

What is it about Water birth?

Narrative and Reflection on a Retrospective Study

Josie Conte, DO

The delivery of an infant from the maternal environment, into a warm tub of water and then to the mother's arms, is commonly referred to as water birth. It has been growing in popularity since the late 1980s, especially in the midwifery model of care. Growing numbers of nationally accredited birth centers and hospitals are standardizing protocols for safe and best practice for water birth while the American College of Obstetricians and Gynecologists (ACOG) advise against water birth. (3)

Can anyone have a water birth? I suppose they can, but should they? Not necessarily; it is not for everyone. Just as vaginal delivery is not for everyone. Some women, for medical or personal preference, would not participate in a water birth. There are guidelines to make this as safe as possible, just as the 2016 ACOG recommendations state. There needs to be informed consent and policies in place to provide the safest environment possible, whether at home, in a birth center or hospital. You will best support your patients by becoming informed. You can familiarize yourselves on the topic before your patients ask, by familiarizing yourselves with resources in your region.

As a scholarly project during my family medicine residency, I chose to perform a retrospective analysis of births that were completed at the Ballard House. I started this in 2012. Twelve years later, I am continuing to struggle to bring this to publication. My hesitation around how best to share our research has been overshadowed by memories of being scolded privately and then in front of a row of nurses, medical assistants and other clinicians in a respected pediatrics office. Having the experience of being shut down as a medical student by attendings I had respected led me to hold my tongue for 12 years, for fear of further antagonism.

The study itself was presented in 2020 at the 48th Annual North American Primary Care Research Group, as a poster, along with a two minute video summary. (9) Since the start of our investigation, several large retrospective studies have been published (6, 7, 8) and a systematic review updated. (10) Over 300,000 births were analyzed, and the results of our small study reflect similar outcomes to the larger studies. There was no statistical significance in outcomes for babies born into water, when compared to those born on land (or bed, floor or birthing stool—I suppose you might consider that into the air.)

So what this really all comes back to is giving women respect and support. Trust that women know what they want and have thought a lot about where and how they hope to be supported

during their birthing journey. If they are not certain, it is our job to provide the information. Most healthy women do not wish to bring harm to their babies.

Do you, can you, trust women to know what is best?

Do women shop around for a supportive place to deliver their baby?

Do they interview clinicians and choose to deliver their baby where they feel safest?

Yes, they do.

Do you trust women to know what is best for themselves?

If you also answered 'yes' to the last question, this is how you empower women to own their health and create the experience they hope for. An empowering birth sets the necessary foundation for confident parenting. In fact, women trust their primary care providers and are hoping to gather information. Your opinion, whether you state it aloud or hold it to yourself, will inform her choices. (11)

The births we studied all occurred in a National Association of Childbearing Centers (NACC) accredited birth center. NACC changed its name to the American Association of Birth Centers (ABCC) in 2005. The ABCC has guidelines for institutions and birth workers to follow. (12) There are some hospitals that will support water births, mostly in countries outside the USA, and protocols are written and followed, as they should be.

Water birth works because of principles of nature and physiology. I will cite articles for you to explore further, but a proposed mechanism is the presence of a swallow reflex that the neonate has when transitioning from internal or water birth (14) fluids to the outside environment. A swallow occurs before the first inhalation. At birth (14) pressure differential affects the expansion of the neonate's ribs and lungs, as does temperature, so that breathing will not occur until the baby's nose and mouth are brought to the surface of the birthing waters; the cool air on their facial cheeks starts the process.

The umbilical cord is left alone, no pulling and tugging. Of the births that occurred in water in our study, avulsion of the cord occurred three times. The placentas were delivered naturally, without incident. No need to pull on it. The uterus will contract to release the placenta; the placenta is delivered after the blood vessels are constricted by the contractions of the muscular wall of the uterus.

Consumers can drive the way medicine is practiced. More women are becoming aware of water immersion as a non-pharmacological method of easing labor pain, and are asserting their desire to be supported in their choice for water birthing. The current estimated number of US hospitals offering water immersion as an option for both labor and birth is just under 10% of all maternity

care facilities. (13) 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. (10)

Birth can heal. The process of pregnancy, labor and birth is the transformation of a person with a uterus to a mother. I have witnessed pain and past trauma transformed to beauty, strength and power. So be a part of the support. Inform yourself. A woman needs to be well supported, especially during this transformation.

Delivering a baby into a warm tub of water may not appeal to many, and may even seem gross when considering the wide range of bodily fluids released into this water. But RN Barbara Harper likes to reassure us, “The solution to pollution is dilution.” (1)

Indeed, drowning and infection are the two biggest concerns and arguments still being made by the American College of Obstetricians and Gynecologists (ACOG). This is despite updated guidelines from 2016 (3) and the American Academy of Pediatrics (AAP). The AAP has only presented articles conjuring the naked emperor, as if women’s decisions should be treated as fairy tales, and horror stories, through citing unfortunate and poorly managed water births. (2, 3, 4) To be fair, these are outdated papers, given the larger systematic reviews that were published in the last 7 years, reviewing and comparing neonatal outcomes between land birth and water birth. I did attempt to collect data on nosocomial and adverse events that result from interventions practiced daily in hospitals, following rubrics; these statistics are not available.

So, what’s a little urine, blood, amniotic fluid and probably a little feces among the family?

I am going to tell you about the first water delivery I attended as a doula in a hospital in Maine, because it is both brilliant and awful. No, there is nothing reflecting all the horror stories written in the journal from the AAP: drowning, infection, pulmonary edema. (2) The child was healthy; all went well.

The mother was a 19-year-old, I’ll call Alice. She was hoping to deliver her baby at a birth center in Portland, Maine, but at the time she was ready to give birth, the Ballard House Birth Center was still in the process of inspections. This was to be the first free-standing birth center in Maine, and the owners were still working through the accreditation process with the North America Childbearing Center (NACC now AABC). Ballard House would be located one block from Mercy Hospital in Portland, and would have a good relationship with Maternal Fetal Medicine specialists at Maine Medical Center. Sarah Levy, (one of the founding mothers of Ballard House) and I were invited to serve as *doulas* for Alice. A *doula* is a non-clinical support person who will attend to the birthing mother and her partner and family, offer advocacy, provide comfort measures and support the mother's wishes within the practices of the clinician and institution where she will be delivering her child.

Alice asked her PCP, who was a family doctor, to let her try a water birth at the hospital nearby and the doctor decided she would support her request. There was a tub in the center of the labor room, which is ideal to be able to access the laboring/birthing mother from all sides of the tub. It is also rare, due to the space a birthing tub requires. Many tubs in hospitals are set into a corner, if there is a tub at all. This tub was sterilized and filled with warm water from a tap deemed sanitary.

Alice walked, danced, paced the room, shook her hands and sang to oldies music and, when she became truly uncomfortable, entered the water. At one point in the process, probably near transition, when basically nothing was comforting, she got out of the tub and locked herself in the bathroom, refusing to come out again. After being threatened to have the door removed, Alice left the bathroom, stomped back to the tub and immersed once again into the water where her partner was waiting to support her. She let go and allowed herself to be carried into an altered state, singing between contractions and then beating on her partner when a contraction overtook her.

Her three year old daughter wanted to join them. We lifted her up and lowered her into the tub. She pretended to be a mermaid and floated around her mother, who had entered an altered state and did not find this annoying in the least. I applied firm downward pressure to a few acupressure points: (in the middle of her trapezius muscles, and on her sacrum) to meet the intensity of the contractions, and work with the sensations. There came a point in her labor where the baby was entering the lower pelvis. Alice was having a lot of discomfort in her sacrum, so to gain better access, I climbed in the tub, wearing my bike shorts. This is the cringe-worthy moment. I am pretty sure the three attending doctors (from two Portland hospitals) shrank back and away in horror. As I write this, I too feel a little flip in my stomach, as I consider my exposure to the water and fluids I alluded to earlier. Yet, I lived to tell this story, now 20 years later and 3 negative hepatitis tests. Just, please, don't do this. Follow universal precautions. There are arm-length protective gloves and goggles to don, if or when the need arises to reach into the birth waters.

But what was most remarkable, aside from the actual delivery of her baby into the water, was that Alice delivered her own child, bringing her baby's face to the water's surface as her child took their first breath. Her nurse provided her with a warm towel to dry the baby's face and head. Alice intuitively brought her baby to her breast. The doctors were eager to dip in and collect the placenta. But this self assured birthing mother held up a hand, gesturing: "stop, wait". We all watched for a good five minutes. When the contractions came again, for her to bear down, she passed her baby boy to her partner, reached down, and caught her own placenta too. In a moment, her baby was back to her breast. After a few minutes, Mom and baby were assisted out of the tub, wrapped in a warm blanket, dried and escorted to the bed where her intact perineum

was inspected. It was truly amazing. I had seen water birth on video but this was my first time witnessing it in person. It works. Nature is ingenious. No one drowned or developed infection. Not even me.

Resources for patients

[Water Birth International](#)

[American Association of Birth Centers \(AABC\)](#)

Resources for Family Doctors

[Water Birth International](#)

[American Association of Birth Centers \(AABC\)](#)

[ACOG Committee Opinion No 697 November 2016](#)

[Guidelines for Safe Water Birth](#)

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