

Water births provide “clear benefits” for healthy mums and their newborns

Less need for intervention during/after the birth plus greater satisfaction for mums

Water births provide “clear benefits” for healthy mums and their newborns, with fewer interventions and complications during and after the birth than standard care, as well as higher levels of satisfaction for the mum, finds a synthesis of the available evidence, published in the open access journal **BMJ Open**.

A water birth involves using a birthing pool to achieve relaxation and pain relief, either exiting the pool for the birth, so the newborn can emerge into air to breathe, or remaining in the birthing pool for the birth, bringing the newborn to the surface to start breathing.

The researchers wanted to compare the extent of healthcare interventions needed during and after labour between the two different types of water birth and to see if outcomes differed between a water birth and standard care (without the use of a birthing pool).

They trawled research databases looking for relevant studies published between 2000 and 2021. Some 36 studies involving 157,546 women met the eligibility criteria and were included in the review. Most of the studies were carried out in obstetric units.

The studies included a broad range of interventions and outcomes. These included: induced labour; artificial breaking of waters (amniotomy); stimulation of labour (augmentation); continuous fetal monitoring; opioid use; epidural use (pain relief injected into lower back); pain; C-section; stuck shoulder (dystocia); tearing or cutting (episiotomy) of the vagina or the area between the vagina and the anus (perineum); haemorrhaging after birth; manual placenta removal; infection (mother); mother’s satisfaction; Apgar score (assessment of baby’s wellbeing immediately after birth); newborn resuscitation; rapid shallow breathing of the newborn (tachypnoea); respiratory distress; admission to intensive care; newborn death; infection (newborn); umbilical cord snap (avulsion); breastfeeding.

The pooled data analysis of the study results showed that a water birth, regardless of whether women birth in or out of the pool, “has clear benefits to women” in obstetric units, where most births take place and where healthcare interventions and complications are more likely than in midwife-led units, note the researchers.

A waterbirth was as safe as standard care for healthy mums and their newborns.

Compared with standard care, a water birth significantly reduced the use of epidurals, injected opioids, episiotomy, as well as pain and heavy bleeding after the birth. And it increased mothers’ satisfaction levels and the odds of an intact perineum. And there was no difference in the rate of C-sections.

“Water immersion can significantly increase the likelihood of an intact perineum and reduce episiotomy, an intervention which offers no perineal or fetal benefit, can increase postnatal pain, anxiety, and impact negatively on a woman’s birth experience,” write the researchers.

There were more instances of umbilical cord breakage among water births, but the rate was still low: 4.3/1000 births in water compared with 1.3/1000 births with standard care.

This may be linked to pulling on the umbilical cord when the newborn is brought up out of the water, suggest the researchers.

They acknowledge that information on birth settings, care practices, interventions and outcomes varied considerably among the included studies, and few were carried out in midwife-led units or in the mother's home, which may have affected the findings of the pooled data analysis.

But they conclude: "Water immersion provides benefits for the mother and newborn when used in the obstetric setting, making water immersion a low-tech intervention for improving quality and satisfaction with care.

"In addition, water immersion during labour and waterbirth alter clinical practice, resulting in less augmentation, episiotomy, and requirements for pharmacological analgesia. Water immersion is an effective method to reduce pain in labour, without increasing risk."

To strengthen the evidence base, future research should include factors that are known to influence interventions and outcomes during and after labour/birth. These include how many children a woman has already had, where she gives birth, who looks after her, and the care she receives, they add.