Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Preserving the perineum intact
The MEPPI study

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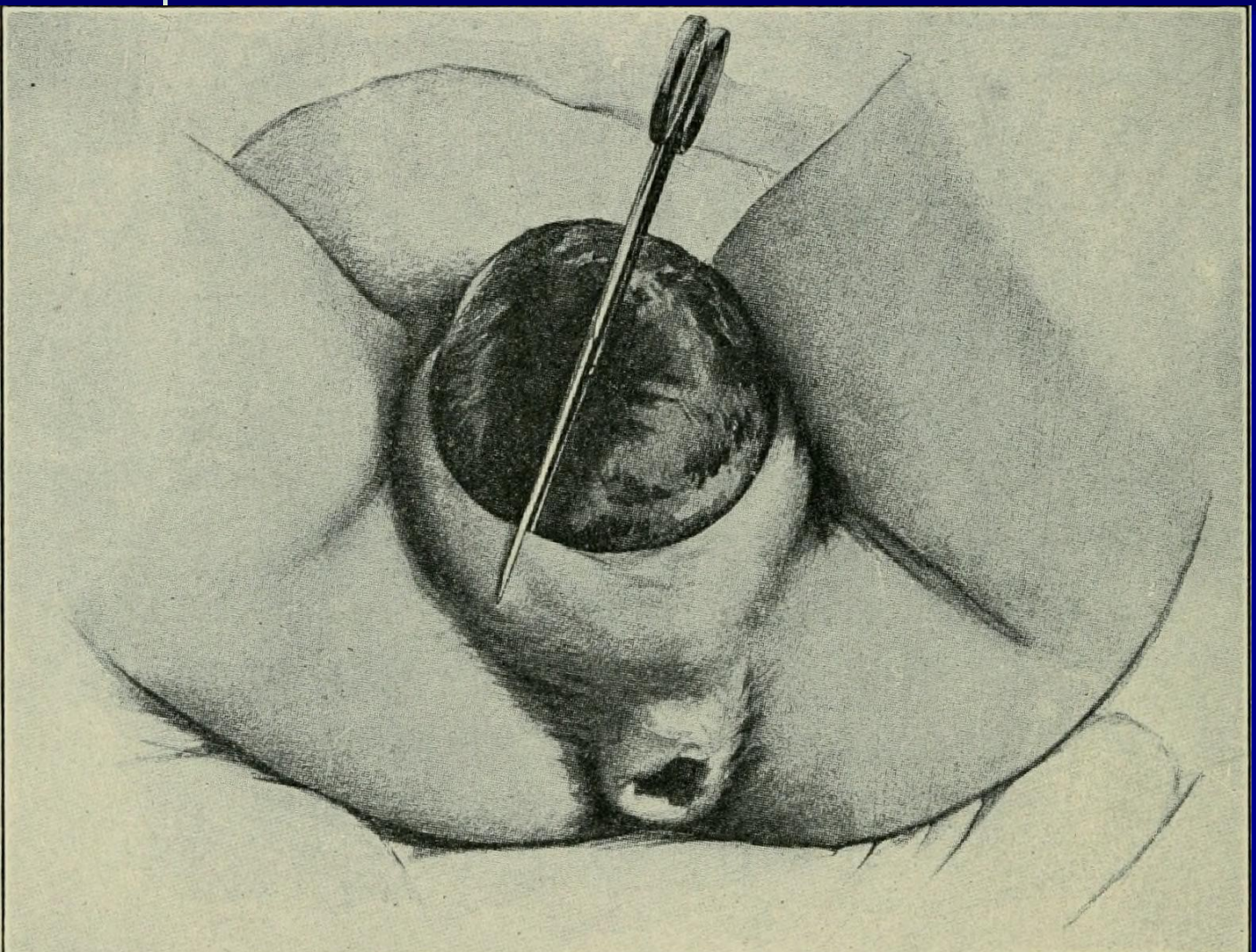
Perineal research



- 1922 text-book for nurses

Episiotomy study

- Study 1 (Begley 1986) - retrospective study of perineal trauma rates in normal births for six months.
- Documented the midwife conducting the birth.
- Table of the perineal trauma rates of 20 experienced midwives

Episiotomy study

Group (Para 0)	Number	No Suture %	Epis %	2nd degree %
A	23	**56.5**	17.4	26.1
B	27	55.6	22.2	22.2
C	25	48.0	20.0	32.0
D	17	47.1	**5.9**	47.1
K	22	22.7	77.3	0
S	37	10.8	83.8	5.4
T	30	10.0	70.0	20.0

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Episiotomy study

- Presented the results at the hospital's weekly multi-disciplinary conference
- Circulated the results to all labour ward midwives, showing how they differed
- Gave out a synopsis of the literature on indications for episiotomy (now very few)
- Conducted study 2, 6 months later (Begley 1987, 2002)

Episiotomy study

Group (Para 0)	Number	Epis %	Intact %	1st degree %	2nd degree %
Study 1	582	54.0	16.0	10.5	19.6
Study 2	564				

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6 months later		25.0

These midwives halved the episiotomy rate in one year

- Resulted in lots more comfortable postnatal women, without perineal sutures

YOU could do this, too

Midwives' Expertise in Preserving the Perineum Intact (MEPPI)

- Episiotomy rate in Ireland was 14%
- Episiotomy rate in CR is ??
- Episiotomy does not prevent severe lacerations, or urinary incontinence
- Selective episiotomy policies result in fewer women with severe perineal/vaginal trauma, than when routine episiotomy is used. (Jiang et al 2017)

Midwives' Expertise in Preserving the Perineum Intact (MEPPI)

- The only indications for an episiotomy now: fetal distress or medical compromise of the mother e.g., cardiac problem, hypertension (or, maybe, forceps birth).

- **In the absence of a valid reason to do one, episiotomy is an unjustifiable assault on women.**

- **And…all midwives need to be proficient at PPI**

Which midwives are best at PPI?

- New Zealand and Ireland had population based, retrospective cohort data.
- First-time mothers with spontaneous vaginal birth.

New Zealand/Ireland

	New Zealand		Ireland	
Perineum	N	%	N	%
Episiotomy	864	14.34	120	13.00
" no sutures"	2799	46.45	449	48.64
2nd degree	2115	35.10	321	34.78
3rd degree	230	3.81	31	3.36
4th degree	18	0.30	2	0.22
Total	6026	100	923	100

Some of those midwives could preserve the perineum successfully – why can't others?

- Text-books do not describe clearly how to preserve the perineum intact.
- Expert midwives share their knowledge one-to-one with students.
- New midwives are afraid that if they do not use episiotomy, and there is a large tear, they will be reprimanded.

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

- Why not ask them?

- The MEPPI study (Smith et al 2017, Begley et al 2018)
- Ethical approval granted by Trinity College Dublin
- Qualitative descriptive study
- Recorded interviews
- 21 "expert midwives" in NZ and Ireland

"Experts"

- For all nulliparous women they cared for, over a three-year period:
  - Under 11.8% episiotomy (below average)
  - More than 40% no suture rate
  - Less than 3.2% (or 1) third/fourth degree tear

  - Volunteered, informed consent
  - Interviewed in 2014 and 2015
  - NZ: 14 individual interviews
  - Ireland: 7 individual interviews

The expert midwives

- Mean length of time as registered midwife 16 years, 2 - 36 years.
- All participants were female.
- Episiotomy rate: 3.9% (wanted 11.8%)
- 'No suture' rate: 59.2% (wanted >40%)
- Serious laceration rate: 1.1% (wanted <3.2%)

"Getting ready"

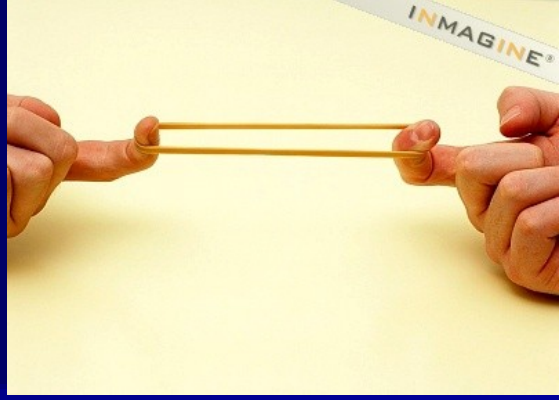
- **Position - keep upright for early pushing**
- I love the birthing stool because I find, the upright, gravity because the mum's squatting down. It opens up the pelvis, gives them an extra chance to push the baby out. [EI-5]
- NB: all recommended coming off the stool for the birth – otherwise more tears

"Getting ready"

- **Feedback to women**

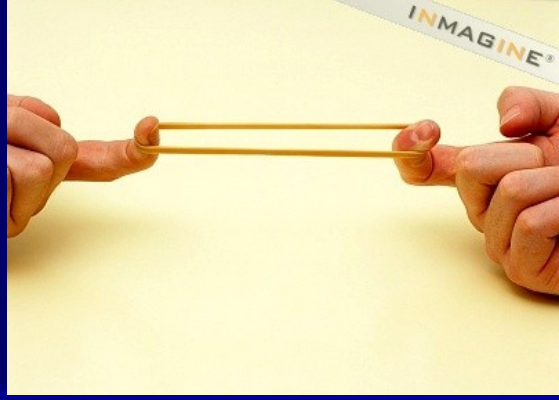
- As the head is coming up and the perineum is stretching …I let the woman know that … her baby's head is advancing well …and that she will feel the stinging and burning probably but it's all normal and it will all go when baby comes out. [EI-2]

"Letting it stretch"



- **Hot compress**
- So you're using the hot flannel both as the heat and enhancing the stretch and supporting. [NZ-3]
- I use hot compresses a lot, virtually everyone gets a hot compress… [NZ-10]

"Letting it stretch"



- **Lubrication**

  I'm a big fan of lubricating the perineum with some KY gel…it might just help moisten the perineum and help baby's head slip out a little bit (laugh). [EI-2]

- **Sometimes infiltrate**

  …the woman actually just relaxed because that pain is gone out of her perineum and they are tense because of that. And so I've just given the local and the baby is born. [NZ-6]

"Slow and blow"

- **Long wait on the perineum**
- Q: How long would that be [at crowning]?
- A: At least seven [contractions], probably.... [NZ-9]

- It probably took a good ten contractions, and the fetal heart was alright…the baby came out absolutely fine and she had the most minutest little first degree tear. [NZ-10]

"Slow and blow"

- **Breathe the baby out**
- …blow … a small push and then blow again and then another small push and then blow again. [EI-6]

- …usually the contraction before I can see I need it, I tell them to pant, just to get them into it, so that when I need it they're tuned in to my voice. [NZ-3]

“Hands on or hands off?”

- **You need hands on:**
- I would be very much hands on; I've always been hands on. [EI-5]

- Once that vertex is advancing nicely I don't like hands off totally for the whole time. Mainly because I do like that bit of control just at the very end. [NZ-6]

"Hands on or hands off?"

- **Ease the perineum together**
- …sometimes I might go like that [easing perineum together] and try and draw it together to give a bit of slack. [NZ-5]

- Supporting, supporting the perineum so you get a feel for how fast the head is coming and how much stretch there is in the perineum… not quite pinching it but you're certainly just supporting it a little bit… taking some of the stretch out…[NZ-3]

Conclusions

- This study confirmed the usefulness of previously-identified elements of PPI such as slow birth of the head, giving gentle pushes at and after crowning

- But - there was a greater emphasis on:
  - a REALLY slow birth (five or more contractions)
  - REALLY gentle pushes – blowing, breathing

Conclusions

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

- using hot, rather than warm, compresses
- (sometimes) using lubrication, if it appears dry
- (sometimes) infiltrating the perineum with local anaesthetic, to relax a tight perineum
- ensuring 'hands-on' at birth of the head (on land)
- easing the perineum together gently

Above all…

…patience,
patience,
patience…

… the wait will be worthwhile

References

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