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[A pilot study for a randomised controlled trial of waterbirth versus land birth]

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Objectives To assess the feasibility of undertaking an adequately powered multicentre study comparing waterbirth with land birth. To assess whether women are willing to participate in such a trial and whether participation has a negative effect on their birthing experience. **Design** A randomised controlled trial (RCT) with 'preference arm'. Setting District general hospital with 3600 deliveries annually. **Population** Women with no pregnancy complications and no anticipated problems for labour/delivery. **Methods** Women were recruited and randomised between 36 and 40 weeks of gestation. Comparison of randomised and 'preference arm' to assess any impact of randomisation on women's birthing experience. **Main outcome measures** Data were collected at delivery concerning the labour, the pool water and baby's condition at birth and six weeks of age. The main outcome measures are means and standard deviation of cord O2, CO2, haemoglobin, haematocrit and base excess; medians and ranges of time to first breathe and cord pH; bacterial growth from pool water samples and neonatal swabs; and maternal satisfaction. **Results** Eighty women participated 60 women were randomised. Twenty women participated in a non-randomised 'preference arm'. The babies randomised to a waterbirth demonstrated a significantly lower umbilical artery pCO2 (P= 0.003); however, it is recognised that this study is underpowered. Women were willing to participate and randomisation did not appear to alter satisfaction. **Conclusion** This small study has shown that a RCT is feasible and demonstrated outcome measures, which can be successfully collected in an average delivery suite.

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