A true story...
A pregnant woman who attended a major hospital for antenatal care and a booking-in visit was told by a senior consultant obstetrician that she must abandon her plan to birth in water because her baby would drown. Although the woman knew the obstetrician’s advice was nonsensical, she found his assertion confronting and confusing and discussed the comment with her midwife caregiver the next day.

The woman was reassured that labour and birth in water is perfectly safe, and provides many benefits for herself and her baby when conducted by attendants skilled in supporting normal labour and birth in water. Whether the obstetrician was ignorant of the truth or deliberately misinforming the woman is unsure, but in giving this ‘advice’ he perpetuated the most common myth associated with birth in water.

No, babies do not drown if they are born underwater. They live in a watery environment until labour heralds their transition from the uterus to the air-filled world outside. The stimulus to breath at birth occurs when the baby is exposed to air, plus the dramatic change of temperature, noise and light.

During a waterbirth this occurs when the baby is lifted up out of the water. His umbilical cord, his lifeline, continues to provide oxygenated blood while he responds to the new stimuli and fills his lungs with air for the first time. Simultaneously his heart function converts to include the oxygenated blood provided by his lungs, no longer solely relying on the placenta. Delaying clamping and cutting of the umbilical cord is very beneficial to baby’s transition to life outside the uterus. If allowed the umbilical cord may continue to pulsate for some time, providing baby with his full quota of blood volume via the placenta, maximising perfusion of his newly functioning lung tissues and supporting his transition, unhurried, into his new world.

**How does water help the woman during labour?**

The benefit of using water to reduce the pain of childbirth is well established and accepted, and the use of a shower or hot wet towels for pain relief is common practise in most care settings. When immersed in deep warm water the buoyancy enables a woman to move more easily than on land, allowing freedom to manoeuvre and work with her contractions assisting the descent of the baby. Immersion reduces opposition to gravity, providing ease of movement and conservation of energy.

The comforting water environment promotes deeper relaxation allowing the woman’s hormones to respond appropriately, facilitating endorphin release and efficient progress of labour, including relaxation of the pelvic floor. This alleviates pain and optimises the progress of her labour.
Women who wish to labour and/or birth while immersed in deep warm water know it is a simple way of assisting them to cope without the use of strong drugs. A reduction in the use of pain relieving drugs not only benefits the mother who is more alert and responsive after the birth, but the baby will also benefit considerably.

Women also know that labour in water increases their chances of giving birth naturally and normally with a minimum of interference or medical intervention. A prospective observational study in Switzerland in 1999 found waterbirths had the lowest rate of analgesia use, the lowest episiotomy rate and lowest incidence of 3rd and 4th degree tears, as well as the lowest maternal blood loss. The birthing pool provides an environment which enhances a woman’s sense of privacy – a zone which is her own – permeated only by those entrusted and permitted by the labouring woman. This may be particularly important to women who have been subjected to sexual abuse in the past.

**What about the baby’s wellbeing?**

Immersion in water during labour reduces pressure on the woman’s abdomen, and buoyancy promotes more efficient uterine contractions and better blood circulation. This results in better blood circulation and oxygenation of the uterine muscles, and more oxygen for the baby during labour. The Swiss study also found babies born in the water had the lowest rate of neonatal infection, and the average Apgar score at 5 minutes was significantly higher after waterbirths.

Other waterbirth studies failed to detect differences in the incidence of neonatal morbidity or mortality between water and land birth and found fewer babies adopted deflexed positions during the first stage of labour when their mother’s used water immersion for pain relief. Water born babies are typically relaxed and alert at birth as their mothers have not required drugs during labour. One study has demonstrated that babies whose mothers had epidural anaesthesia were still showing adverse effects of the drug up to six weeks later.

**What about after the birth?**

Water offers a labouring woman an environment where she can behave instinctively and feel in control. When a woman feels in control during childbirth, she experiences a higher degree of emotional well-being postnatally. Many studies have confirmed that women who give birth in the water have a most satisfying birth experience.

**Common misconceptions about labour in water**

*“My waters were broken so it wasn’t safe for me to labour in the water”*

No studies have indicated any increased risk association between ruptured membranes and water immersion in labour. If the membranes have been ruptured longer than 18 hours the risk of infection increases whether the woman is labouring in or out of water. Most caregivers will recommend intravenous antibiotic treatment if this situation occurs, and all other factors relating to the wellbeing of mother and baby will be taken into account when deciding whether it is appropriate to continue to labour in the water if desired. If everything is normal it is safe to continue to labour in the water.
“I got into the pool too early and my labour stopped.”
It’s quite likely that this woman was not in established labour. Water immersion during the very early latent phase of labour will sometimes relax the woman significantly and consequently her uterine activity may also reduce. Water immersion can provide a very useful and safe remedy if the woman’s prelabour uterine activity is causing discomfort and fatigue, and may allow her to catch up on some sleep prior to labour establishing.

“So when is the best time to get into the water?”
It’s best to use alternatives to immersion in the pool during early labour, such as trying different physical positions and mobilisation, massage, sitting or standing in the shower. When these alternatives are no longer helpful at all it’s probably time to get into the water. Some caregivers will want to confirm that the cervix dilation is 4cm or more, while others will avoid unnecessary vaginal examinations and be guided by the woman’s interpretation of her needs and visible signs of labour progression.

“When should I leave the water?”
If the progress of the labour is very slow or stalls it is often helpful to leave the birth pool and mobilise, take some food and fluids and return to the pool if desired when the contractions increase in strength and frequency. The woman should get out of the pool to pass urine, or a bowl or bucket placed under her as she stands in the pool to urinate. The woman may be asked to leave the pool for vaginal examinations to be performed although this is not absolutely necessary.

If the progress of the labour deviates from normal the woman may be asked to leave the water. Problems with the baby’s heart rate, either very slow or very fast may indicate baby is having difficulties and closer monitoring out of the water may be indicated. Meconium-stained liquor (caused by baby’s bowel action in the amniotic fluid) during labour may be an indication to continue the labour out of the pool. If meconium is present but undetected it may be seen floating out of the baby’s nose, mouth or ears as the baby is born into the water.

It is common for the baby’s heart rate to slow slightly during the pushing phase of the labour due to compression of the baby’s head in the vagina. Provided the descent of the baby progresses normally this is not usually sufficient concern to warrant leaving the water. Many caregivers want the third stage of labour to be completed out of the bath so that blood loss can be carefully monitored. Sometimes the placenta is born soon after the baby. If this occurs in the water it is not a problem.

If the woman’s temperature becomes elevated it may be advisable for her to stand for a while, or leave the pool to allow her body to cool. The baby’s temperature is 1degree higher than the mother’s measured external temperature, and prolonged temperature elevation may be harmful to the baby. If a problem occurs during the expulsion of the baby (dystocia) the woman may be asked to stand to assist delivery of the baby.
General guidelines for labour and birth in water

It is important for the woman to be well hydrated during labour whether she is in or out of the water, and to pass urine frequently. It is not advisable to add salt or essential oils to the water. The woman should be free to leave the bath if desired, and birth plans should allow for flexibility as well as definition of the woman’s wishes for the birth.

The baby must be born either fully submerged or fully out of the water, and it is important for the woman to understand this is her choice at the time of birth. Skin to skin contact is fundamental to the birth and bonding experience as well as providing warmth and comfort to the newborn. Drying the baby’s face and head and applying a hat will also assist in keeping baby warm. Warmth and an undisturbed environment immediately following the birth are essential for the woman’s physiological functioning to safely complete the third stage of the labour.

We believe that waterbirth will lose its ‘outsider’ status and will, in the next few years, take up a fixed place in obstetrics. It leads to minimal intervention and is a woman-friendly method and thus results in higher satisfaction of the mother. (Thni & Mussner, Reuters Health, Berlin 22/1/03)

References
6. See 2

For further information:
AIMS publication “Choosing a Water Birth” by Beverley A Lawrence Beech.
www.yourwaterbirth.com provides a comprehensive list of link sites
For specific guidelines for midwives interested in conducting waterbirths, I recommend
- Standard 10-3 “Labour and Birth in Water” 2002, from Women’s and Children’s Hospital, Adelaide, South Australia
- Govt.of SA – Dept of Health POLICY – BIRTH IN WATER pdf www.health.sa.gov.au