

midirs

In deep



Seven secrets of successful water birth

Barbara Harper

What constitutes a successful water birth? One might immediately respond, '*a healthy mother and baby*'. But I believe there is a deeper answer.

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 (Harper 2008). At first I thought it was just the fact that the babies were born in water that caused them to be alert, calm, responsive, connected, present and aware. I'm not completely convinced that it was just the water that caused this response. I now believe a host of other actions, thoughts and feelings contribute to welcoming bright, aware babies.

I have identified seven qualities that have a profound impact on the success of a waterbirth.

Confidence

Both the caregiver attending a water birth and the mother giving birth must possess confidence. In my *Guide to safe water use* (Harper 2010), the first contraindication is a fearful provider. Confidence comes with education and experience. The first teaching objective of any water birth course, study day or conference is for participants to understand and be able to communicate, without doubt, that the baby is safe in the water environment. After the baby's head emerges and the contraction stops, the uninformed or inexperienced provider becomes anxious to '*get the baby out*'. That urge leads to getting wet from leaning over the pool and reaching in to handle the baby and deliver the shoulders. The confidence that no harm can come to baby, that aspiration will not happen, begins with understanding the physiology of newborn breathing. The reflex to begin breathing is only initiated after innervations of the trigeminal nerves in the face, nose and mouth are stimulated with a combination of room air



under pressure – called gravity (Johnson 1996, Harper 2000, Garland 2011). Once this reflex is activated and results in pulmonary circulation for the first time, oxygen rich blood flows into the lungs and carbon dioxide is removed. Oxygenation is improved by allowing the cord to continue to pulse, providing a higher volume of blood to flow into the alveolar capillaries and causing them to become erect and thus increasing the amount of oxygen and carbon dioxide exchange. This also results in more of the fetal lung fluids being drawn out into the more viscous blood (Mercer 2001). The baby whose face is exposed to air while the head is hanging on the perineum in a normal vaginal birth has the experience of beginning the process of switching from fetal circulation to newborn circulation right away. The water-born baby's breathing reflex is delayed until it emerges into the air; thus it needs the extra placental blood from delayed cord clamping even more than the air-born baby. In an effort not to disturb the mother and baby after a water birth, delaying cord clamping became standard practice as well as skin-to-skin contact. The benefits that result from both of these practices contribute to a more alert, focused, quiet, peaceful baby (Ludington-Hoe 2011a). Nancy Acheff, a Colorado nurse midwife with four years of water birth experience, states, *'I have never seen a baby aspirate during a water birth, but that is the first objection everyone cites. We all need more education.'* With education and experience, also comes the assurance that you will know how to best assist a mother to move or assume a position that will encourage baby to emerge in the best way possible. Knowing how to handle a potential shoulder dystocia increases the confidence of the attendant. The baby has been programmed with a biological imperative to be born and more often than not will find the best way out, even if it takes until the peak of the next contraction, or the next. Guiding the mother onto her knees, or one knee down and one foot on the floor, significantly increases pelvic capacity and usually results in rotation of the fetal head. So remember, if the baby does not appear to be moving, the best thing to do is move the mother.

Conditions

The **conditions** of the room, the ambience created by merely having a birth pool, contribute to the well-being of the mother. It is surprising to see how quiet voices become when you introduce a freestanding birth pool in the hospital room. The routine is changed and the birth pool presence says that this is a different environment. The water creates new conditions in the mother, both

physiologically and spiritually. After only 20-30 minutes of immersion in water the body redistributes blood volume, which stimulates the release of atrial natriuretic peptide (ANP) by specialized heart cells. The complex relationship between this release and the activity of the posterior pituitary gland enhances the release of more oxytocin (Katz 1990). Just the touch of the water on her skin increases the release of oxytocin and endogenous opioids (endorphins) by stimulating the C-afferent pathway fibres (Ludington-Hoe 2011b). The fear of slowing the labour down by getting in the water too soon should be outweighed by needs expressed by the mother. If she feels that she will derive relaxation and a decrease of anxiety, then even if she is only minimally dilated, she should be encouraged to try the pool for at least an hour, due to the increased oxytocin release. There is a lingering debate over the timing of entering the pool. There are many other factors that affect dilation, so allow for a 'trial of water' even in early labour. A nurse-midwife in California told me a story about a hospital where birth pools were installed in every room. As a means of helping the staff understand the great benefit of water labour, they instituted a new policy stating that if a woman wanted an epidural she first had to take a bath. When the staff witnessed a significant decrease in the number of epidurals and a reduction in overall labour time, they were convinced of the beneficial effects of water. The internal conditions or co-dependency of mother and baby should also be considered. If the mother is relaxed and perceives a feeling of peace, serenity and well-being, her baby is experiencing that same environment. Babies who are stressed *in utero* prepare themselves for living in a stress-filled world (Kinnally 2010). The mother relays environmental information to the developing fetus. Her perceptions directly impact upon the selection of gene programmes that may enhance the survival of her offspring, and ultimately that of the species. A mother can have a negative impact on the survival of her child through a 'misperception' of her environment. For example, a pregnant woman in an abusive or fear-filled environment will continuously relay distress signals, which shunt resources from growth-related behaviours to protection-related behaviours, in both herself and in her fetus (Lipton 1998). The presence of endorphins aid the baby in preparing for both the physiological requirements of extrauterine life, including breastfeeding, and in the creation of 'growth' brain pathways during and after birth (Schoore 2009). Providers who are used to seeing mothers relax completely and go into altered states of awareness are more comfortable with not



disturbing those states unless absolutely necessary. They take care to listen to fetal heart tones with Dopplers in an unobtrusive manner, thus not detracting from that inner peace. Many providers feel that their presence in the room is not enough. They have been trained to 'do' something, to intervene in some way. Water challenges that belief. A doctor attending a water birth training got up and stated, *'Okay, I understand the hands off approach and allowing the mother to even catch her own baby, but if I don't do anything how do I justify my fees?'* After the giggles died down in the room, I calmly replied, *'Does the life guard on the beach still get paid if he doesn't have to save anyone that week?'*

The mother's mental or spiritual condition assessment should have started in her very first prenatal visits, but even in labour a skilled practitioner can assist the mother in finding her centre, staying in a blissful, mindful state. The key to this is for the practitioner to find that place within themselves first. The phrase, 'holding the space', is very important in birth when you realize that thoughts and feelings are transmitted through actual energy waves and there is an interpersonal neurobiology taking place between mother and provider. We have extreme influence over the mother, who is in a highly suggestible state, just by what we are thinking and not necessarily actually saying. Ninety-eight per cent of communication is non-verbal, including: your eye contact, your facial expressions, your tone of voice, your posture, your gestures, the timing of what you say, and the intensity of what you say. All of the above influence her condition of pleasure or pain. Keeping the room quiet is not enough. We have to keep our thoughts quiet as well and be just as mindful of, and in resonance with, the mother. The baby also picks up on the thoughts of those in the birth room. Dr. David Chamberlain, a noted psychologist and author, states that adults in regression can tell you exactly what was being discussed and thought about in the delivery room (Chamberlain 1988). The mother's internal environment takes on new meaning within these discoveries. The water aids and enhances the mother's ability to focus on the birth process, connect with her baby and remain in a blissful state.

Consciousness

Consciousness is a relatively new study within neuroscience and psychology. There are programmes and departments in universities throughout the world studying the effects of mindfulness meditation on the ability to change brain pathways and to even forge new ones. The use of medical hypnosis and programmes like HypnoBirthing® has added another interesting element to the birth room. The baby is a conscious participant in his birth. He's listening, responding to his inner environment and preparing his neurological systems to deal with life outside the womb. The baby is not just the passenger during birth. The baby is the driver! When this becomes evident, our birth practices shift their focus into what is required to aid the baby in the most respectful, assuring and safe manner. A profound connection with his mother is the best way to assist baby on his journey. Allowing mothers to labour and birth in water is one of the easiest ways for her to connect to her baby. Water birth mothers repeatedly report an increased awareness of the baby's movements, when the baby is moving down, turning and even kicking their way out of the birth canal. They feel more connected with the baby's thoughts and feelings and some even report hearing the baby talk to them. Some

providers report being able to listen to the voice of the baby. A midwife in Albuquerque, New Mexico, states that all she has to do to 'talk' to the baby is put her hand in the water. She explains that the water intensifies the vibration of consciousness that normally goes unnoticed. This may be a lot to consider, but the field of consciousness is expanding daily. Medical hypnotherapist, Dr. Nadine Romain, recommends that the best way for the practitioner to begin to understand this is to develop their own daily practice of mindfulness exercises. Meditation, prayer, yoga, including yoga nidra, or even Tai chi and Qigong are ways to connect to source – consciousness. The water assists the mother to connect, but it can be intensified when the practitioner connects, as well, and holds the space for the baby to do the work that he was biologically and consciously programmed to accomplish.

Constancy

When this level of understanding or consciousness is experienced a feeling of **constancy** is established. Within that environment the mother and baby are free to unfold in ways that best serve them. Constancy is more than patience, it allows enjoyment to replace fear and the birth proceeds faster and more effectively than you could have imagined. If oxytocin is the 'love' hormone and endorphins are the hormones of pleasure and transcendence (Buckley 2009), then with constancy everyone is in the 'zone'. Constancy provides a sense of trust. Trusting the mother to know her body and be connected with the baby and also to trust your instincts and intuition as a provider. Suddenly, you don't have to perform vaginal exams to confirm dilation. You start trusting your instincts more and looking for other outward signs from the mother, like her vocalisations, or the bump on her coccyx which rises as the baby descends through the pelvis. Water has allowed practitioners to develop an entire new set of skills for assessing the progress of labour. Because so many women lean over the side of the birth pool there is more opportunity to view the purple line that ascends from the rectum up the back one centimetre for each centimetre of cervical dilation (Shepherd 2010). Russian midwives first told me about this in 1987 and I was amazed and delighted to witness it many times. Providers experience more intense emotional satisfaction when they allow themselves to develop this trust and feeling of constancy.

Compliance

Compliance is a two way street. We talk a lot about the necessity of the mother being compliant to our orders, routines, experience and knowledge, but the use of water requires the provider to offer compliance to the mother and baby in new ways. The mother, however, must offer compliance if the provider feels something is not right, as in the case of too much bleeding postpartum. In suggesting position changes in the water for a longer than average time with the head hanging on the perineum, an unmedicated mother is able to move quickly, shift and realign herself immediately, allowing the baby to be compliant with the mother's body. If the mother wants to vocalise throughout second stage and not push, perhaps singing or chanting, trust her and watch for external signs of descent, such as a bulging rectum and sudden position changes. If the baby truly is the driver and the mother the vehicle for the birth, trust the mother to be compliant to her baby's movements. If she is in a position that does not allow you to have your hands on the perineum, use a mirror to watch her bottom, and focus on her

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breathing, perhaps even breathing or singing with her. Compliance is about adaptability, flexibility. If she doesn’t want a vaginal exam, but you want to know where the baby is, ask her to slip her fingers in and tell you where the baby is. Women labouring in water are much more able to touch and feel their bodies. Women report that the positions on a bed don’t allow them to be as close to their bodies or as free to touch, feel and experience what is happening. You can tell immediately when she connects with the baby’s head. Ask her if it is three knuckles away, two away or one away.

Cooperation

Cooperation between mother and baby and between provider and mother/baby is also required. Adaptability leads to confidence and understanding. When mother and baby cooperate together in the water, they dance through the birth process. If the mother’s pelvis is in good alignment, the cooperation that takes place with the descent of the baby is nothing short of miraculous. After the baby’s head passes through the pelvic inlet, the pelvic floor muscles, which are directed obliquely across the pelvis, cause the baby’s temporal plates to fold over one another. This results in a tightening of the baby’s neck muscles which in turn causes the head to rotate 45 degrees as the muscles turn toward one shoulder (Phillips 2001). This is known as the ‘asymmetrical tonic neck reflex’ and is the first of four primitive reflexes that are the result of a cooperative effort between the mother’s muscles (the vehicle) and the baby (the driver). It’s as if the baby steps on the gas and the car responds with the delivery of gas to the compression chamber, the spark plugs engage the cycles of the engine and the car goes forward. The next reflex is caused by pressure from the mother’s anal gutter which forces the baby’s head into extension. This extension is like a seesaw, rocking his sacrum, making his pelvis more compact and allowing him to slip under the mother’s public bone. The last cooperative reflex, known as the ‘placing reflex’, which is also caused by that rocking sacral motion, causes his knees to extend and he can now push off with his feet against the top of the uterus and expel his body through the cervix. The water allows for a completely hands off approach to witness this dance in what sometimes feels like slow motion. After studying the primitive reflexes during a water birth workshop a midwife made the observation that when the head is out the mother could possibly apply a small amount of pressure to the baby’s spine by doing a Kegel, which could enhance or trigger the Perez reflex -one of the reflexes for expulsion. The primitive reflexes, as it turns out, if not expressed can lead to neurological and physical deficits in the person, which may not show until childhood or even later in life (Goddard 2005).



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Candor

When establishing the relationship between caregiver and patient, candor, openness, truth-telling and sincerity are essential. In a recent lecture, paediatric psychiatrist Daniel Siegel redefined the terms of clinician and patient to be more appropriately, teacher and student in collaboration (Siegel 2011). Cellular biologist, Bruce Lipton, agrees with this new definition stating that the thoughts, beliefs and attitudes that are communicated to the patient greatly influence her ability to create wellness (Lipton 2008). The science of quantum physics and epigenetics, replaces the previous notion that the growing is subject to a random genetic predestination, but influenced more by maternal behaviours and emotions which profoundly impact the child's physical development, behavioural characteristics and even its level of intelligence. The medical world is beginning to agree that the fundamental cause of most chronic adult diseases such as cancer, diabetes and obesity, is related to life experiences in the fetal and perinatal period of the child's development (Dover 2009). We finally realize that genetic switches that ultimately control our life were first programmed during this primary developmental period, and the relationship of the parents is instrumental in determining which genes are going to be selected in their fetus, which then in turn is instrumental in the health of that child 40 or 60 years from birth. In short, how we care for pregnant women, assist birthing mothers and what we do immediately after birth with mother/baby creates sequelae that influence the core of our existence as human beings. Instead of looking at a 'right way' or a 'wrong way' to care for women and their babies, we must look at a 'cooperative way', with complete candor. By co-creating a nurturing environment with the mother, for the baby, the evolution of humankind takes a giant leap from survival into what Bruce Lipton, in his book, *Spontaneous evolution* calls, 'thrival' (Lipton 2009). Once we embrace the truth we are then responsible for communicating that understanding with complete honesty. Water birth has given us a view of what is possible – a platform for investigating a new view of the impact of birthing practices. Babies who are born in water are more awake and aware and connected, but generally, so are their mothers. The water environment creates harmony, peace, and enhances the normality of birth and the protective hormones that cooperate during an undisturbed experience.

My two water babies are active thriving adult men in their mid-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 every clinical setting, but especially in maternity care, including sharing worldwide water birth data and follow-up studies on the children. Water birth continues to provide a platform for maternity care reform, discoveries of consciousness and birth and a new respect for fetal and newborn development.

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MyGoodBirth

Waterbirth

photo competition

Now in its 3rd year, the 2011 MyGoodBirth Waterbirth Photo Competition entrants have taken on a more global flavour. The panel of judges shortlist five images that they feel best convey the beauty, power and calm of water birth, before public voting is used to choose the final three winners. Public voting has increased participation and raised awareness of water birth. Entries for the 2012 competition will open in October, with final winners announced in early December. For more details and how to enter, please visit www.mygoodbirth.com

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1st Prize:

Becky and baby **Kade**
from **Vancouver, WA, Canada**

3rd Prize:

Virginia and baby **Keanu**
from **Caringbah, NSW, Australia**

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2nd Prize:

Erin from **Sarasota, FL, USA**



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