Findings from the MEET study – how expert midwives conduct physiological third stage

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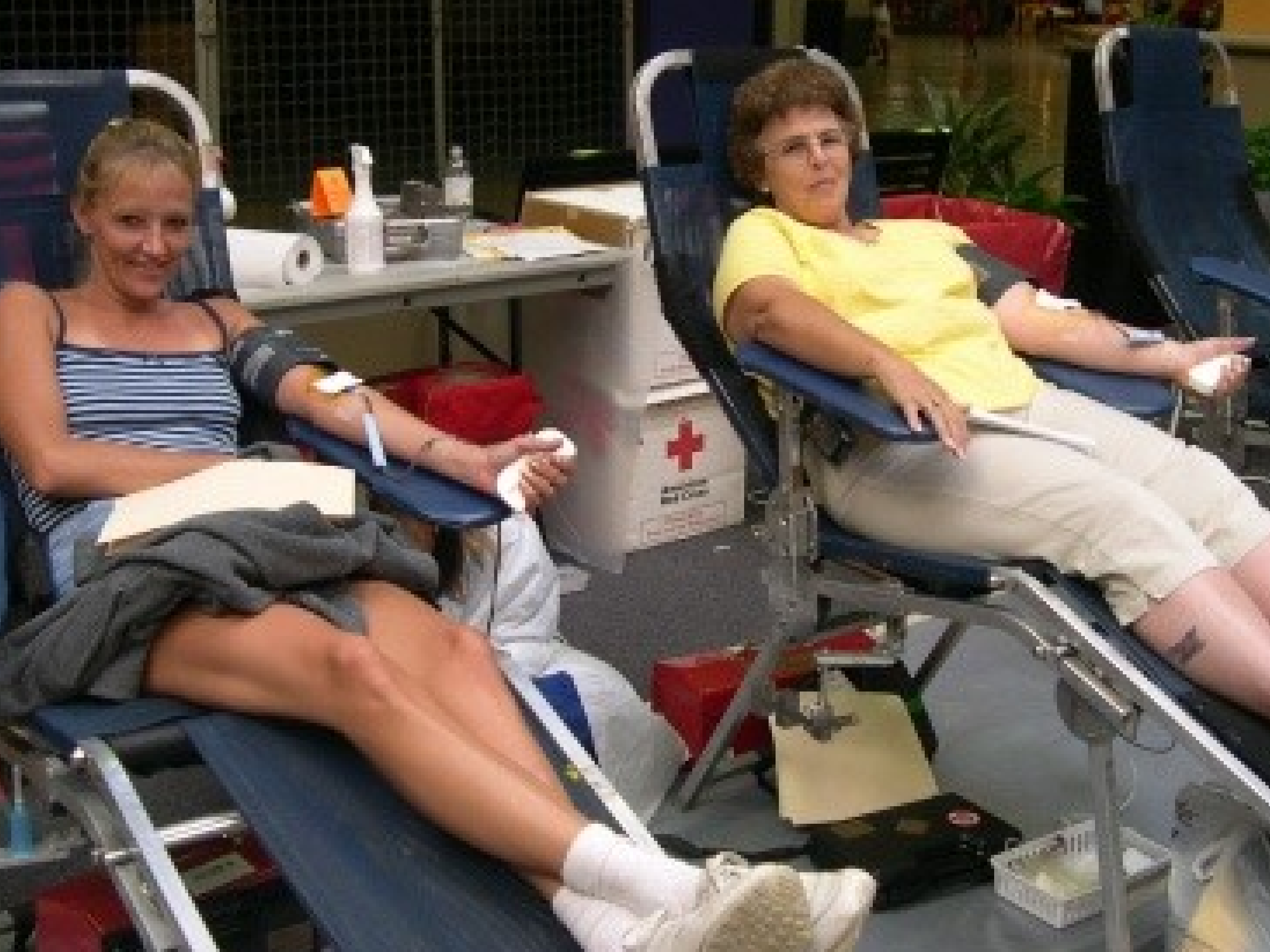
AMTSL in low-income countries

- AMTSL was introduced to try to reduce postpartum haemorrhage (PPH), a major contributor to maternal mortality in low-income countries.

AMTSL in high-income countries

- When caring for well-nourished women, in general there is little impact from a blood loss of 500 ml, the equivalent of a routine blood donation.



Cochrane review

- Compares AMTSL and EMTSL
- Includes 5 studies (6486 women), all undertaken in high-income countries (Begley et al 2019).

In women at low risk of bleeding (3 studies, 3134 women)

- No difference was identified in severe blood loss (greater than 1000 ml)
- No difference was identified in postnatal anaemia

In women at low risk of bleeding

	Active	Expectant
500ml+	4.5%	12.5%
BT	.4%	1.5%
Iron	16%	27%
BW	-67 gms	
BP >90	2.8%	.4%
Pain	3.4%	.4%
Bleed	2.8%	1.3%

So…..

- …for low-risk women, there are benefits to both methods and harms from both methods.

Conclusion of the Cochrane review (for low-risk women)

- It is uncertain whether there was a difference between active and expectant management for severe PPH or maternal Hb less than 9 g/dL (at 24 to 72 hours).

- Women could be given information on the benefits and harms of both methods to support informed choice.

In the studies included in the Cochrane review

- High percentages of women had received an oxytocic for induction or acceleration of labour – de-sensitises the uterus to the effect of oxytocin
- Expectant management was not the norm for midwives involved, so blood loss may be greater.

Midwives need to get used to using expectant management

- PPH rate in Physiological group, by month (Begley 1989):

- Pilot study 21%
- 1st 4 months 13%
- Last 8 months 6%

Where is EMTSL the norm?

- Netherlands
- New Zealand
- the Midwifery-led Units in Ireland
- (and maybe others!)

New Zealand (NZCM 2009)

- Population based, retrospective cohort study, reporting on MTSL
- Included 33,752 low-risk women who had no oxytocic for induction/ acceleration
- 48% had EMTSL, 52% had AMTSL

New Zealand (2)

- EMTSL - 3.7% had PPH > 500 ml
- AMTSL - 6.9% had PPH > 500 ml

Ireland (Begley et al 2009)

Midwifery-led Unit births (445)
(no oxytocin for induction/ acceleration)

- 29% had EMTSL, 71% had AMTSL
- EMTSL - 0% had PPH > 500 ml
- AMTSL – 1.3% had PPH > 500 ml

Ireland (Dencker et al 2017)

Midwifery-led Unit - births in MLU (SVB, 1,878)

- 50.9% had EMTSL
- PPH 2.9%

Midwifery-led Unit – births in hospital (SVB, 900)

- 4.7% had EMTSL
- PPH 7.2%

Those midwives could use EMTSL successfully – why can't we?

- Text-books do not describe clearly how true physiological management of the third stage should be conducted.

- Many midwives are afraid to use EMTSL, due to lack of knowledge and practice in the technique.

Midwives' Expertise in Expectant management of the Third stage of labour: the 'MEET' study

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So – what are the Irish and NZ midwives doing differently (and correctly)?

- Why not ask them?

- The MEET study (Begley et al 2011)
- Ethical approval granted by Trinity College Dublin
- Qualitative descriptive study
- Recorded interviews
- 27 “expert midwives” in NZ and Ireland

“Experts”

- Used EMTSL at least 30% of the time
- Had PPH rates of less than 4%.

- Volunteered, informed consent
- Were interviewed in 2010
- NZ: 1 focus group of 7, 11 individual interviews
- Ireland: 1 pair of midwives, 7 individual interviews

Data analysis and rigour

- Constant comparative method of analysis
- Peer debriefing (4 authors checked 2 transcripts each)
- Member checking – analysis sent back to participants.

The midwives

- Mean length of time as registered midwife 13.6 years (SD=6.7), 2 - 24 years.
- Mean length of time using EMTSL 7.1 years (SD=4.5), 2 - 20 years.
- All participants were female.

The midwives

- 9 worked in MLUs (IRL)
- 11 worked in birth centres (NZ)
- 3 were home birth midwives (NZ)
- 4 (NZ) were caseload midwives

Four themes

- “Going with the flow”
- “Knowing it’s separated”
- (“Coping with the abnormal”)
- “Letting it come”

"Going with the flow"
Attachment time

- 25 (IRL) you are sitting on the floor or where she is… watching what the situation is… the initial mum/baby connection is very important for me and dressing is the last thing you do and weighing and all that stuff.

- 11 (NZ) So you're watching your baby and you're actually watching this relationship starting to form which you'd probably turn your back on if you were tidying up.

"Going with the flow" Attachment time

- 24 (IRL) When the baby is born we'd put the baby onto the mother's tummy, dry the baby off and, skin to skin, cover with a warm blanket.
- 12 (NZ focus group) They're nuzzling at the breast because they're skin to skin, so I think that helps too.

“Going with the flow” Let it happen

- 21 (IRL) It’s just a total hands-off process.
- 1 (NZ) There is a lot of…nonsense, snobbery, trying to manage things about the third stage, just let it happen… if the delivery goes normally generally the third stage would be ok, why do we feel we have to manage that?...we'll just wait and see.

"Going with the flow" Watchful waiting

- 6 (NZ) We just wait and watch.
- 10 (NZ) I go into a watchful waiting mode, it's that vigilance, alert vigilance.

“Knowing it’s separated” The woman knows

- 20 (NZ) Usually within that first half hour or so mum starts complaining of some cramping.
- 12 (NZ) They normally get quite uncomfortable and quite fidgety.
- 21 (IRL) They might turn around to you and say ‘oh I can feel cramping there now’ and I just say ‘it’s fine now, just let it come.’

"Knowing it's separated" Other signs are secondary

25 (Ire) When it comes it's a large gush…so you have no bleeding and then …a large gush, but it stops. It doesn't continue like a PPH would where you'd have a continuous trickle … it's just a single gush that would come out and then that's it.

12 (NZ focus group) You get that lengthening of the cord, a relaxed cord just coming out.

"Knowing it's separated"
Other signs are secondary

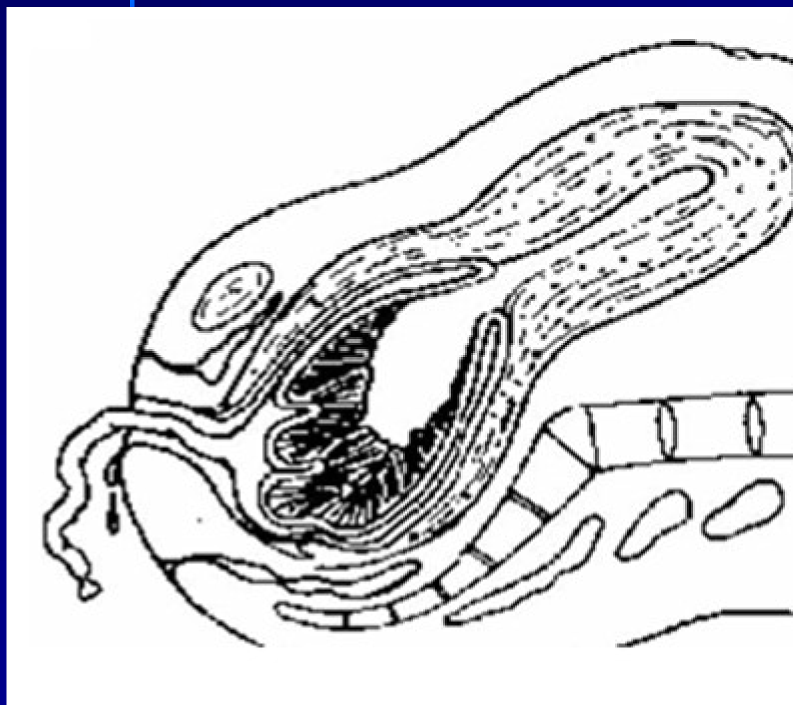
- 18 (NZ) The shape of the uterus changes and you can see that from the baby… when the baby is first sitting there you've got a lopsided uterus and then when it's separated you've got a more round uterus because it's gone lower down, you can see that with the baby sitting there.

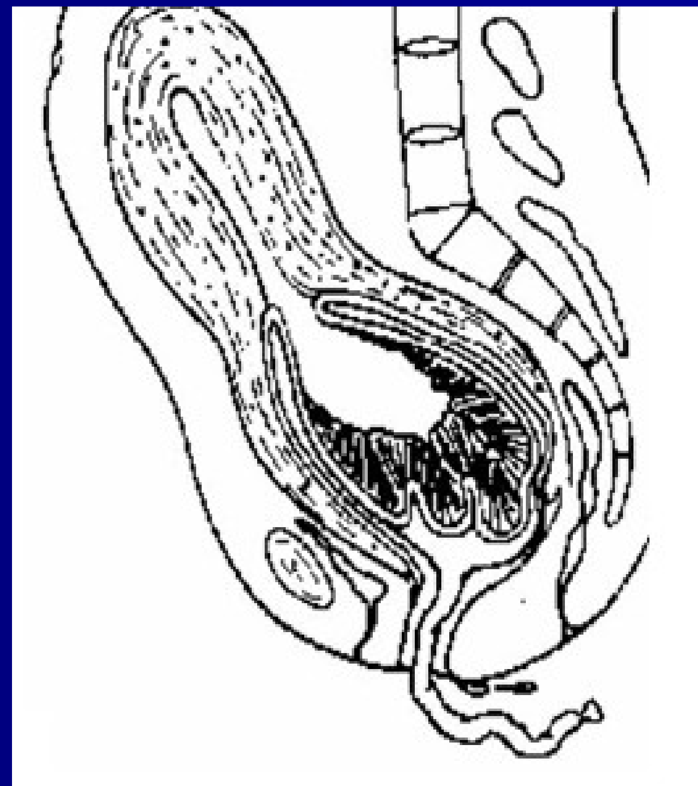
“Letting it come” Let gravity do the work

- 5 (NZ) Quite often they will just walk out … and sit on the toilet but we put a … yellow bin bag and curl it all over the thing and just, yeah they sit on the toilet for a while.
- 24 (IRL) Get them out onto the stool and get them to push it.
- 20 (IRL) Getting her to walk out to the toilet it often will come out half way there

NO

YES!





"Letting it come"
Never clamp the cord

- 4 (NZ) I just don't like that startle that the baby gets at active management when you cut; there's a very definite fetal distress when you cut the oxygen off and that's quite marked.

- 23 (IRL) I've had two...episodes probably within a week, where the placenta has fallen out and it was never clamped … because the cord continued to pulsate, the placenta was sitting on the floor and the cord was…(laughs).

"Letting it come"
Just a little lift

- 25 (IRL) I would guide it out then, a little lift.
- 1 (NZ) I don't yank it out or anything … I can see it's coming down, so I just draw it out.
- 12 (NZ focus group) I waited for three hours once for a placenta sitting in a vagina…I'm not doing that again.

Conclusions

- Observing the behavioural cues of women gave the midwives confidence to not interfere.
- This study confirmed the usefulness of previously-identified elements of EMTSL such as skin-to-skin contact, breast-feeding, using upright positions and maternal effort.
- But - there was a greater emphasis on not clamping the cord at all, and using truly upright positions such as walking, and sitting on the toilet.

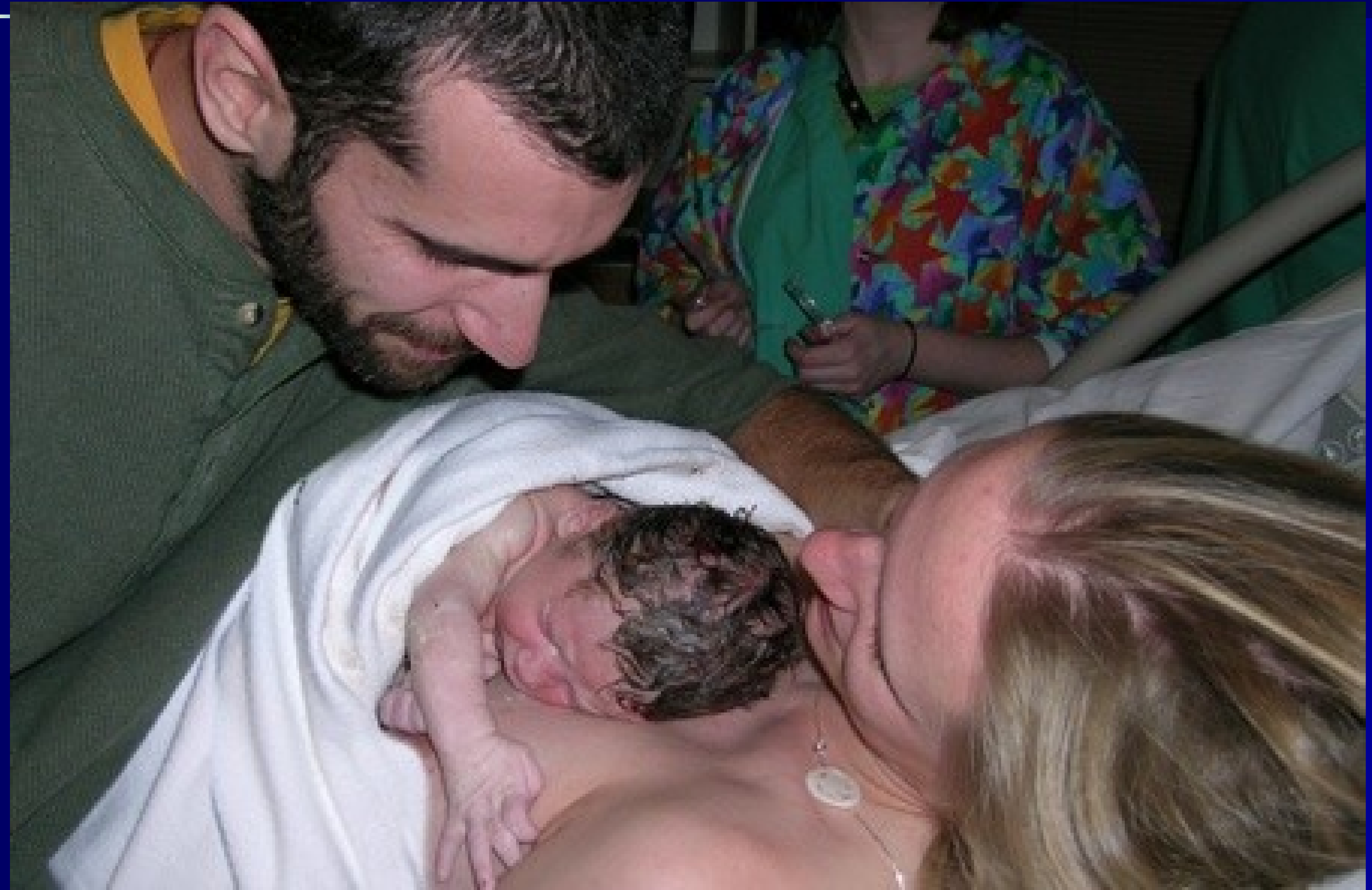
Conclusions

Some components of EMTSL identified by these expert midwives are not recorded in text-books:

- ensuring a calm, safe, warm environment
- watching the woman's behaviour and listening to her feelings
- the size and time of the first "gush' of blood at separation
- using gentle cord traction, if necessary, to lift the placenta out.

Above all…watch and wait….

…it is their special time



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