reviewing the extensive evidence for the safety of midwives, a recent article in an obstetric journal concludes: 'a search of the scientific literature fails to uncover a single study demonstrating poorer outcomes with midwives than with physicians for low-risk women — evidence shows primary care by midwives to be as safe or safer than care by physicians' [28].

The second advantage of midwives over doctors as primary birth attendants is a drastic reduction in rates of unnecessary invasive interventions. Scientific evidence shows that, compared with physician-attended low-risk birth, midwife-attended birth has statistically significantly: less amniotomy, less IV fluids or IV medication, less routine electronic fetal monitoring, less use of narcotics, less use of anesthesia including epidural block for labor pain, less induction and augmentation, less episiotomy, less forceps and vacuum extraction, less cesarean section, more vaginal birth after cesarean section [28].

The third advantage of using midwives as the principal birth attendant for most births is cost savings. While it varies from country to country, midwives salaries are almost always considerably less than doctor's salaries. And of course, the lower intervention rates with midwives mean major cost savings. In a paper reviewing the data on cost saving [28], one study found a cost saving of US $500 for every case where a midwife is birth attendant.

Another advantage of midwifery care, often disparaged by advocates of medicalized birth, is the pregnant and birthing woman's satisfaction with her care. The evidence in the literature is overwhelming: midwifery care is statistically significantly more satisfying to the woman and her family [28].

Since hospitals are doctor territory and no woman has ever been in control of her own care in a hospital setting, another important strategy for humanization of birth is to move birth out of the hospital. There have always been and always will be women everywhere who choose planned home birth and need a midwife to attend the birth. But today, as a result of decades of propaganda about how dangerous birth is and how safe hospital birth is, told by doctors who are themselves afraid of birth and need the security of hospitals, there are many women who have bought into the myth that home birth is dangerous.

It is unbelievable that obstetric organizations in some highly industrialized countries such as the US still have the same official policy against home birth which they wrote in the 1970s. At that time analyses of out-of-hospital births did not separate planned home birth from unplanned precipitous out-of-hospital birth and the latter had high mortality due to preemies born in taxis, etc. Then when scientists separated out planned home birth, it proved to have perinatal mortality rates as low or lower than low risk hospital birth. A large scientific literature documents this, including when the home birth practitioner is a nurse midwife [21] or when the midwife is not also trained as a nurse [22–24]. A meta-analysis of the safety of home birth, published in 1997, conclusively demonstrates the safety of home birth and includes an excellent review of the literature [25].

So the real issue with home birth is not safety but freedom and sanctity of the family. For the over 80% of women who have had no serious medical complications during pregnancy, planned home birth is a perfectly safe choice. Any doctor, hospital or medical organization attempting to

discourage a low risk woman from choosing home birth is denying basic human rights by withholding full-unbiased information and limiting a woman's freedom of choice of place of birth. The birth of a baby is one of the most important events in the life of the family and when the family chooses a planned home birth, the sanctity of the family must be honored.

Because of the frightening propaganda of many in the obstetrical profession about how dangerous birth is, many women want the freedom to control their own birthing but need the 'security' of an institution. How can women today be in control of giving birth and be empowered by birth and be assisted by a midwife and still feel comfortable and protected by an institution? By choosing an alternative birth center (ABC) which is 'free-standing' (i.e. out-of-hospital) and staffed by midwives.

The first essential characteristic of an ABC is that it is free of any control by a hospital. A hospital which claims to have a 'birth center' is like a bakery which claims to sell 'home-baked bread'. To be a birth center, the birthing woman must be in control of everything that happens to her and her baby. This means the ABC should be staffed with midwives using protocols made by midwives.

The type of care provided in an ABC is quite different from a hospital. In a hospital the doctor is always in absolute control while in an ABC the woman is in control. In the hospital the emphasis is on routines while in the ABC the emphasis is on individuality and informed choice. Hospital protocols are designed with all the possible complications in mind while ABC protocols focus on normality, screening and observation. In hospitals pain is defined as an evil to be stamped out with drugs while in the ABC it is understood that labor pain has a physiological function and can be relieved with scientifically proven, non-pharmacological methods such as immersion in water, changing position and moving about, massage, presence of family, continuous presence of the same birth attendant.

In the hospital, induction is frequent using powerful, dangerous drugs that increase pain while in the ABC labor is stimulated with non-pharmacological methods including walking and sexual stimulation such as massage of the nipples. In the hospital, staff are not always present and change every 8 h while in the ABC there is the continuous presence of one midwife throughout the labor. In the hospital the new baby is taken away from the mother for various reasons such as doing a newborn examination while in the ABC the new baby is never taken from the mother.

Are ABCs a safe place for a woman to give birth if she has had no complications during the pregnancy? This is a key question because in the struggle between the medicalized and humanized approaches to maternity care, the ABC is a big threat to doctors and hospitals and the industry producing all the obstetric technologies. Because medicalized birth is so expensive with costly hospital stay, highly paid obstetricians using so much costly high tech intervention, the doctors and hospitals must convince the public and those who control funding of health services that their way is the only safe way. Otherwise they will quickly lose much of their business. So obstetric organizations usually fight against all birth where they are not in control. Their first line of defense against any planned out-of-hospital birth is to label it unsafe.

The only way to determine if ABCs are safe is to turn to the scientific evidence. A thorough review of the scientific evidence on ABCs [32] reports that in the 1970s and 1980s there were a number of descriptive studies on ABCs. Then in 1989 a most important paper on ABCs was published: 'The US National Birth Center Study' involving 84 ABCs and 11 814 births [33].

Regarding safety, the US National Birth Center Study had no maternal mortality and an intrapartum and neonatal mortality rate of 1.3 per 1000 live births, a rate comparable with the rates in low risk hospital births. The infant mortality rate and Apgar scores in the ABCs was also comparable with low risk hospital rates. Sixteen percent of ABC births were transferred to the hospital. Such rates of transfer of planned ABC birth to hospital because of complications compare favorably with the number of planned hospital births which are transferred from the labor rooms to the surgical suite because of complications. The intention to treat analysis was used in

which all complications, interventions and outcomes from ABC births transferred to hospital are included in the ABC statistics.

The safety of ABC birth is further substantiated by eight additional studies done in the 1990s in which the outcomes of ABC births — perinatal mortality, neonatal mortality, Apgar scores, low birth weight rates — in all studies were as good or better than the outcomes with hospital birth [32].

In addition to the evidence for the safety of ABCs, these studies had further data on the characteristics of women choosing ABCs. After their ABC birth was over, 99% said they would recommend ABC birth to their friends and 94% said they would return themselves to the ABC for any future births. A RCT found that 63% of ABC women had an increase in self-esteem while 18% of women with hospital birth had an increase in self-esteem [32].

With regard to the promotion of breastfeeding, studies in the US, Denmark and Sweden all found significantly increased rates of successful breastfeeding in ABC women.

The review of literature on ABCs [32] compared a number of obstetrical intervention rates in the US National Birth Center Study with the rates of obstetrical intervention in all hospitals in one State (Illinois). In ABCs, 99% were spontaneous vaginal births compared with 55% of hospital births. Less than 4% of ABC births had induction or augmentation with artificial rupture of membranes and/or oxytocin compared with 40% of hospital births. Routine electronic fetal monitoring was done in 8% of ABC births and 95% of hospital births.

Regional or general anesthesia (including epidural block) was done in 13% of ABC births and 42% of hospital births. Operative vaginal birth (forceps or vacuum) was done in less than 1% of ABC births and 10% of hospital births. Cesarean section was done in less than 5% of ABC births and in 21% of hospital births. Looking at these comparisons of interventions, clearly the logical question is not if ABC birth is safe but if hospital birth is safe.

As the news about the safety of ABCs spreads, more and more are being established. In the past 10 years, Germany has gone from having one ABC to over 50 ABCs. In Japan, a network of midwife birth houses provided a significant part of maternity services the first half of the last century but during the American occupation, US Army doctors and nurses put pressure on the Japanese to close the birth houses. Now, however, there is a resurgence of birth houses in Japan.

Another strategy in humanizing birth is to integrate out-of-hospital and in-hospital birth care and practitioners. This was accomplished with excellent results in Fortaleza, Brazil with community-based traditional midwives collaborating closely with hospital obstetricians [26]. This model program, which had gained worldwide recognition, was sadly eliminated when the visionary obstetrician who established it died. Data from places such as Australia show that when home birth midwives and local hospital doctors collaborate, fewer babies die and everyone learns from each other.

Birth is political. An essential strategy is for advocates of humanized birth to be politically active. Politicians and government agencies make crucial decisions about maternity care and their education about and involvement in humanization of birth is essential. Advocates of humanized birth must warn politicians and policy makers of the use of scare tactics by some of the more reactionary elements of the medical and nursing establishment who raise the issue of safety and claim without a shred of evidence that humanized birth is dangerous — that midwives are less safe than doctors and out-of-hospital birth less safe than hospital birth.

Another common scare tactic is for some obstetricians to say that every out-of-hospital birth transported to the hospital is a ‘train wreck’. The answer to this criticism is ‘of course’. A competent out-of-hospital midwife will only transport those few cases where there is a serious problem requiring surgical interventions not available in the home. So for the obstetricians who have never attended a home birth (in many places this is nearly all obstetricians), these out-of-hospital transports with problems are their only experience with out-of-hospital birth and they erroneously assume these cases are representative of

all out-of-hospital birth. This is why doctors need to experience out-of-hospital birth first hand.

These scare tactics are motivated by the attempt of some doctors (and sometimes nurses) to protect maternity care as their territory. Often doctors attempt to overwhelm legislators with technical language which implies that only doctors can possibly understand so the listener must simply 'trust me, I'm a doctor'. Politicians and policy makers should be urged to ask those making these scare statements: 'Please show me the scientific data to prove what you are saying.' It can also be illuminating for legislators to ask those making scare statements how many out-of-hospital births they have attended.

5. Conclusion

The final solution is to evolve new social and political forms for the medical profession and for medical care. And there are obstetricians joining in the effort to find these new forms for their profession. Maternity care needs turning around so that, instead of drifting away from physiology and from the social and cultural environment, the process moves toward respecting and working with nature and with the woman and family, turning control of medical care over to the people. For those who fear chaos, remember Churchill's warning: democracy is the worst form of government until one considers the alternatives.

This turn around has started in places with local public committees deciding on health care policies and priorities — post-modern maternity care. Everything about pregnancy and birth — how it is perceived by society, how the pain of birth is endured by women, how birth is 'managed' by birth attendants — is highly cultural. Local control leads to empowerment of women which, in turn, leads to a stronger family and society — local women need to give birth in local waters. People have been swimming in the physiological, social and cultural primordial sea for a long, long time, can see the water, know where the sharks are and are adept at eventually finding their way forward to reclaiming humanized birth.

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