The recent objections to birth in water which were voiced by both The American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists (ACOG) in ACOG Bulletin #594 on immersion in water during labor and delivery is nothing new. The joint Bulletin, which was published in both the April Pediatrics and on the ACOG website, is a follow-up to previously published opinions on the use of warm water immersion during labor and birth. Pediatricians were first warned of the potential dangers of birth in water in an article published in the Journal of the American Academy of Pediatrics in 2002. The current opinion of the Committee on Fetus and Newborn was first issued in 2005, restated in November 2012 and it has not changed since it was first issued. What has changed since 2002, is a growing body of evidence that reports on the safety and efficacy of not only laboring in water, but actually giving birth in warm water.

ACOG draws a distinction between these two events and have said in their opinion that, “Immersion in water during the first stage of labor may be associated with decreased pain or the use of anesthesia and a decreased labor duration.” But, they warn that there are no known benefits to either mother or baby during the second stage of labor and cause for concern of serious harm.

There are many midwives, obstetricians and pediatricians who are perplexed and angered over the issuing of this statement. Especially, doctors like Duncan Neilson of the Legacy Health Systems in Portland, Oregon. Dr. Neilson is chair of the Perinatology Department and VP of both Women’s Services and Surgical Services at the Legacy Emanuel Hospital in downtown Portland.

In 2006, Dr. Neilson did an independent review of all the literature on waterbirth, including obstetric, nursing, midwifery and pediatric. He concluded, “there is no credible evidence that waterbirth is a potential harm for either mothers or babies.” He reported that the majority of the waterbirth studies have been done and published in Europe with large numbers in retrospective analyses. What has been published in the US is largely anecdotal and has involved very small numbers of case reports from home birth or birth center transfers into NICU. Dr. Neilson even pointed out that Jerold Lucy, MD, the editor of the American Journal of Pediatrics put the following commentary in a sidebar in this research journal, “I’ve always considered underwater birth a bad joke, useless and a fad, which was so idiotic that it would go away. It hasn’t! It should!”

The publication of such prejudicial statements makes it difficult for pediatricians to look at the European research without skepticism. Dr. Neilson concluded that American doctors were not getting the complete picture. After this comprehensive review of waterbirth literature, Dr. Neilson believed that waterbirth is a safe birth option that
provides other positive obstetric outcomes. He helped set up a Legacy research committee and the parameters for waterbirth selection were created, using current recommended selection criteria followed by other Portland hospitals offering waterbirth:

Upon Dr. Neilson’s recommendations the entire Legacy system has adopted waterbirth. The most recent hospital to begin waterbirth was Good Samaritan in Portland, which conducted their first waterbirth in February of 2014. He is currently reviewing the statistical data on just over 1100 waterbirths in the Legacy Health System and made the following comments in a recent interview. “The large-scale observation studies from other countries which ACOG cites (e.g. Geissbuhler et al) do show neonatal outcomes that are at least as good as, and often somewhat better than outcomes from conventional care, but this likely reflects the ability of care providers to select low risk patients rather than any benefit from the water immersion. The consistent valid point, which can be gleaned from observation studies, is that there seems to be no increased risk in these studies involving certified experienced birth attendants in adequate facilities with protocol-driven care paths.”

Dr. Neilson makes a valid point that women self select and often follow the suggestions and experience of their providers. Dianne Garland discusses the process of how women choose to birth in water, in her book “Waterbirth Revisited: An Attitude to Care.” In a large survey of practices of individual midwives, the rate of the use of water varied greatly from almost 100 percent for some and less than 10 percent for others. Why such variances? Garland explains that women who seek this type of care option are influenced by the comfort level of their individual providers. This theory was also evidenced in a 2002 audit of waterbirth practices in ten birth sites throughout the UK. The more waterbirths taking place in a facility meant that the hospital staff and providers were comfortable with the practice and recommended it to every woman as an option and those who were not comfortable with the practice discouraged women from staying in the water for birth.

Every single day, Waterbirth International receives emails from women throughout the US, asking one simple question. “How can I have a waterbirth in my hospital?” Our first response is, “how pregnant are you?” and then, if they are less than 30 weeks pregnant, we list the tasks that need to happen before a hospital can change policy and embrace using water for labor and birth. In the past five years more hospitals have begun waterbirth programs than in the previous ten years. The current estimated number of US hospital offering water immersion as an option for both labor and birth is just under ten percent of all maternity care facilities. Women in the US and around the world are seeking a kinder, gentler way to birth their babies.

Women who are seeking waterbirth and undisturbed birth have usually considered the consequences of interference with the birth process. They may have read about the impact of early childhood trauma, including birth trauma, on the developmental neurobiology, endocrinology, immunology, and epigenetics of this new human being. Many women are not just looking for pain relief, but a way to remain drug free, relaxed, with some control over the process of letting the baby out. Over the past three decades, I have assisted hundreds of women in the birth pool. I have observed closely, listened carefully, and recorded many actions and characteristics in mothers and their caregivers. I have heard many caregivers and mothers retell their stories to friends,
families, and to their babies. Over 2500 women have completed surveys about their
water birth experience through Waterbirth International, often using the same words to
describe how their babies responded after birth and in the months and years that
followed. Is it just the water that caused these babies to be alert, calm, responsive,
connected, present and aware? The use of warm water immersion aids and assists the
mother in feeling calm, relaxed, nurtured, protected, in control with the ability to easily
move as her body and her baby dictate. From the mother’s perspective, using water
becomes the best way to enhance the natural process without any evidence of
increased risk. A calm relaxed mother is more likely to experience a calm relaxed baby
after birth.

The goal of the pediatrician and the goal of mothers who choose undisturbed birth is
really exactly the same. They are both thinking of the baby and what the baby needs to
enhance its quality of life from the very beginning.

A joint meeting of the Royal College of Obstetricians, the Royal College of Midwives
and the National Childbirth Trust in 2006 examined many different birthing methods and
modalities. Their main question was, “what would increase the normalcy of birth without
increasing risk?” and the very first agreement that went into a joint statement, was that
access to water for labor and birth would accomplish that task."17

Framework for Maternity Services Protocol
The UK National Health Service and the National Childbirth Trusts formed a Framework
for Maternity Services that includes the following statements:

- Women have a choice of methods of pain relief during labour, including non
  pharmacological options.
- All staff must have up-to-date skills and knowledge to support women who
  choose to labour without pharmacological intervention, including the use of
  birthing pools.
- Wherever possible women should be allowed access to a birthing pool in all
  facilities, with staff competent in facilitating waterbirths.

There is a concerted effort to educate midwives and physicians in all hospital in the UK
on the proper uses of birthing pools and safe waterbirth practices.

From the baby’s perspective, the benefits from an unmedicated mother who has a full
complement of natural brain oxytocin, endorphins and catecholamine flowing through
her blood supply, which he receives and uses to aid his physiologic imperative to be
born. The descent and birth of the baby is easier when the mother can move into any
upright position where she can control her own perineum, ease the baby out and allow
the baby to express its primitive reflexes without anyone actually touching the baby’s
head. The birth process is restored to its essential mammalian/human nature.
Pediatric Objections

Pediatricians worry that the following hypothetical situations could potentially bring severe harm to newborns who are born in water.

- Aspiration
- Hypothermia
- Infection

Newborn Breathing and Transition

Belief in the safety of waterbirth comes with a complete understanding of the mechanisms which prevent the baby from inhaling or gasping while it is still submerged in the water as the head is born and after the full body has slipped into the water. One must also poses knowledge of the triggers for newborn breathing and what takes place in the cardiovascular system as the baby transitions from fetal circulation to newborn circulation. The fear of aspiration is a strong deterrent to waterbirth for some providers and a grave concern for pediatricians and parents alike. When a baby is born everyone awaits that first cry which signals that the newborn has emerged safely from the womb. The delay of that response is very stressful for most people. Others view the newly born baby in the water opening his eyes and stretching his limbs in awe, and see a baby who is doing exactly what he did for nine months and still completely supported by placental circulation, but now is in a larger expanded womb – a womb with a view. The focus on the breath and that first cry has overshadowed all the other mechanisms that happen in the first moments of life which welcome us to life on planet earth.

One of the most important triggers for breathing is the presence of gravity pushing equally on the face and stimulating the trigeminal nerve (the fifth cranial nerve) innervations around the nose and mouth. Human beings need the force of 14.7 pounds per square inch of gravity, as well as the presence of oxygen and carbon dioxide molecules to trigger the switch from fetal circulation to newborn circulation. Once the shunts in the heart (the foramen ovale and ductus arteriosus) close and highly oxygenated blood flows into the pulmonary arteries, the well-vascularized tissue around the aveoli fill and fluid that occupies every one of the aveloar spaces (air sacs) is resorbed into the erect capillaries. The thick viscous fluid that was present in the lungs during fetal life will now increase the blood volume by as much as 20 percent.

Immediately after birth, the cardiac output to the lung must increase from the 8 percent level in fetal life to a 45 percent level necessary for neonatal life and adult circulation. Therefore, some of the blood from the fetal ‘lung’, the placenta, is needed by the neonatal lung for draining of the lung fetal fluids, adequate expansion and recruitment of lung tissue. Immediate cord clamping eliminates the many benefits of placental transfusion and compromises lung expansion and function. The infant is left with only the blood that was in the body at the time of cord clamping, which is not adequate to create an increase in the circulatory bed at the same time that the infant’s organs (lung, liver, kidney, skin, gut and brain) begin to assume the functions sustained by the
placenta during fetal life. In other words, the more blood that flows from the placenta into the newborn, the higher the blood volume. The more blood volume and the thinker the blood, the more fluids are able to leave the lung tissue. The many mechanisms that function to switch the newborn from fetal circulation to newborn status take place over the course of hours and sometimes days. Not all the fluids that were in the lungs prenatally are drawn out into the vascular circulation. The fluids that remain are drawn out of the lung tissue through the lymphatic system, which is stimulated over the following 72 hours by skin to skin placement, self-attachment and breastfeeding. One of the many benefits of waterbirth is immediate and uninterrupted skin to skin contact. Waterbirth providers have learned so much from observing what normal full term healthy newborns do in the habitat between the breasts. The neonate who is placed skin to skin regulates all his systems very quickly, but is usually extremely quiet. The absence of vigorous crying is not indicative of the absence of newborn breathing. Quiet stable newborn breathing happens often without a single peep out of the baby who is immediately placed in the habitat. This has been a frequent observation of babies who are born in water.

The presence of lung fluids in the alveolar spaces prenatally was explained by Dr. Paul Johnson, an Oxford University research physiologist, as one of several inhibitory factors which prevent the baby from gasping or taking a breath during the infant’s brief contact with the water during a waterbirth. When he explained the mechanisms of newborn breathing at the First International Conference on Waterbirth at Whembley Hall, London, in 1995, and said, “there are some things physiologically that are in favor of waterbirth,” there was a collective nod of understanding from more than 1100 participants. With this information, along with the other 15 lectures, more waterbirth practices were established all over the UK and Europe. Dr. Johnson went on to publish his explanations in the British Medical Journal in 1996.

Two other inhibitory factors need to be examined. The first one involves fetal breathing movements, which take place 40% of the time in utero, from ten weeks gestation. 24-48 hours before the onset of normal labor the prostaglandin E2 levels rise in both mother and fetus. The mother’s cervix softens, but the fetus slows the rate of active fetal breathing in an effort to conserve oxygen. After 4 centimeters of dilation, it is thought that the prostaglandin levels are much higher preventing any fetal breathing movement from taking place from that point forward throughout the labor and birth process. It makes sense to think that an expansion of the intercostal muscles during the birth is not something that would aid in the expulsion of the fetus from the birth canal. Dr. Johnson explained further that if the muscles are inhibited from working, the fetus or newborn has no ability to gasp or inhale. The musculature that operates the lungs simply is off-line during the birth – they are not functional.

A prominent theme in Dr. Johnson’s work is the explanation of normal mild newborn hypoxia and how it prevents the neonate from taking a breath by causing a swallowing reflex. All newborns are born with mild hypoxia. It is expected and it causes bradycardia, apnea (absence of breathing) and swallowing. The very first accomplishment on the long list of transitional activities for a newborn is to swallow the contents of the mouth. Presumably the mouth is full of vaginal secretions, amniotic fluid and other bacteria laden secretions, which need to get into the gut to begin to colonize
and prime the new digestive system with the right bacterial probiotics. Swallowing those fluids and clearing their own airway takes place before the first breath. Experienced providers of undisturbed birth, including waterbirth, often report that newborns will swallow, then spit, cough, and perhaps sneeze before regular respirations are noticeable. When a baby’s mouth is suctioned with either a bulb syringe or a DeLee trap, this act interferes with the mechanisms to introduce normal flora into the gut. And rather than enhancing the ability for the newborn to breathe, it may in fact, disrupt their efforts.25

Johnson’s 1996 review of respiratory physiology suggests that, in a non-stressed fetus, it is unlikely that breathing will commence in the short time that the baby’s head is underwater. Johnson sees no reason to prevent this option being offered to women. During a 1987 unassisted home waterbirth in Washington State, a couple left the baby under the water after it was born for more than 20 minutes. When the baby was brought to the surface of the outdoor hot tub, it was not able to be resuscitated. It had died. I mention this terrible tragedy because it had a huge impact on my life. By that date, I had already given birth to my two sons at home in water and had assisted another dozen women in setting up waterbirths, some in my own home. I had extensively researched and found water immersion to be safe, but then this incident challenged my beliefs. I interviewed the couple, the coroner and the local prosecuting attorney who had brought charges of child neglect against the grief stricken couple. The young couple did not understand that the placenta would eventually stop providing oxygenated blood to their baby and it would die, not by drowning, but by anoxia (lack of oxygen). The autopsy confirmed that the baby, even though completely without oxygen never attempted to take a breath. After that I began the process to create a nonprofit organization to disseminate correct information about the process of birth in water and to educate providers as well as parents, how to conduct a safe waterbirth.

Preventing hypothermia in water born babies

The thermal regulation abilities of the newborn are enhanced by delayed cord clamping, which will allow all the skin capillaries to fill, and improved by skin to skin contact.26 All water babies experience immediate and uninterrupted skin to skin contact. In 2011, I took the Kangaroo Mother Care certification course offered through the US Institute of Kangaroo Care. During the course, I described a waterbirth to the predominately pediatric and neonatal nursing audience and stated that in my entire career as a home birth midwife and doula I had never placed a baby or witnessed a baby placed anywhere except skin to skin. Every waterbirth ends with the baby being placed upright, face to one side, on the mother’s chest. A dry towel is sometimes used to gently wipe the face and head and another one is placed over the baby’s back. All observations of the newborn take place while the baby is transitioning in that space. The newborn brain is programmed to behave in a specific sequence and transition only in that space.27 28 The infant does not need a hat, clothes or warmer. The mother’s skin facilitates warming of the infant and leads to thermal stability better than any substitute mechanical warming unit.29 The warmth of the water (temperatures vary between 92-99 Fahrenheit /32-37 Celsius). Ambient skin temperature is between 92-95 Fahrenheit. Water temperature should always be kept comfortable for the mother, but
not too hot. During labor, if the mother becomes overheated from higher water temperatures, the fetus will experience a transient increase in heart rate, which only resolves if the mother cools off. After the birth, the temperature of the water can be raised by adding a more hot water. Mothers can stay in the water until the delivery of the placenta or leave the bath with baby still attached and deliver the placenta outside of the water. Have a bath blanket or robe handy to keep mother warm.

**Infection in newborns following waterbirth**

In 1960, Dr. Peter Segel published a study in the Journal of OB/GYN, titled, “Does Bath Water Enter the Vagina?” Pregnant women were put into bathtubs that contained iodine stained water. Before entering the bath, a sterile starched white tampon, without a string, was inserted into the vagina. After 30 minutes of soaking, the women left the bath, the tampons were removed and not a single one was stained with iodine. Common advice from physicians at that time was to avoid bathing in the third trimester and definitely to not bath while in labor or after membranes have ruptured.

No relationship has been found between hydrotherapy and newborn Apgar scores, infections or an increase in admissions to special care nurseries. In Oregon, the Oregon Health and Science University (OHSU) has been teaching safe water birth in the nurse-midwifery education program since approximately 1999 when one of the perinatologists on the staff brought this practice to the institution from her fellowship site in England, where waterbirth was routine. That OHSU program continues today without any evidence of added risk to the neonate.

A 1996 Scandinavian study of women with premature rupture of membranes and prolonged latency in which part of the study group took baths once labor began and the rest labored conventionally, compared rates of infection in neonates following the births. The bath group had significantly lower rates of infection than the bed group, concluding that even with waiting for 72 hours for labor to begin using hydrotherapy did not increase infection.

The subject of fecal matter in birth pools always comes up when infection risk during waterbirth is discussed. Dr. Michael Rosenthal began offering waterbirth to clients at his free standing birth center in Claremont, California, in 1992, after hearing a lecture by Dr. Michel Odent. Dr. Rosenthal, being one of the first US board certified obstetricians to embrace waterbirth was often interviewed and asked about this not so pleasant aspect of hydrotherapy. He explained in numerous interviews that the dilution effect of the water actually reduced the exposure to any harmful bacteria and then went on to explain that every baby needs to be exposed to the bacteria from the mother’s vagina and rectum in order to create the proper microbial protection for the baby. He was twenty years ahead of his time when he stated that ‘the solution to pollution was dilution.’ Recent studies that looked at Group Beta Strep exposure to babies born in water, revealed that the tendency was for less colonization of bacteria on the water babies compared to the land born babies.
The bottom line in preventing infection and cross contamination in birth pools and equipment is to either make everything disposable or cleanable. Having infection control policies in place for all birth settings, even home births, is necessary to prevent serious infections from occurring, especially with multi-use birth pools and installed bath tubs.

**European Research**

Highlights of the literature:
- APGAR scores were found to be unaffected by water birth.\(^{34, 35, 36, 37, 38}\)
- One study found a decrease in 1-minute APGAR scores exclusively in a subgroup of women who were in water after membranes were ruptured longer than 24 hours.\(^{39}\)
- A consensus of researchers found that waterbirth had either no effect or reduced cesarean section and operative delivery rates.\(^{40}\)
- No studies have found an effect on rates of maternal or fetal infection.\(^{41, 42, 43}\)
- Statistically, waterbirth leads to increased relaxation and maternal satisfaction, decreased perineal trauma, decreased pain and use of pharmaceuticals, and decreased labor time.\(^{44, 45, 46, 47, 48, 49}\)

**The American Association of Birth Centers Position Statement**

An April 2014 statement was released by the Board of Directors of AABC, in response to the ACOG opinion.\(^{50}\) Data for analysis was collected from a sample of 15,574 obstetrically low-risk women eligible for birth center birth at the onset of labor from January 1, 2007 to December 31, 2010. There were 3998 water births in the sample. These data demonstrate that water birth, with careful selection criteria and experienced providers, does not negatively affect mothers or newborns.

Rates of newborn transfer to a hospital were lower following water birth (1.5%) than nonwater birth (2.8%)

Rates of adverse newborn outcomes (5 minute APGAR < 7, respiratory issues, presence of infection and NICU admission) were each below 1.0% in the water birth sample. The total rate of any respiratory issues was 1.6% in the babies born in water and 2.0% in those not born in water.

**Cochrane Collaboration Findings**

A Cochrane Collaboration review of waterbirth in three randomized controlled studies (RCTs) show no research that demonstrates adverse effects to the fetus or neonate.\(^{51}\) Other studies that were not RCTs were included in the conclusion:
“There is no evidence of increased adverse affects to the fetus or neonate or woman from laboring in water or waterbirth. However, the studies are variable and considerable heterogeneity was detected for some outcomes. Further research is needed.”

**American Academy of Pediatrics’ Misleading Committee Commentary**

Despite this review, the 2005 American Academy of Pediatrics committee on Fetus and Newborn, commentary (the one upon which the current ACOG statement is based) raised concerns regarding the safety of hospital waterbirth. The committee commentary was not a study itself, but rather an opinion generated upon the review of research.

A review of the commentary and the sources cited, revealed irregularities. The commentary often paraphrases text from the references, redacts crucial words and sentences from the texts, and sometimes re-interprets the authors’ conclusions. Anecdotal case studies were referenced without being part of an empirical study.

**Example:**

*Committee text:* “All mothers used water immersion during labor, but only a limited and unspecified number of births occurred under water.” 2 infants required positive pressure support, but little additional data were provided.

*From cited reference:* 100 births occurred under water. Only 2 infants out of 100 needed suction of the upper respiratory tract and a short period of manual ventilatory support. 52

*Committee text:* “Alderdice et al performed a retrospective survey of 4494 underwater deliveries by midwives in England and Wales. They reported 12 stillbirths or neonatal deaths”

*From cited reference:* "Twelve babies who died after their mothers laboured or gave birth in water, or both, in 1992 and 1993 were reported. None of these cases was reported to be directly related to labour or birth in water."

*Committee text:* "In a subsequent survey of 4032 underwater births in England and Wales, the perinatal mortality rate was 1.2 per 1000 live births (95% confidence interval: 0.4–2.9) and the rate of admission to a special care nursery was 8.4 per 1000 live births (95% CI: 5.8–11.8) The author of this survey suggested that these rates may be higher than expected for a term, low-risk, vaginally delivered population.”

*From cited reference:* "4032 deliveries (0.6% of all deliveries) in England and Wales occurred in water. Perinatal mortality was 1.2/1000 (95% confidence interval 0.4 to 2.9) live births; 8.4/1000 (THEY LEFT OUT THE 2ND CI 5.8 to 11.8) live births were admitted for special care. No deaths were directly attributable to delivery in water...."

The reference also provides that the UK perinatal mortality and special care admission rates for conventional birth ranged from 0.8 to 4.6/1000 for perinatal mortality, and 9.2 to 64/1000 for special care admission—significantly higher than those utilizing waterbirth.
Nowhere in the cited reference can the statement be found that “these rates may be higher than expected for a term, low-risk, vaginally delivered population.” In fact, the study results reflect no effect on fetal outcomes and certainly not an increase in fetal mortality and special-care admissions.54

Finally, the committee commentary acknowledges the findings of the Geissbühler study55:

“A prospective observational study compared underwater birth with births using Maia-birthing stools and beds. Although underwater birth was associated with a decreased need for episiotomies and pain medication as well as higher APGAR scores and less cord blood acidosis in newborns, the birthing method was determined by maternal preference, and potential confounding variables were not analyzed.”

The committee does not elaborate on which confounding variables they feel are of concern. It appears this supportive study was automatically discredited without a reason.

While The American Academy of Pediatrics is committed to patient safety and evidence-based medicine, this commentary’s conclusions that hospital waterbirths are of greater risk than other hospital birth options for low risk and carefully screened patients are completely unfounded.

**Studying Waterbirth**

In 1998, I copied all the medical journal articles about waterbirth that had been published to date and sent the labeled and categorized studies to the Practice Committee of ACOG. In the cover letter accompanying the rather weighty binders, I asked the Committee if they would review the literature and issue an opinion about actual birth in water. The letter that arrived a few months later from Stanley Zinberg, MD, head of the Practice Committee, stated, “until there are randomized controlled trials of large numbers of women undergoing birth in water, published in peer reviewed journals in the US, the committee is not able to issue an opinion.”

Randomized studies of waterbirth are difficult to design and implement for one major reason: women want to choose their own method of delivery and should be able to change their mind at any point of labor. Because of this, it is difficult to design a randomized controlled study without crossover between control and study group. A 2005 randomized trial which was set up in a Shanghai, China hospital was abandoned because the hospital director realized after only 45 births that the study was unethical. The original goal was to study 500 births, but the results of those first 45 were so good they abandoned the research project, yet continued their commitment to offering waterbirth to any woman who wanted one. The latest communication from the Changning Hospital indicates that they have facilitated well over 5000 waterbirths.

Randomized controlled trials may be few, however, many retrospective and prospective case-controlled studies have been performed, primarily in European countries with a long history of waterbirth. In reviewing published studies, a comparison of the safety of waterbirth to conventional births among low-risk patients can be made. The evidence
reveals the option of waterbirth is safe and, looking at certain parameters, has superior outcomes.

**Conclusion:**

Waterbirth is an option for birth all over the world. World-renowned hospitals, as well as small hospitals and birthing centers, offer waterbirth as an option to low risk patients. Though some members of the AAP feel otherwise, the Cochrane review and many other studies find no data that supports safety concerns over waterbirth.

Women increasingly are seeking settings for birth that honor their ability to do so without intervention. Waterbirth increases their chances of attaining the goal of birth without intervention.

My two water babies are active thriving adult men in their late-twenties. I kept notes on their development and intelligence, but my biased information needs to be joined with other collective data. We need robust cooperative research in maternity care, including sharing worldwide waterbirth data and follow-up studies on the children. Waterbirth continues to provide a platform for maternity care reform, discoveries about consciousness and birth and a new respect for fetal and newborn development. Waterbirth takes us beyond our previous limitations of knowledge about newborn adaptation and challenges us move from our comfort zone. When undisturbed waterbirth is embraced by a hospital system, other practices change as well. Cords are left uncut; babies are put into the habitat and left there skin to skin without separation for any reason; women are encouraged to eat and drink liberally; to walk and be upright in or out of the water. The use of water immersion does, indeed, normalize all birth once the basic principles are embraced.

Physicians and midwives are skilled providers who are being trained in waterbirth techniques, safety concerns and infection control procedures. Patients will return for future births when they know they are being cared for with respect for their birth experience.

Obstetricians and midwives can offer a full complement of services in any setting, even in the “security oriented” environment of the hospital. Increasing the number of low risk women attracted to these facilities will reduce their exposure to higher risk interventive practices.

Carefully managed waterbirth is both an attractive and low-risk birth management tool that can provide healthy patients with nonpharmacological options in hospital facilities while not compromising their safety.

German philosopher, Arthur Schoephauer,(1788-1860) is quoted as saying, “All truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident.” In some parts of the US the benefits of waterbirth are accepted as self evident and it is promoted as being easier for mothers and better for babies. In other places waterbirth is still being ridiculed. We know that waterbirth is being violently opposed by those who do not understand all the benefits that
undisturbed birth provides for both mother and baby. Women want safe, satisfying births where the provider is a powerful guardian of the experience, trusting the woman and her baby to unfold at their own pace in their own way, including the use of water throughout the birth process.

Despite Dr. Lucy's statement, waterbirth is not a fad, especially when it is mandated as an available option for all women in the UK and practiced worldwide in over ninety countries.

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11 Neilson, Duncan Presentation at the Gentle Birth World Congress, Portland, Oregon, Septemnbere 27, 2007

12 Duncan Neilson, Person communication via email. March 28, 2014


46 Eckert, K; Turnbull, D; MacLennan, A. (2001) Immersion in water in the first stage of labor; A randomized controlled trial. Birth, 28 (2) p 84-93.


50 AABC Position Statement: Water Immersion During Labor and Birth April 1, 2014


52 Odent, M., 1983. The Lancet, December 24/31, p 1476


54 Ibid