Planned home birth: the professional responsibility response

Frank A. Chervenak, MD; Laurence B. McCullough, PhD; Robert L. Brent, MD, PhD, DSc (Hon); Malcolm I. Levene, MD, FRCP, FRCPPH, F Med Sc; Birgit Arabin, MD

There has been a recrudescence of and new support for planned home birth in the United States and other developed countries. The Centers for Disease Control report that from 2004 to 2009 home births in the United States rose by 29%, increasing from 0.56% to 0.72% of all births or 29,650 home births. There is also evidence that vaginal birth after cesarean delivery is increasing at home in the United States. Planned home birth for breech presentation has been defended as a legitimate option. Private midwives who provide home birth services have even become “status symbols.”

Home birth rates in Europe and Australia vary over time and in different countries or provinces. In the Netherlands, home birth has been traditionally the first choice for so-called uncomplicated pregnancies, performed by midwives or general practitioners. Moreover, women have to pay an extra amount (around €250) when deciding for a “nonindicated hospital birth” under the guidance of an obstetrician and even when they decide for a midwifery-guided delivery within the hospital. Nevertheless, the home birth rate in the Netherlands has decreased during the past 20 years from 38.2% (1989-91) to 23.4% (2008-10), mostly because of the increasing awareness of the media, patients, and obstetricians about the risks of home birth. In the United Kingdom 3% of total births occur at home, although less than half are planned. In Sweden, the estimated proportion of planned home births was 0.38 of 1000 of all term births.

In Germany, more than 98% of all deliveries occur within hospitals, but the absolute number of deliveries in nonobstetric units is rising. Between 2000 and 2010, the absolute number of home births dropped from 4303 to 3587, but the number of deliveries in 138 certified freestanding midwifery unit settings rose from 4475 to 6775 per year as documented by the midwifery quality documentation system (abbreviated as QUAG). Seventy-four percent of these midwifery units perform less than 70 deliveries per year, and only 9% perform more than 155 per year. According to German law it is even accepted that the planned delivery of a singleton breech or twins can take place at home, if an obstetrician is present at delivery.

Professional organizations in most European countries favor hospital birth and their insurance systems pay for it. Nevertheless, planned deliveries within midwifery units or even at home are accepted and paid for, although the incidence of these deliveries is in general less than 2%.

In 2010, the European Court of Human Rights ruled on a case originating in Hungary in which it was argued that Hungarian law on home birth “disguised” health care professionals from assisting home birth in violation of the...
plaintiff’s “right to respect for her private life.” The Court found for her and stated that “the right of the decision to become a parent includes the right of choosing the circumstances of becoming a parent” and this encompasses professional assistance in home birth.9 The implications of this court ruling for clinical practice throughout Europe have not been fully assessed.

In 2011, the Royal College of Obstetricians and Gynaecologists and the Royal College of Midwives issued the following statement: “The Royal College of Midwives (RCM) and the Royal College of Obstetricians and Gynaecologists (RCOG) support home birth for women with uncomplicated pregnancies. There is no reason why home birth should not be offered to women at low risk of complications and it may confer considerable benefits for them and their families.”10 Also in 2011, the American College of Obstetricians and Gynecologists (ACOG) stated that “it respects the right of a woman to make a medically informed decision about delivery.”11

These recent statements by professional associations and by the European Court should not be allowed to stand unchallenged, because the positions taken about planned home birth, in our view, are not compatible with professional responsibility for patients. The advocates of planned home birth emphasize (1) patient safety, (2) patient satisfaction, (3) cost-effectiveness, and (4) respect for women’s rights. The purposes of this paper are to critically evaluate each of these claims and to identify professionally appropriate responses of obstetricians and other concerned physicians to each claim and therefore to planned home birth.

**Patient safety**

Discussion of patient safety is best based on evidence about obstetric outcomes.12-15 ACOG in its statement accepts the finding of Wax et al16 that there is a 2-fold to 3-fold risk of neonatal death from planned home vs hospital birth.11 ACOG takes the view that pregnant women should be informed about this risk.11

The RCOG and RCM Joint Statement goes further and claims that planned home birth is a “safe option for many women.”10 This claim does not withstand close scrutiny for planned home birth without immediate access to hospital-based care. Such settings are unavoidably at risk for transport to the hospital. It is not surprising that the perinatal mortality rate was reported to be more than 8 times higher when transport from home to an obstetric unit was used.17 As clinicians we have all experienced that unavoidable delay involved in even the best transport systems from home to hospital and even from labor and delivery to the operating room results in increased risks of mortality and morbidity for pregnant, fetal, and neonatal patients.18,19

Maternal and fetal necessity for transport during labor is often impossible to predict and indications include failure for labor to progress, unbearable labor pain, fetal malpresentation, increasing maternal temperature, suspicious fetal heart-rate tracings, abrupt deterioration of fetal heart rate, uterine rupture, acute bleeding, placental abruption, vasa previa, acute sepsis, and cord prolapse. For unpredictable, extremely sudden complications, even rapid transport may not prevent the fetus or pregnant woman from death or severe harm, as sudden cardiopulmonary arrest, shoulder dystocia, or maternal exsanguination.20

Postnatal reasons for transport include lacerations of the vagina or cervix, sphincter rupture, uterine atony, and placenta accreta, increta, or percreta. In patients with severe hemorrhage and placental problems the pregnant woman may already be in shock when arriving at a hospital. Even though operative and shock treatment can be immediately instituted, death may nevertheless sometimes occur.

Neonatal reasons for transport are myriad and include unexpected very low or very high birthweight, neonatal depression, signs of respiratory distress, unexpected malformations, and acute sepsis. In the general population, the incidence of common problems, such as major malformations (3%), prematurity (≥6%), and severe fetal growth restriction (3%) is not inconsequential.21 Moreover, the best screening procedures, even when optimally performed, sometimes fail to detect these high-risk conditions. Given the severity and frequency of reasons for transport, even a very low rate of emergency transport should prompt considerable concern. This has been proven by a review of perinatal deaths in planned home births in Southern Australia where inappropriate inclusion of women with risk factors resulted in inadequate fetal surveillance during labor.17

The recent Birthplace in England prospective cohort study reported transport rates from nonobstetric units to the hospital of 36 to 45% for nulliparous women and 9 to 13% for multiparous women.22 For the primary outcome measure of perinatal mortality and specific morbidities, there was an adjusted odds ratio [OR] of 1.59 (95% confidence interval [CI], 1.01–2.52) for women “without any complicating factor at the start of care in labour” for planned home vs planned obstetric unit births. The adjusted OR was 1.75 (95% CI, 1.07–2.86) for the primary outcome for planned home vs planned obstetric unit births for nulliparous women, which increased to 2.8 when restricted to nulliparous women with no complications at the start of labor. The 59 to 75% increase in a poor primary outcome is frequently attributable to the delay in access to hospital care from transport time. Only in the online appendix were so called “events” elucidated. In the primary outcome population, intrapartum stillbirths and early neonatal deaths accounted for 13%, neonatal encephalopathy for 46%, meconium aspiration syndrome for 30%, brachial plexus injury for 8%, and fractured humerus or clavicle for 4% of “events.” It is concluded that these “results support a policy of offering healthy nulliparous and multiparous women with low risk pregnancies a choice of birth setting.”22 We contend that this view is irrational and cannot be supported in light of the reported adverse outcomes for birth outside of an obstetric service.

In the Netherlands, there is a long tradition of optimally organized home birth, with well-trained midwives and a
transport system with short distances to hospitals. Nonetheless, 49% of primiparous and 17% of multiparous women are transported during labor. The most frequent indications are the need for pain relief (which is subjective and possibly influenced by anxieties to continue with the delivery at home) and prolonged labor. Women who are transferred to a hospital have a significantly higher rate of operative vaginal delivery and secondary cesarean delivery (relative risk [RR], 1.42 and 1.2) and a higher rate of peridural anesthesia (RR, 1.45). Of all primiparous women transported in the Netherlands to a hospital because of prolonged labor, two-thirds receive pain treatment.

De Neef et al analyzed the intention to deliver either at home (45%), under guidance of a midwife within a hospital (44%) or under guidance of an obstetrician in a hospital (11%) in Dutch primiparous women in the first trimester. The reality was that only 17% of these women delivered at home, 10% delivered under the guidance of a midwife in an obstetric unit, but 73% delivered in a hospital under the care of an obstetrician. The authors logically conclude that patients have to be informed about these numbers and the high transport rates. Such information is essential for pregnant women to make good decisions about the site of delivery. In Germany, midwives are obligated to inform their patients about the distance from the freestanding midwifery unit (or home) to the nearest hospital obstetric unit and the approximate average time of transport. Midwives are also obligated to document this information in the informed consent form and in the patient’s record. Nevertheless, many pregnant women are not aware of what this might mean in an emergency.

Some authors from the Netherlands acknowledge and discount the clinical significance of an increased risk of adverse outcomes of planned home vs hospital birth. Van de Kooy et al and all others who judge the adverse outcomes of planned home vs hospital birth to be ethically acceptable. The professional responsibility response demands adherence to accepted standards of care.

The adverse outcomes described above can be reduced in their incidence by access to timely cesarean delivery. In the United States, there has been a “rule” of 30 minutes from “decision to incision.” ACOG has revised this to state that “when a decision for operative delivery in the setting of a Category III EFM tracing is made, it should be accomplished as expeditiously as feasible.” In Germany, a 20-minute interval from decision to delivery is used for quality assessment of perinatal centers.

None of these standards can be consistently met if pregnant patients have to be transported. This is true even in the case of the Netherlands, where the infrastructure of transport systems is highly developed and distances within the country are small. In the rest of the world the interval for time of transport can be more lengthy. This will be true, for example, in countries such as the United States that have emergency services but not dedicated, well developed maternal transport services. More to the point, the inherent problems with transport are in large measure irremediable, even with a huge investment of capital. Professional responsibility is defined prospectively because of the inherent and unpredictable risk to maternal, fetal, and neonatal patients in any pregnancy, including uncomplicated pregnancy at the onset of attended labor.

In summary, planned home birth does not meet current standards for patient safety in obstetrics, as illustrated by the recent preventable death from hemorrhage of an Australian midwife homebirth advocate while attempting delivery of her own child at home. There is increased relative risk and a persistent absolute risk both of which can be reduced in their incidence by having access to professional standards of perinatal care. To regard these risks as ethically acceptable rebuffs pregnant and fetal patients who experience adverse events to the category of collateral damage. It is antithetical to professional responsibility to intentionally assign any damaged or dead pregnant, fetal, or neonatal patient to this category, even if the number is small. Obstetricians who nonetheless do so should be subject to peer review and jus-
tifiably incur professional liability and sanction from state medical boards. Policy makers who do so should be exposed as threats to professional responsibility.

**Patient satisfaction**

The raison d’etre for planned home birth is increased patient satisfaction. The RCOG-RCM statement emphasizes that the focus should not be exclusively on the physical safety of planned home birth. It is also important to “acknowledge and encompass issues surrounding emotional and psychological well-being.” Birth for women is a rite of passage and a family life event, as well as being the start of a lifelong relationship with her infant.10

The RCOG-RCM statement is correct to emphasize the biopsychosocial importance of planned home birth.29,33 Its biopsychosocial advantages include continuity of an empathetic caregiver, the comfort of home, greater control by the pregnant woman, fewer interventions, and less defensive medicine. These advantages become even more salient if the hospital birth option includes provision of care by nonobstetric physicians or poorly supervised trainees and physicians new to practice, lack of in-house anesthesia or neonatal care, and increased intervention rates driven by defensive medicine or unprofessional self-interest to avoid lengthy attendance at labor.

The high rates of transport undercut the raison d’etre of planned home birth. Emergency transport, even in its most humane forms, is psychologically and socially disruptive for the pregnant woman whose expectation to deliver at home has suddenly been dashed. The expectation of normal vaginal delivery at home without intervention is put at risk by the higher rates of operative and cesarean deliveries compared with women who labor in the hospital.35 It is therefore not surprising that a study of Dutch women revealed that the self-reported, persistent levels of frustration including serious psychologic problems in transported women compared with those who labored in a hospital persisted even up to 3 years after birth in 17% of all transported women.35

Most relevant reasons were the necessity of transport from home to the hospital, the inability to cope with pain, the unexpected increased rate of operative deliveries, anxiety about losing the infant during transport, and the dissatisfaction with caregivers. This paper documents that planned home birth, often unpredictably and suddenly, fails to fulfill what is promised to pregnant women and therefore expected by them. Unfortunately, none of the other studies has systematically investigated satisfaction/dissatisfaction with planned birth in an intention-to-treat model.

It also has been demonstrated in the Netherlands that among low-risk women the rate of operative deliveries is higher when they are managed by an obstetrician instead of a midwife.36 This is explained by the high rate of continuous fetal heart rate monitoring and impatience of the obstetrician to tolerate a longer labor time.

Much can and should be done to create a home-like, psychologically, and socially supportive hospital birth to support the legitimate expectations of women for a humane, safe, and undisrupted labor experience with full back-up immediately available.37 Hospital managers and obstetricians should be aware of the fact that a home-like equipped delivery room can reduce the woman’s need for pain relief, even reduce the rate of operative deliveries or episiotomies and increase patient satisfaction.38 It is also useful if pregnant women and their partners are already familiar with the delivery rooms within a hospital and all possibilities of pain relief. A Cochrane review has stated that a continuous 1-to-1 care during delivery can reduce per se operative interventions at the second stage of labor.39

In summary, planned home birth often does not satisfy its raison d’etre, improved patient satisfaction. Professional responsibility requires physician leaders to take measures to improve patient satisfaction, by creating home-birth-like environments that are appropriately staffed not only to ensure patient safety, which is the paramount professional responsibility, but also to ensure patient satisfaction.38 Successful collaborative experience with midwives, either within the hospital or home-birth centers with access to full back-up, have recently been reported.40-43 We fully support and endorse professionally responsible midwifery but reject professionally irresponsible homebirth midwifery and advocacy of it.

**Cost-effectiveness**

In the United States and throughout the world fiscal responsibility and accountability have become essential components in clinical practice and organizational leadership.44 It might at first appear that planned home birth offers the potential for cost-savings by avoiding a relatively more expensive hospital admission. The Birthplace in England national cohort study “priced” planned home birth, birth in freestanding midwifery units, “alongside” midwifery units, and obstetric units at, respectively, £1066, 1435, 1461, and 1631, and concluded that “for multiparous women at low risk of complications, planned home birth is the most cost-effective option. For nulliparous low-risk women, planned birth at home is likely to be the most cost-effective option but associated with an increase in adverse perinatal outcomes.”45

This is selective and a defective cost-effectiveness analysis. A more comprehensive Dutch report calculates a general 3-fold increase of costs in patients transported during labor, when the costs of the midwife, the transport system, and the obstetricians are included. Even more important, Svensson46 exposed the failure to include the lifetime costs for support of disabled children, which he estimates to be £5 million per handicapped child. In addition, the potential increased cost of professional liability must be considered.47 A comprehensive and reliable cost-effectiveness analysis would have also to take into account the cost of maintaining an adequate transport system, hospital admission for the pregnant women, admissions to the neonatal intensive care unit, the lifetime costs of supporting the neurologically disabled children who will result from planned home birth, and potentially increased professional liability costs.

In summary, selective cost-effectiveness analysis is not consistent with professional responsibility and may seri-
ously mislead public officials in policy deliberations about permitting and funding planned home birth. If we regard the increased “event” of perinatal or even maternal death—which appears in the British Birthplace study only in an appendix—these calculations become even more problematic, inasmuch as the least expensive patient is a dead patient.

**Respect for women’s rights**

There are 2 ways in which respect for women’s rights can be understood. The first starts with the right of the woman to make decisions and control what happens to her body. The physician is bound to acknowledge the scope of clinically reasonable alternatives. This limit does not exist in the rights-based reductionist model of women’s rights.

In the professional responsibility model of decision making, the patient has the right to select from among the medically reasonable alternatives. If she rejects them all and remains a patient, then her refusal is not a simple exercise of a negative right to noninterference. Her refusal is more complex, because it is coupled with a positive right to the services of clinicians and the resources of health care organizations and society. In all ethical theories positive rights come with limits. In the clinical setting ethically justified limits originate in professional integrity, because professional integrity prohibits provision of clinical management that is not safe.

In summary, from the perspective of the professional responsibility model, insistence on implementing the unconstrained rights of pregnant women to control the birth location is an ethical error and therefore has no place in professional perinatal medicine. An editorial in *Lancet* succinctly summarized this point: “Women have the right to choose how and where to give birth, but they do not have the right to put their baby at risk.”

**Professionally appropriate responses**

**What should obstetricians do to address the root cause of the recrudescence of planned home birth?**

The first professional responsibility of obstetricians is to ensure that hospital delivery is safe, respectful, and compassionate. Current, inappropriate practices may be fueling the recrudescence of planned home birth. Physicians need to closely scrutinize organizational policies and practices and should see to it that staffing is competent and adequate. Well-trained, compassionate in-house attending obstetric and anesthesia coverage should be required for all hospitals offering planned hospital delivery. Unnecessary obstetric interventions need to be assiduously prevented by adherence to evidence-based guidelines. Teaching of noninvasive care and mode of delivery should become an essential part of training. Physician leaders must be especially watchful for trends of clinically unjustified increased intervention that results from inappropriate self-interest in reducing liability, convenience, or financial gain. This focus on maternal and fetal safety should be complemented with an emphasis on compassionate care that respects pregnant women as persons by acknowledging and striving to meet their psychosocial needs. Home birth centers with immediate access to cesarean delivery, as well as collaborative practice models between obstetricians and nurse midwives should be encouraged. The goal should be effective integration of clinically competent and empathetic obstetric care as presaged by the Scottish physician-ethicist John Gregory, more than 2 centuries ago, who called for physicians to be scientifically excellent and to exhibit “gentleness of manners, and a compassionate heart,” what Shakespeare calls “the milk of human kindness.”

**How should obstetricians respond when a woman raises the topic of planned home birth?**

The increased risk of planned home birth is preventable by planned hospital delivery. Planned home birth should not be considered medically reasonable in professional clinical judgment. This clinical judgment should be respectfully communicated and the woman’s questions addressed in an evidence-based fashion. Women should be informed of the high transport rate and the increased, preventable risks to herself, her fetus, and her infant, as well as the psychosocial harms of emergency transport. The obstetrician and other obstetric provider should recommend strongly against planned home birth and obtain informed consent for delivery in a safe and compassionate hospital environment or a birth center with immediate hospital access.
How should obstetricians respond when a patient is received on emergency transport from a planned home birth?

There is a strict professional obligation to provide excellent medical care in all obstetric emergencies. Without hesitation, therefore, the obstetrician should provide excellent, compassionate, emergent obstetric care to all pregnant women transported from planned home birth. Obstetricians have a compassion-based obligation to be aware to and address the psychosocial harms of such transport, in an attempt to ameliorate their long-term effects.

Should obstetricians participate in or refer patients to a randomized controlled clinical trial of planned home vs planned hospital birth?

Analysis of the safety data on home birth shows that there is an unacceptable risk to pregnant, fetal, and neonatal patients. Equipoise, an important ethical condition for initiating randomized controlled trials implies genuine uncertainty as to whether one treatment is better than another. For home birth, equipoise does not exist, because a controlled clinical trial with home birth as one arm would subject pregnant, fetal, and neonatal patients to preventable, unnecessary risk of mortality, morbidity, and disability when compared with hospital delivery. The fundamental ethical imperative in research with human subjects is to protect them from impermissible harm. This imperative would be violated by a randomized controlled clinical trial. This conclusion is made all the stronger when one realizes that fetal and neonatal patients are vulnerable subjects of research because they are incapable of consent and therefore cannot protect themselves. Randomized controlled clinical trials of planned home vs planned hospital birth violate research ethics. It is therefore impermissible for an obstetrician to participate in or refer patients to such trials.

How should professional associations of obstetricians respond to the recrudescence of planned home birth? ACOG and RCOG should continue their important efforts to enhance patient safety and compassionate care for all hospital births and birth centers with immediate access to cesarean delivery. ACOG and RCOG should continue to support collaborative physician-midwife practices and strive for a home birth experience within the hospital. Professional associations should also support policy changes and try to get an impact on health care politicians as demonstrated by the Steering Committee of Perinatal Care in the Netherlands. The Dutch minister of Health and Sports understood that 7 topics are essential to improve perinatal care in the Netherlands: “(1) to organize perinatal care with mother and child in the center, (2) to introduce a proactive instead of a reactive care, (3) to inform women about the importance of preconceptional health, (4) to promote collaborative practice, improve the quality of collaborative delivery, to make plans for the delivery if appropriate by a case-manager and increase visits at home after birth, reduce home delivery, (5) to support national programs for prevention and care of women with poor psychosocial conditions, (6) to not leave women alone from the first moment of delivery to the end, and (7) that a woman can be reassured that at any time of the day or night any intervention that is necessary can be initiated within 15 minutes.” This last goal cannot now or in the foreseeable future ever be met by a home delivery.

Professional organizations should be willing to file amicus briefs in cases like the one decided by the European Court of Human Rights discussed earlier to ensure that courts take into account professional responsibility and integrity. Professional integrity and its implications for constraints on the rights of patients have played a major role in the reasoning of US state and federal courts about end-of-life decision-making because the landmark decision In re Quinlan. Professional organizations should also reconsider their statements on planned home birth and bring them into line with professional responsibility, to prevent rights-based reductionism in obstetric ethics and practice.

Conclusion

Advocacy of planned home birth is a compelling example of what happens when ideology replaces professionally disciplined clinical judgment and policy. We urge obstetricians, other concerned physicians, midwives, and other obstetric providers, and their professional associations to eschew rights-based reductionism in the ethics of planned home birth and replace rights-based reductionism with an ethics based on professional responsibility.

REFERENCES


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