Sinking or swimming?

Results of pilot work undertaken in the development of a RCT of waterbirth

Julia Sanders PhD
Consultant Midwife

South East Wales Trials Unit, Cardiff University

On behalf of

Waterbirth Research Development Group,
Funded by: Children and Young People's Research Network

South East Wales Trials Unit
Uned Ymchwil De-ddwyrain Cymru

National Perinatal Epidemiology Unit

Rhwydwaith Ymchwil Plant a Phobl Ifanc Cymru
Children and Young People's Research Network

The Royal College of Midwives

Background

An estimated 24,000 (4%) women give birth in water in the UK annually
Source: Recorded Delivery: a survey of women's experience of maternity care 2006

Background

‘Women should be informed that there is insufficient high-quality evidence to either support or discourage giving birth in water’

Source: National Institute for Health and Clinical Excellence, 2007

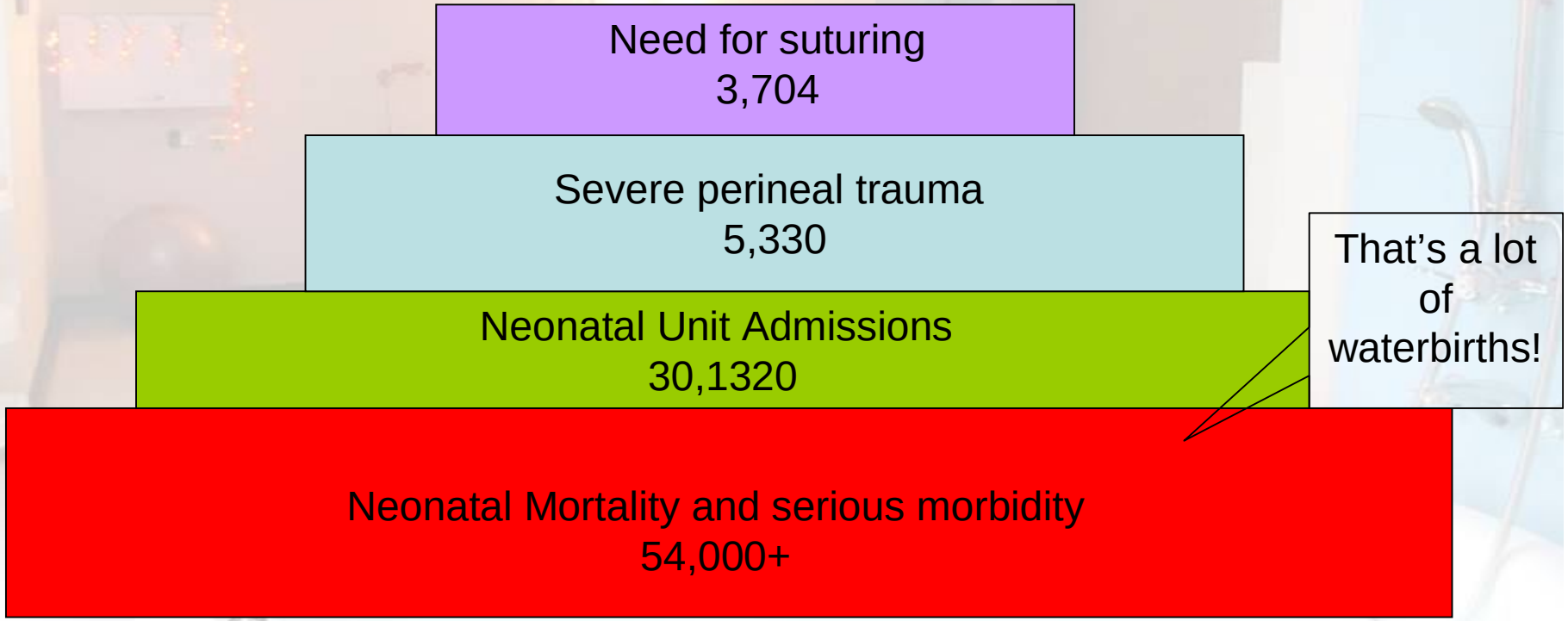
Background

Research Development Group Funded by: National Institute for Social Care and Health Research Clinical Research Centre (NISCHR).

Research Development Group,
Professor Peter Brocklehurst, Director, National Perinatal Epidemiology Unit, University of Oxford
Professor Kerry Hood, Director, South East Wales Trials Unit, School of Medicine, Cardiff University
Professor Billie Hunter, Professor of Midwifery, Institute for Health Research, Swansea University
Mervi Jokinen, Practice and standards development advisor, Royal College of Midwives
Dr. Shantini Paranjothy, Senior Clinical Lecturer, Department of Primary Care and Public Health Cardiff University
Dr Zoe Roberts, Lecturer, South East Wales Trials Unit, Cardiff University
Dr Julia Sanders, Consultant Midwife / Senior Project Manager, South East Wales Trials Unit
Grace Thomas, Consultant Midwife / Lecturer University of Glamorgan
Dr Mark Turner, Senior Lecturer in Neonatology, University of Liverpool
Joanne Woodward, Research Midwife, Northampton General Hospital NHS Trust.

How big is a big enough trial?

Sample Size Calculations around various primary outcomes



Based upon 90% power & 5% two-sided significance

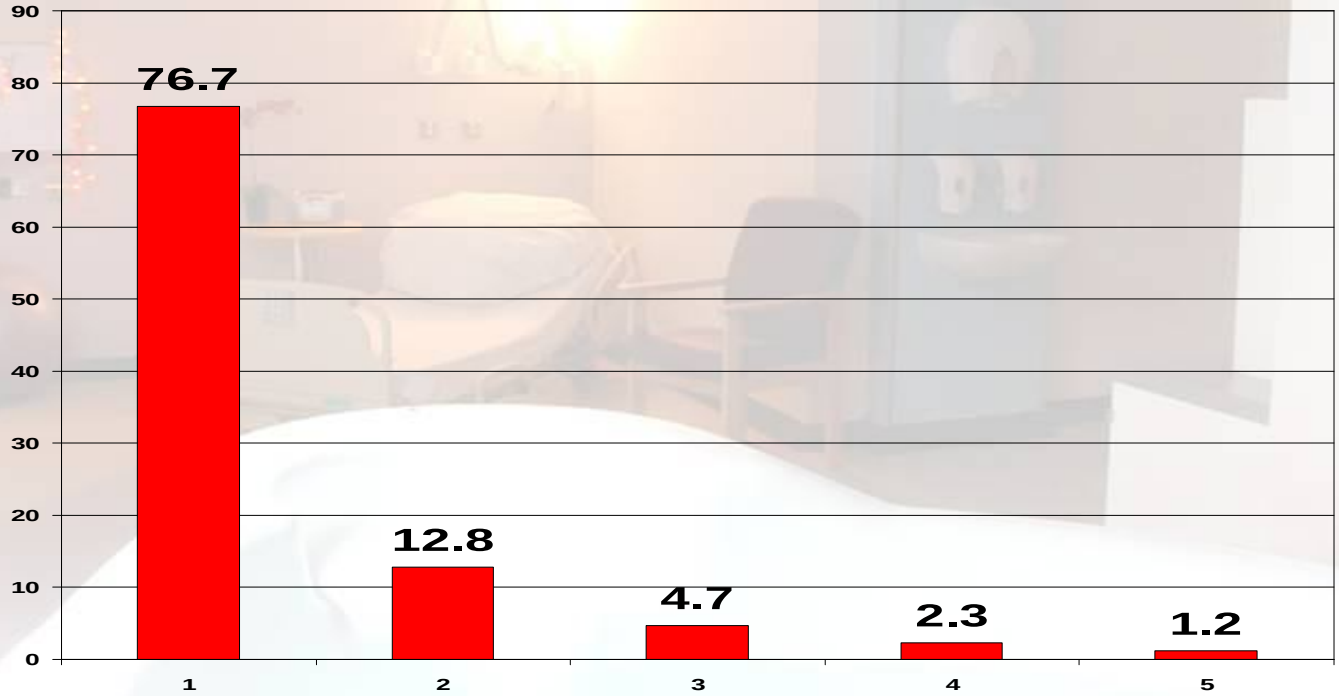
Perineal trauma audit

- Five year period in an alongside MLU
- 4,329 births of which 697 (16.1%) occurred in water
- Logistic regression modelling controlling for parity & birthweight
- No association between birth in water and rates of perineal trauma overall
  - RR 0.83 (95% CI 0.66 – 1.04)
- No association between birth in water and rates of severe (3º) perineal trauma
  - RR 1.01 (95% CI 0.57 – 1.78).

Postal Survey

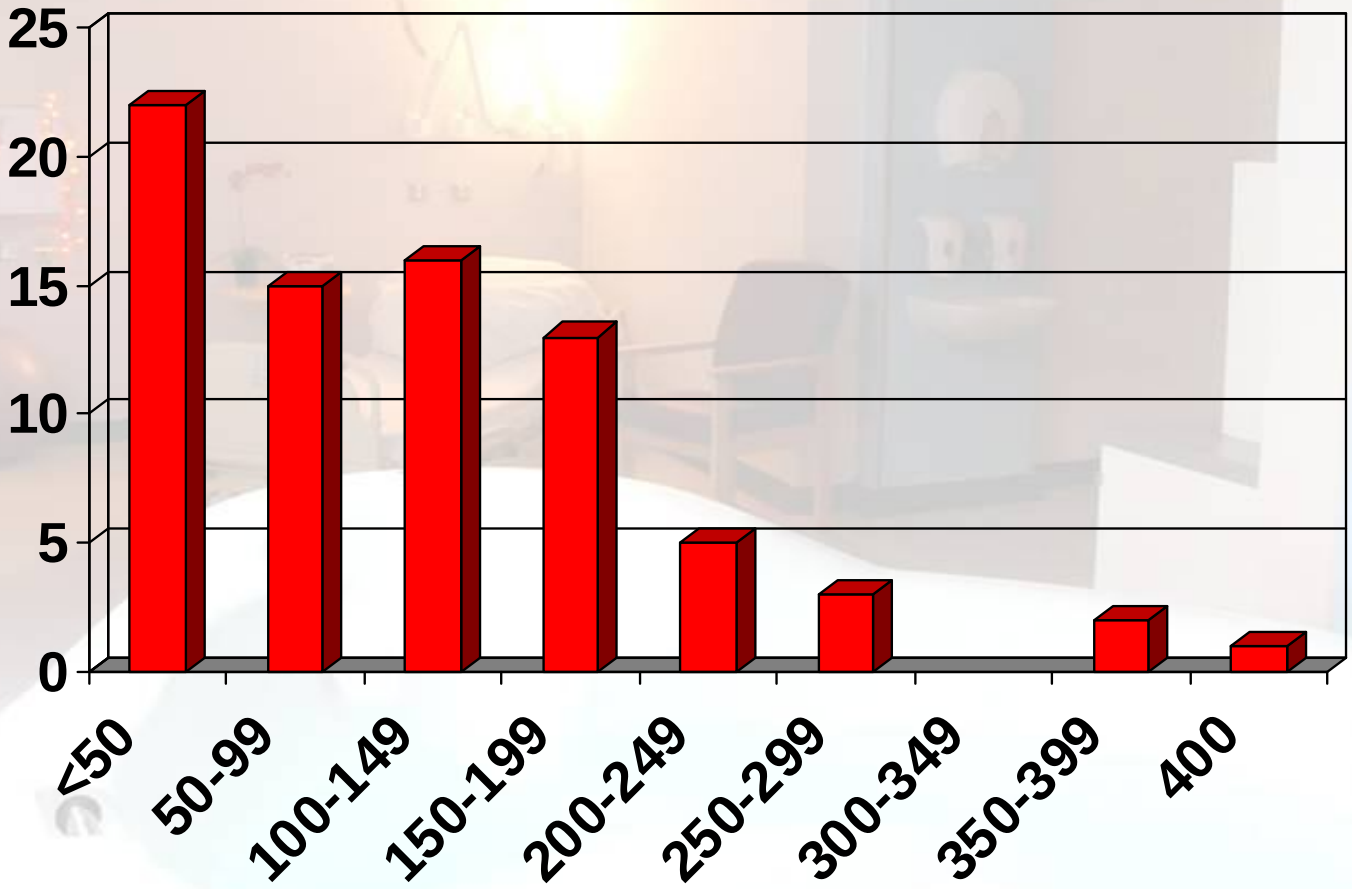
- Maternity Units in England
- Distributed July 2010
- Response rate 86 /159
- Aims
  - ✓ Gather data on the numbers of waterbirths by unit
  - ✓ Identify units interested in participating in a future study
  - ✓ Explore current guidance in relation to waterbirths

Birth Pools in Units (N=86)



% of units with given number of birth pools - many only have one available

Number of waterbirths per unit



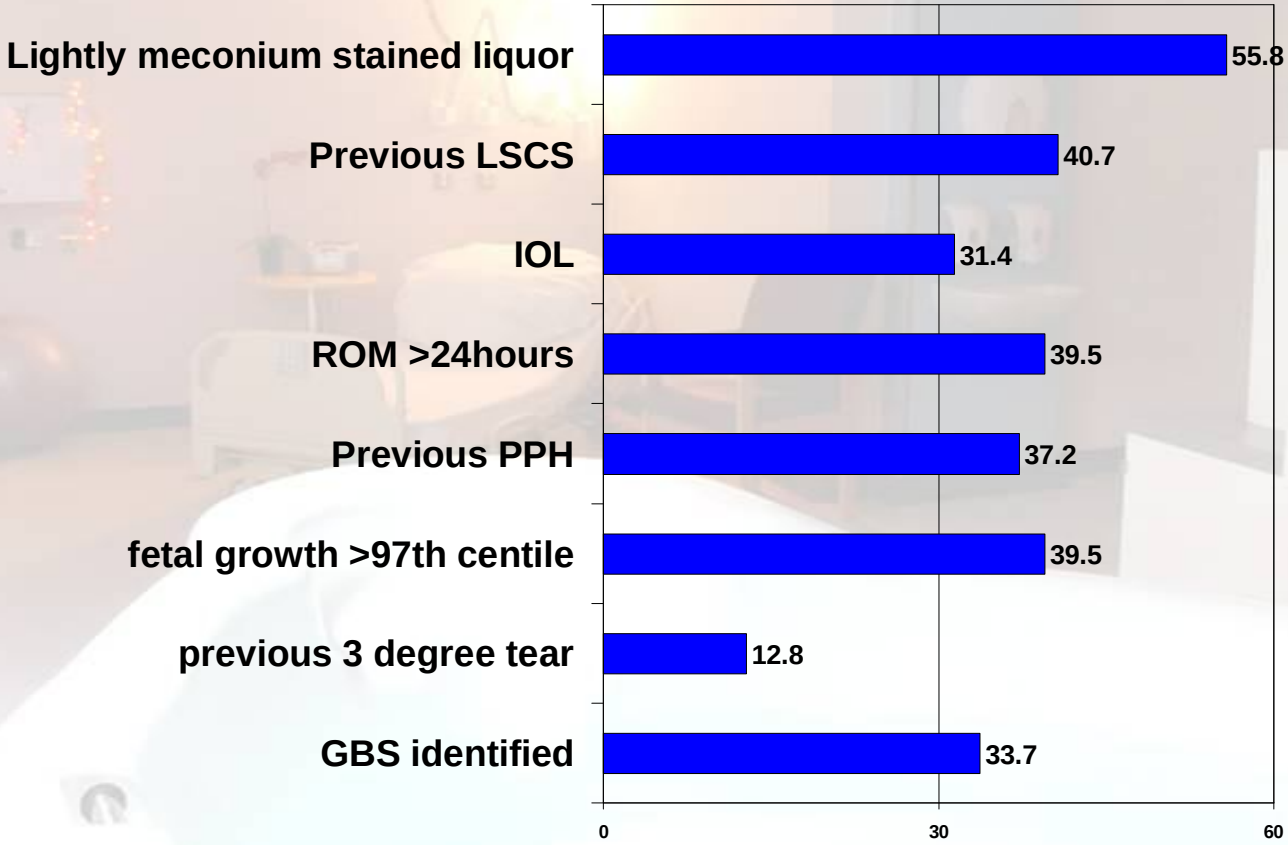
Interested Units

42 maternity units expressed an interest in participation in an RCT with a combined 5,100 waterbirths annually.

Interested Units

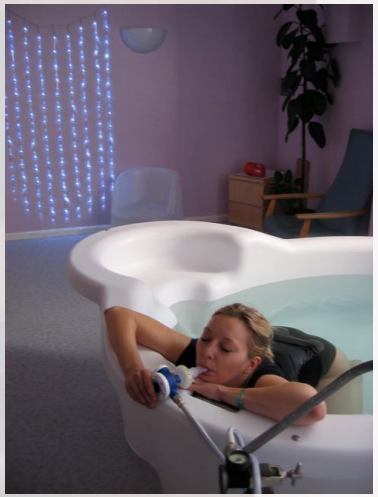
Heart of England	Chesterfield	Rotherham
East Cheshire NHS Trust	Scunthorpe	Basilden
Western Sussex Hospitals NHS Trust	Hinchinbrooke	Taunton
Wrightington, Wigan and Leigh NHS FT	Royal Berkshire	Chesterfield
Sandwell and West Birmingham Hospitals	Southend	Stockport
Wirral NHS Trust	Hull	South London
Ashford and St Peters NHS Trust	Leighton	St George's London
Northern Lincolnshire	Southmead	Frimley Park
	Good Hope	North Devon
Hey NHS Trust	Darent	South Manchester
Milton Keynes NHS Foundation trust	Royal Devon	Coventry & Warwickshire
Luton	Cambridge	Torbay

Absolute contraindications to waterbirth (N=86)



% of units considering each clinical senario an absolute contraindication to waterbirth - lightly to reduce in the future with improving technology

Comments



The availability of waterproof telemetry fetal monitors is opening up the option of waterbirth to more women:

"We now have two cordless CTG monitors that can be used in water so there is more potential for women to labour / deliver in the pool". *Maternity unit with 2,240 births annually*

As more women choose water birth the need for high quality evaluation is important:

"*Women would be supported in whatever they choose – individual plans are made for women who want to use the pool but do not meet the criteria e.g. previous LSCS" (Caesarean section)*

Maternity unit with 4,500 births annually

Thank You

For further information or to express interest in participating in a future RCT please contact sandersj3@cf.ac.uk