

<b>Title</b>	Water Birth
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<b>Reference</b>	Technology Review Report – 027/2013, online: <a href="http://www.moh.gov.my/index.php/database_stores/store_view_page/30/230">http://www.moh.gov.my/index.php/database_stores/store_view_page/30/230</a>

**Aim**

To assess the safety, effectiveness, economic implication, organizational or legal implication of water birth compared with conventional birth for the mother and the baby.

**Conclusions and results**

A total of 1,201 titles were identified through the Ovid interface and PubMed. Twenty one articles related to water birth is included in this review: one systematic review, one non randomised controlled trial, two cohort, three case control studies, four cross sectional studies, three case series, six case reports and one economic evaluation study. The studies were conducted in Switzerland, Australia, United Kingdom, Italy, New Zealand, Turkey and Japan.

**Safety**

Fair level of evidence to suggest there was no significant difference in blood loss during labour and maternal infection in women having water birth compared to women having conventional birth. Fair level of evidence to suggest that there was significantly lower episiotomy rate and third to fourth degree perineal lacerations in women having water birth. However, women having water birth were found to have higher rate of first to second degree lacerations and vaginal or labial tears. There was insufficient evidence on the safety for the neonates.

**Efficacy**

Fair level of evidence to suggest that there was no significant difference in duration of second stage of labour for women having water birth compared with conventional birth. However, there was significant reduction in the use of analgesics among women having water birth. There was no retrieval evidence on the effectiveness of water birth compared with conventional delivery for the fetal / neonatal outcomes.

**Cost /cost-effectiveness**

A cost-effectiveness analysis conducted in Italy found the incremental health care cost (ICER) per avoided perineal tear because of water delivery was estimated as € 1,395.7 (95% CI: € 1,049.2 to € 3,608.5). The cost-effectiveness acceptability curve suggests that at a threshold of € 2,000, more than 80% of water delivery would be cost-effective.

**Organizational**

Water birth is being practiced within the hospital or at home for low risk patient. Guidelines were developed to ensure the safety, as far as possible, for women choosing the option of immersion in water for labour and / or birth for themselves and their unborn / newborn babies. Water birth should be attended by a registered midwife and / or medical practitioner who is trained and experienced in facilitating water birth. There is a significant gap in the local setting as water births are not part of the local training curricula of the advanced diploma in midwifery, nor in the training of obstetrics and gynaecology specialists.

**Recommendations (if any)**

Based on the above review, water birth is not recommended until sufficient evidence to prove the safety for neonates is available.

**Methods**

Electronic databases were searched through the Ovid interface: Ovid MEDLINE® In-process and other Non-indexed citations and Ovid MEDLINE® 1948 to present, EBM Reviews - Cochrane Central Register of Controlled Trials - October 2013, EBM Reviews - Cochrane Database of Systematic Reviews - 2005 to October 2013, EBM Reviews - Health Technology Assessment - 4<sup>th</sup> Quarter 2013, EBM Reviews - Database of Abstracts of Reviews of Effects - 4<sup>th</sup> Quarter 2013, EBM Reviews – NHS Economic Evaluation Database 4<sup>th</sup> Quarter 2013, Embase – 1988 to 2013 week 46. Searches were also run in PubMed. Google was used to search for additional web-based materials and information. No limits were applied. Additional articles were identified from reviewing the references of retrieved articles. Last search was conducted on 25 November 2013.

**Further research/reviews required****Written by**

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