Midwifery decision making in the care of a woman using water during labour and childbirth

Katherine Robinson
Midwifery Ward Manager
Home from Home
Ulster Hospital, Dundonald, Belfast
katherine.robinson@setrust.hscni.net

Betty Cameron
Midwife
Home from Home
Ulster Hospital, Dundonald, Belfast
betty.cameron@setrust.hscni.net
Three Sections

• Rational for Midwifery led care
• The Home from Home Unit
• Care Pathway and Criteria
• Welcome interaction and questions from yourselves throughout
Passing on Knowledge
Midwives don’t need to reinvent the wheel
Midwifery led care should be available to all mothers
Reclaim normal birth
Rebirth of Midwifery Led Care

• ‘A less clinical, non threatening and more home like environment is less stressful for most women and this helps to create an atmosphere more conducive to the progress of the normal physiological birth process’

• Safer Childbirth (2007)
• Information...suggests that among ‘women who plan to give birth at home or in a midwife-led unit there is a higher likelihood of a normal birth, with less intervention’

• ‘Women should be offered the choice of planning birth at home, in a midwife-led unit or in an obstetric unit

• NICE Intrapartum care guidelines (2007)
• Campaign for Normal Birth RCM

• Government Policy is to Normalise Childbirth and reduction of interventions

• 2012 Maternity strategy for NI

• Women should have a choice of MLU or Home Birth
Benefits for women

• Less likely to have interventions
  • ARM /Oxytocin
  • Epidural
  • Episiotomy
  • Fewer deflexed fetal positions
  • Instrumental delivery
  • Caesarian section
Benefits for women

• More likely to have
  • spontaneous vaginal birth
  • increased satisfaction levels
  • to still be breast feeding at 2 months
  • more chance of feeling in control
  • no risks to mother or baby found

• (Hodnett, E.D., Downe, S., Walsh, D. 2012 ‘Alternative versus conventional institutional settings for birth)
Garland 2006

• 2000 water births and dry land births
• 10 units in the UK
• Matched

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<thead>
<tr>
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<th>Water Prim 351 mins</th>
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Water birth advantages

- Majority will have a normal birth
- Women feel safe and remain in control
- Encourages upright position
- Encourages relaxation
- Often increases speed of cervical dilation
- Effective pain relief within 10-15 minutes
- Reduces unnecessary obstetric interventions
- Fewer forceps, ventouse, c/section, episiotomies
- Reduces need for pain relieving drugs
- If it does not work, alternative pain relief can be used
- No adverse side effects for mother or child
- Fewer PPHs
Water birth disadvantages

• The fetal heart rate cannot be continuously monitored
• If a bath instead of a pool, size can be restrictive
• It can slow down labour if women gets in too early
• It does not always work
• Hospitals restrict those who can use it
• Can cause shivering and feelings of cold
• Its pain relieving effects can wear off before the baby is born if the mother gets in the pool too early

• (AIMS: Association for Improvements in the Maternity Services)
Cost effectiveness

• NHS costs for normal low risk birth
• £1631 planned obstetric unit birth
• £1461 alongside maternity unit
• £1435 freestanding maternity unit
• £1067 homebirth

(www.npeu.ox.ac.uk)
Barriers to implementation

• Midwives have lost skills and competence in normal physiological birth
• Compliance with strict obstetric policy
• Inappropriate interventions
• Challenges existing cultures
• Facilities not available
Struggling to get into the pool room

- Coordinators' priorities
- Midwives' negative attitudes
  - fears over emergencies
  - pool not offered as a choice
  - lack of skills
  - women do not ask—no info to make informed choice
- High workloads
- Lack of institutional support
Struggling to get into the pool room

• Option of a water birth more likely if
• Supported by midwifery managers
• Championed by coordinator
• Led by practitioner

• Russell (2011) Struggling to get into the pool room. International Journal of Childbirth. pp 52-60
Drivers for change: Mothers

• Women are a midwives best ally
• MSLC
• Voting with their feet
• Word of mouth
• Positive experience
• Returners to the service
• Recommendation to family and friends
• Active birth classes
• Lobbying for choice
Midwives

• Midwifery managers
• Unions lobbying parliament
• Supporting colleagues
• Supervisor of midwives
• Lateral exchange of knowledge
Obstetricians

• Involved in decision making
• Included in discussions
• Help with challenging cases
• Need good working relationship for transfers
• Patient group directives
Anaesthetists

- Support
- Advice re use of diamorphine
- Challenging cases
Pharmacists

- Patient group directives
- Midwives exemptions
MLU in NI

• Following lobbying by service user groups
• DOH Gave approval for MLUs in July 2004
• Alongside MLU Home from Home 2007
• Freestanding MLU Downpatrick 2010
• Freestanding MLU Lagan Valley 2011
Home from Home

Section 2
Midwifery led care

• Supports normality
• Woman’s choice
• Individualised care
• Engage users - responsive service
• Effective decision making
• Confident and competent midwives
• Greater sense of freedom, privacy and autonomy
Calming Atmosphere

- Home like
- Access to birthing pool
- Their room
- Comfortable furnishings
- Partners can stay
- Parents kitchen
- Restrict noise and interruptions
- Dimmer switch
- En suite toilet
- Space to move around
- Screening of clinical equipment
Keep off the bed and active

birthing stool
beanbags
birthing mat
Screening of Clinical Equipment

Resusitaire available if needed but is not used routinely as infant not separated from mother unless necessary for Resus
Equipment

• Birthing balls
• Birthing mats
• Combi-trac
• Beanbags
• Pillows
• Rebozo scarf
• Music
• Aqua doppler
Combi-trac
Normal Labour Care Pathway

- Structured evidence based framework for normal labour
- Not prescriptive - used as a guide
- Encourages clinical judgement
- To be used and documented
- Regularly updated with changes in practice (v7)
- Included in regional notes
Expected Progress in Labour - First Stage of Labour

A vaginal examination within 4 hours of receiving 1:1 midwifery care

Re-examine vaginally 4 hours later in the absence of signs of full dilatation

Progress of at least 2cms in cervical dilatation

YES

NO

CONSIDER

- Mobilisation or change of position
- Has the labour advanced? eg Head descent
- Is the woman in active labour?
- Positive encouragement
- Review coping with management of labour
- Hydration
- Consider artificial rupture of membranes

Re-examine vaginally 2 hours later in the absence of signs of full dilatation

Progress of at least 1cm in cervical dilatation

YES

NO

Exit the pathway & transfer to Consultant Led Care
EXPECTED PROGRESS IN SECOND STAGE

Fully Dilated

1 hour latent phase for Primigravida and Parous woman 1 hour

Nulliparous: Delay suspected if inadequate progress after 1 hour of active second stage
Parous: Delay suspected if inadequate progress after 30 minutes of active second stage

Offer vaginal exam & confirm full dilatation
Offer support and encouragement
Consider:
Amniotomy if membranes intact
Is her bladder palpable?
Analgesia
Are contractions adequate?
Change of position
Seek opinion of colleague and document

Nulliparous: No birth within next hour (total active second stage - 2 hours)
Parous: No birth within 30 minutes (total active second stage - 1 hour)

Diagnosis of delay in the second stage

Transfer to Consultant Led Care
3rd Stage of labour

> 30 min after birth with active management

> 1 hour after birth with physiological management

Revert to active management: give 10 IU Oxytocin IM or 1 ampoule of Syntometrine and apply controlled cord traction

Placenta delivered

Oxytocin
Injection of 20 IU in 20ml of saline into the umbilical vein, proximal cord clamping in the absence of excessive bleeding

Secure IV access
No IV Oxytocin infusion

Oxytocin effective - placenta delivered

Oxytocin not effective within 30 mins - transferred to Consultant led care

If physiological management is attempted but intervention is needed, management must proceed actively. Do not adopt a piecemeal approach.

Physiological measures to aid expulsion of placenta may include:
Ensuring the bladder is empty
Offering the baby a breastfeed
Encouraging maternal effort to expel the placenta

At all times blood loss must be observed and clinical observations monitored.

Placenta and membranes delivered at ____________ (time)

Placenta
Complete □ Incomplete □

Membranes
Complete □ Incomplete □
Documentation

• VITAL

• Document the decisions you make

• Variants from the norm should be noted and explained
Eligibility Criteria

• What is a low risk pregnancy?
• NICE Guidelines
• Healthy woman - low risk pregnancy - unlikely to develop complications in labour
Criteria con’d

• No long term medical conditions
• No infections, chronic or acute
• No psychiatric conditions requiring inpatient care
• No previous pregnancy complications
• No current complications of present pregnancy
HFH exclusion criteria

• Lists are not exhaustive
• Midwives need to continually risk assess and refer to obstetric care as appropriate
• Women who fall outside normal criteria can be accommodated with consultant approval
| Maternal Request          | Maternal request for medical input in care  
<table>
<thead>
<tr>
<th></th>
<th>Maternal request for epidural/Remifentanil</th>
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</table>
| Maternal Conditions      | Diabetes Mellitus, uncontrolled thyroid disease  
|                         | Cardiac disease                             
|                         | Essential Hypertensive                       
|                         | Severe Asthma requiring admission or steroids in pregnancy  
|                         | Haematological disease including auto immune disease, anaemia<9.0g/dl, if Hb between 9-10 send a repeat sample, site a venflon and actively manage the third stage.  
|                         | Unstable Epilepsy requiring medical input    
|                         | Malignant Disease                            
|                         | *BMI>35 or <18 at booking (if women can demonstrate mobility BMI 35-40 and requests HFH may be admitted but needs active management of third stage).  
|                         | Current significant Psychiatric disorder or substance abuse  
<p>|                         | HIV,Hepatitis B or C, syphilis, or any active Sexually transmitted disease |</p>
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<tr>
<td>- Pre eclampsia, eclampsia or HELLP Syndrome</td>
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<tr>
<td>- Rhesus iso immunisation or other blood group antibodies</td>
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<tr>
<td>- Previous Caesarean Section or uterine surgery. In exceptional circumstances VBAC can be accommodated in HFH if consultant agrees in ante natal period and the woman has agreed care with HFH staff prior to labour</td>
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<tr>
<td>- Retained placenta on two occasions</td>
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<td>- Significant antenatal or postnatal haemorrhage</td>
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<tr>
<td>- Stillbirth or neonatal death or significant neonatal morbidity</td>
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<tr>
<td>- Deep venous thrombosis</td>
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<tr>
<td>- Puerperal psychosis</td>
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<tr>
<td>- Previous 4th degree tear</td>
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<tr>
<td>Complications in this pregnancy</td>
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</tr>
<tr>
<td>- Multiple pregnancy</td>
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<tr>
<td>- Grand multiparity &gt; 5</td>
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<tr>
<td>- Malpresentation</td>
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<tr>
<td>- Confirmed intrauterine growth retardation</td>
</tr>
<tr>
<td>- Prematurity &lt; 37 complete weeks</td>
</tr>
<tr>
<td>- Antepartum haemorrhage</td>
</tr>
<tr>
<td>- Placenta Praevia</td>
</tr>
<tr>
<td>- Induction of labour requiring more than two pessaries, unless previously arranged IOL must be for post maturity with no other risk factors</td>
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<tr>
<td>- Prolonged rupture of membranes with signs of infection</td>
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<tr>
<td>- Group B strep this pregnancy with signs of infection (Asymptomatic Group B Strep in this pregnancy can come to HFH and have a waterbirth but must be under obstetric care and have had antibiotic cover in labour)</td>
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<tr>
<td>- Suspicious fetal heart rate</td>
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<tr>
<td>- Oligohydramnious/ polyhydramnious</td>
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<td>- Particulate Thick, fresh meconium</td>
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<tr>
<td>- Light meconium if before 40 weeks or not in active labour</td>
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<tr>
<td>- Intrauterine death</td>
</tr>
<tr>
<td>- Significant antibodies in this pregnancy</td>
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Evolving Practice

• Annual review of the care pathway and criteria is necessary to keep practice up-to-date, to be responsive to innovations in practice, new research findings, learning from practice audit

• Continuous cycle of review involving multi professional team

• Resulted in closer collaboration between professions, increased numbers eligible to access HFH, increase number of normal births
Recent Changes

• VBAC
• Raised BMI
• Group B Strep
• Induction of labour (Scott & Mallon 2013, Measuring Results, Midwives, Issue 2)
• NB: anyone accessing HFH may use the birthing pool there are no separate criteria
Why Exclude?

• Ask
• Why is a woman not suitable?
• How would care be be different in Labour Ward?
• Is the difference necessary or unnecessary interventions? (monitoring protocols etc)
• What are the woman’s wishes?
• What does the Consultant say?
Birthing Pool
Water birth care of mother

- Pool environment
- Quiet
- Subdued lighting - torch
- Minimum interruptions
Water temperature

• 35 - 37 degrees C in 1st stage
• 37 - 37.5 degrees C in 2nd stage
• Record hourly maternal and pool temperature
Depth of water

- Pool filled to mother’s breasts
- Aids buoyancy
- Unrestricted movement
- Enhances maternal control
- Mother can ‘get into zone’
Positions in pool

- Squat
- Kneel
- All fours
- Sitting
- Floating
Aids for pool

• Flotation aids
• Mirror
• Torch
• Sieve
• Aqua doppler
• Gloves
Maternal Observations

• Temperature
• Pulse
• Respiration
• B.P.
• Volume of fluid intake isotonic fluids
• Elimination
FAQs

• When can the mother get in the pool?
• What to do with faecal contamination?
• Nucal cord
• Snapped cord
• Maternal faint/collapse
• Shoulder dystocia
• How do you assess blood loss?
Assessing Progress without VE

- Sound changes near transition and birth
- Vocalising and deep guttural sounds
- Feel head descending on abdominal palpation
- Show PV
- Purple line between buttocks
- Rhombus of Michaelis
- Cold legs
Vertex visible

No need to confirm full dilatation on VE
Positive correlation between the length of the purple line, cervical dilatation and the station of the fetal head

Shepherd et al 2010. The purple line as a measure of labour progress. Pregnancy and Childbirth. 10:54
Rhombus of Michaelis

• Visible in the second stage when woman is upright or on all fours
• Provides a little extra space for the birth in upright positions
No touch technique at Birth encourage and coaching in transition and birthing

• Third stage management
• Aim to keep normal
• Skin to Skin
Active Birth Workshop

• Information and education for normal birth needs to be
  • Informative
  • Consistent
  • Realistic
• Active birth workshops gradually increase in frequency
• Working with couples
Top Tips for Involving Fathers in Maternity Care
Reaching out: Involving Fathers in Maternity Care
Topics for Active Birth Workshop

- Teach anatomy and physiology of birth (doll & pelvis)
- Hormones and environment for birth (quiet music, dimmed lights, privacy)
- Explain role of midwife during labour and birth
- Display aids for active birth (ball, beanbag, mats, combi-track, robozo scarf, birthing pool)
- Teach breathing and relaxation techniques
- Discuss sounds and movements during labour and birth
- Methods of analgesia (mobilising, walking about, up and down stairs, leaning over chair, bed, bean bag, pelvic rocking, labour dance, TENS, robozo scarf)
- Discuss use of water and birthing pool in labour and birth
- Discuss medication Positions for birth (on all 4s, squatting, pool, over bed)
- Positions for birth
- 1st Hour after birth
- Physiological 3rd stage of labour
Rebozo

- Midwives learning practical skills from other cultures
- Aims to encourage caregivers to adopt practices that optimise women’s physiological capacity to give birth and help reduce the need for intervention and caesarian section
Staff Training

- Revising normal birth techniques
- Staff induction (rotation)
- Suturing
- PCHR checks
- New innovations: sterile water injections
Thank you
Questions?