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# Evidence-based practice – the key to excellent midwifery care


## Professor Cecily Begley

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**Trinity College Dublin**
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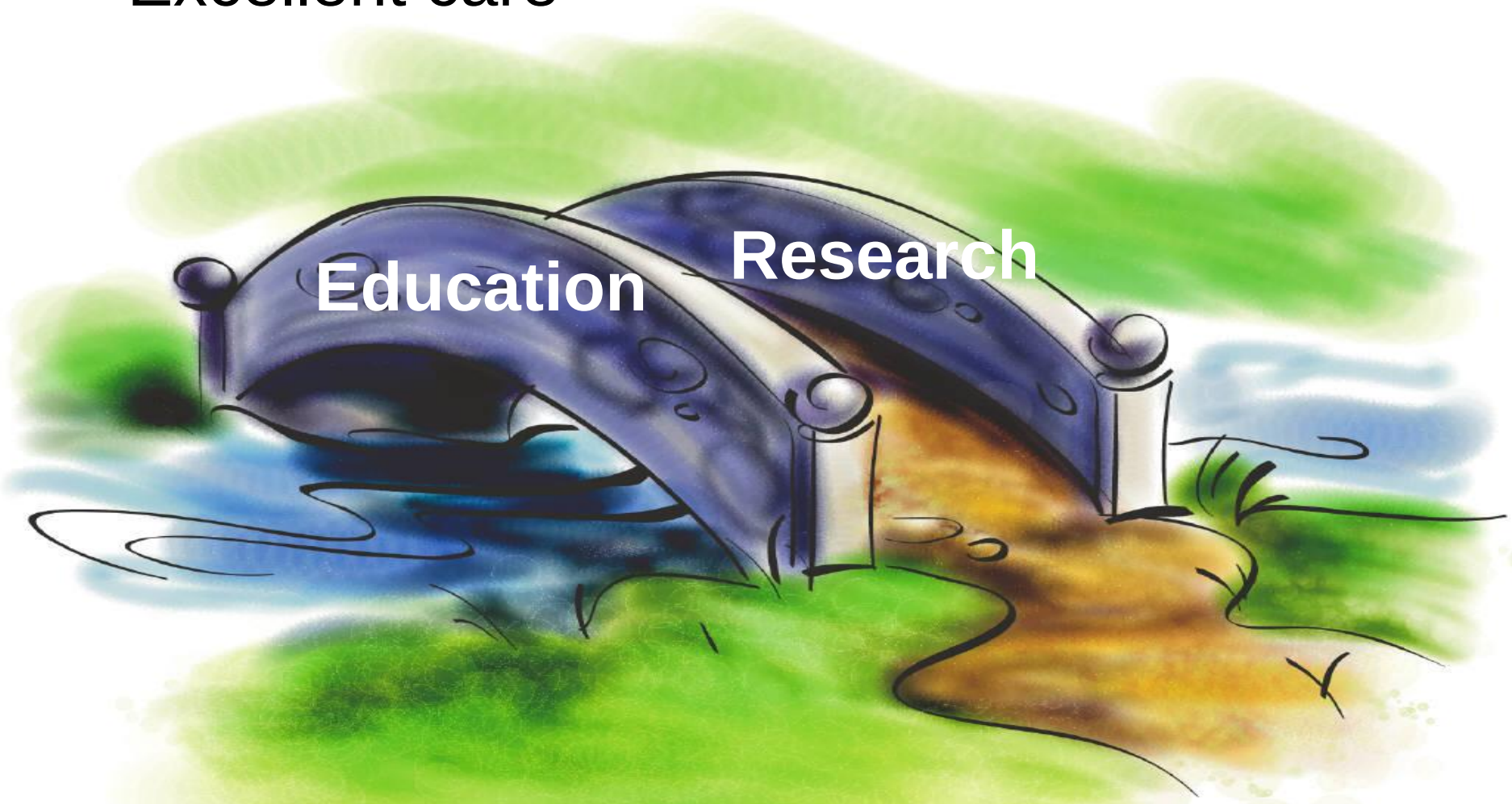
**and Visiting Professor, University of Gothenburg, Sweden**

Excellent care




Ignorance and poor practice

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# Why educate?

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# Undergraduate education

- We teach students how to care for women and babies

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# Undergraduate education

- …how to use technology…and how to rub backs

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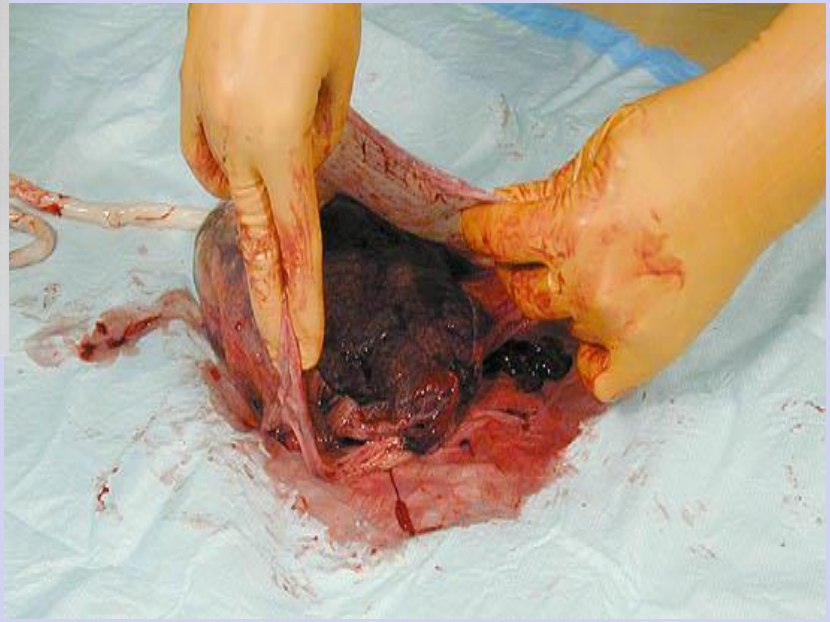
# Undergraduate education

- …how to wash hands …and how to check placentas



# Need to continue education

# Need to continue education

Elaine Dunn, University of Wollongong, aged 84

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# Knowledge is POWER

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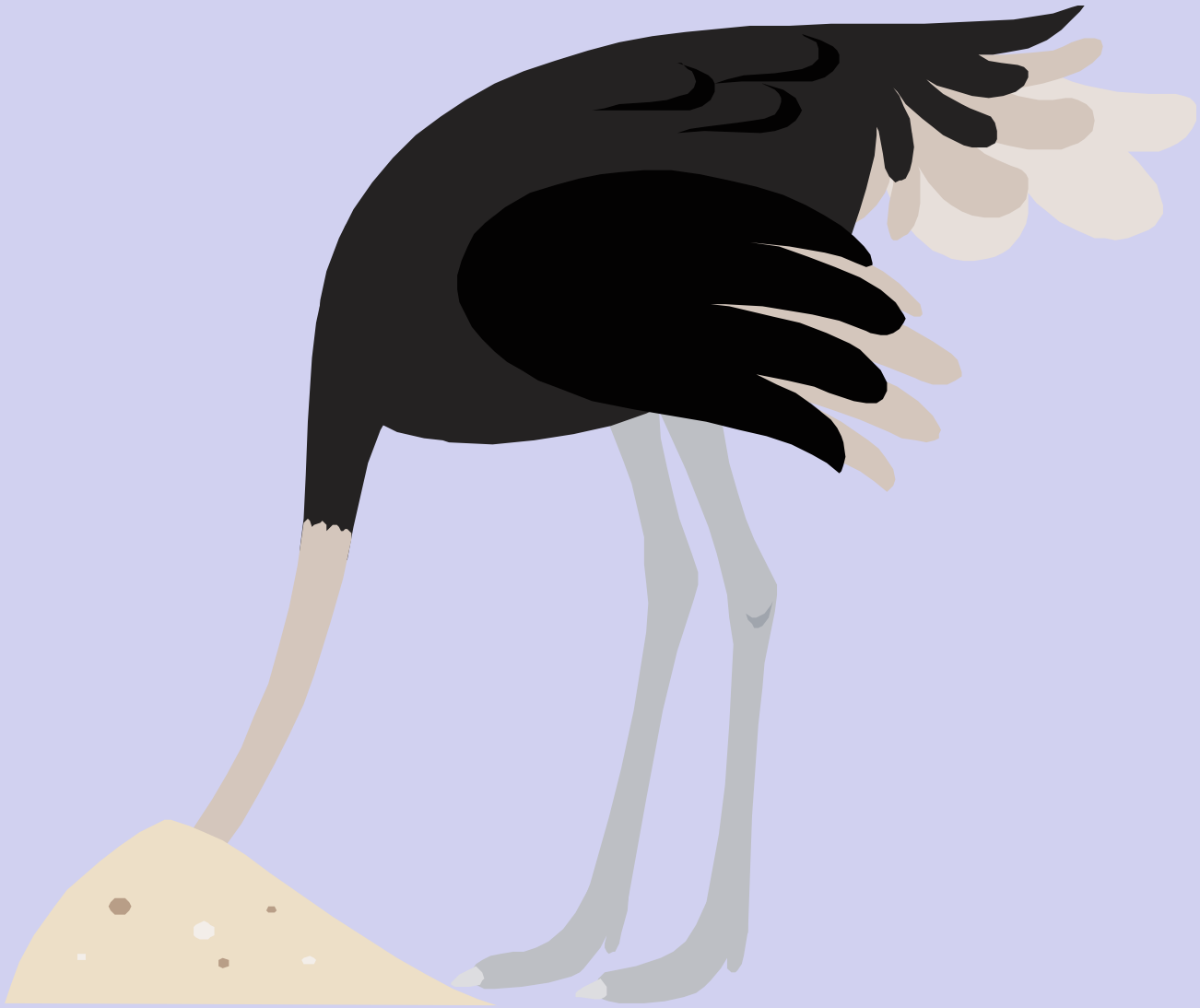
# Do we use our knowledge?



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# 'Routine' care is always wrong for someone

- Routine ARMs:
- Smyth et al 2013 have shown that artificial rupture of membranes has no significant effect on length of first stage, CS, maternal satisfaction and low Apgars.
- So – not recommended routinely – even in prolonged labour

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# Accelerating labour

Cochrane review (25 trials, 5218 women)

- Women who were upright as opposed to in recumbent positions:
  - First stage of labour was 1 hour 22 mins shorter (average MD -1.36, 95% confidence interval (CI) -2.22 to -0.51).
  - less likely to have caesarean section (RR 0.71, 95% CI 0.54 to 0.94)
  - less likely to have an epidural (RR 0.81, 95% CI 0.66 to 0.99)

  (Lawrence et al 2013)

# Fetal assessment

Electronic fetal monitoring (Cochrane review)

- 13 trials were included, 37,000 women;
- Compared with intermittent auscultation continuous CTG showed :
  - no significant improvement in overall perinatal death rate (risk ratio (RR) 0.86, 95% confidence interval (CI) 0.59 to 1.23
  - was associated with a halving of neonatal seizures (RR 0.50, 95% CI 0.31 to 0.80).
- (Alfirevic et al 2013)

# Fetal assessment

Electronic fetal monitoring (Cochrane review)

- no significant difference in cerebral palsy rates (RR 1.75, 95% CI 0.84 to 3.63).
- a significant increase in caesarean sections associated with continuous CTG (RR 1.63, 95% CI 1.29 to 2.07)
- an increase in instrumental vaginal birth (RR 1.15, 95% CI 1.01 to 1.33).

- (Alfirevic et al 2013)

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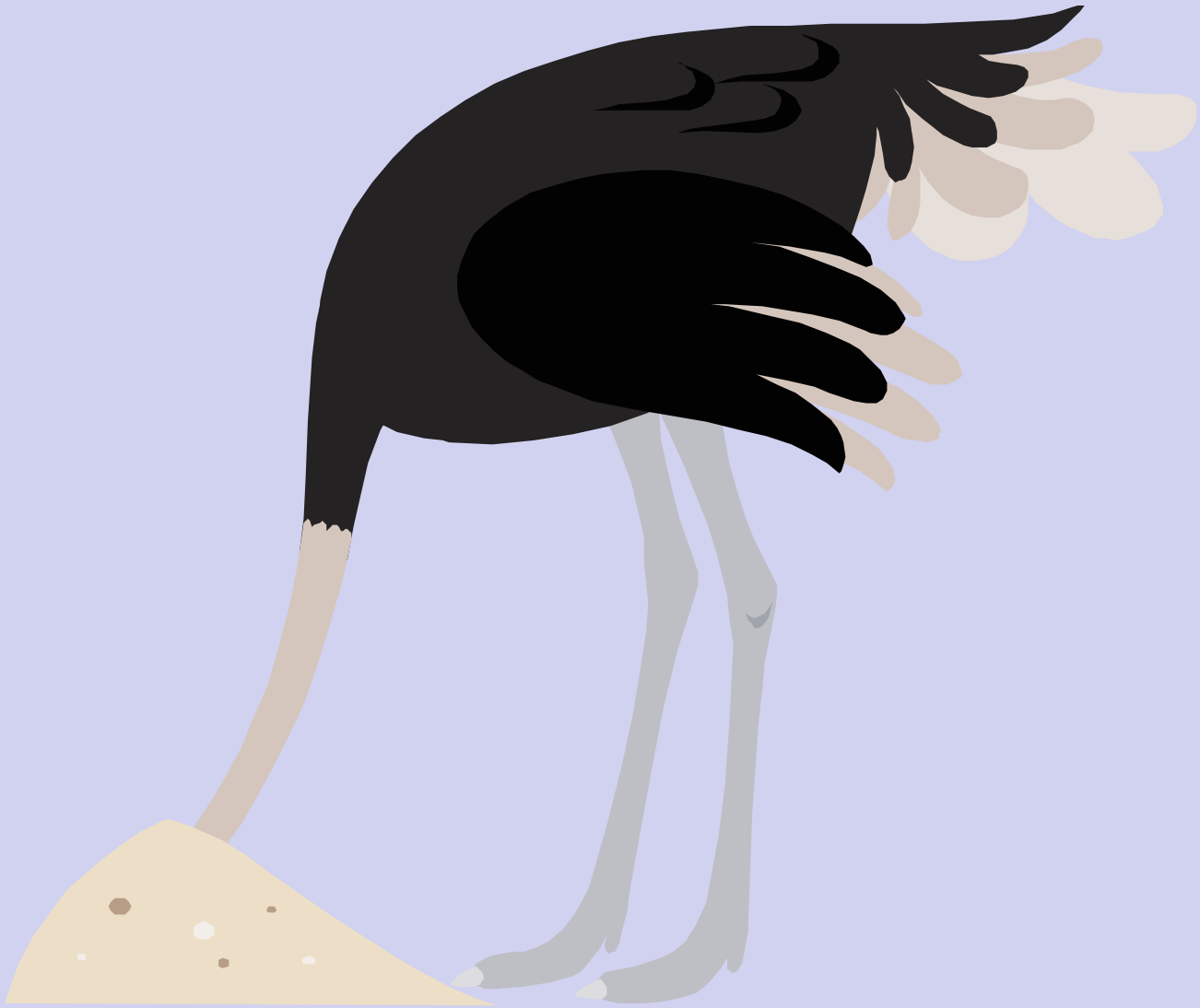
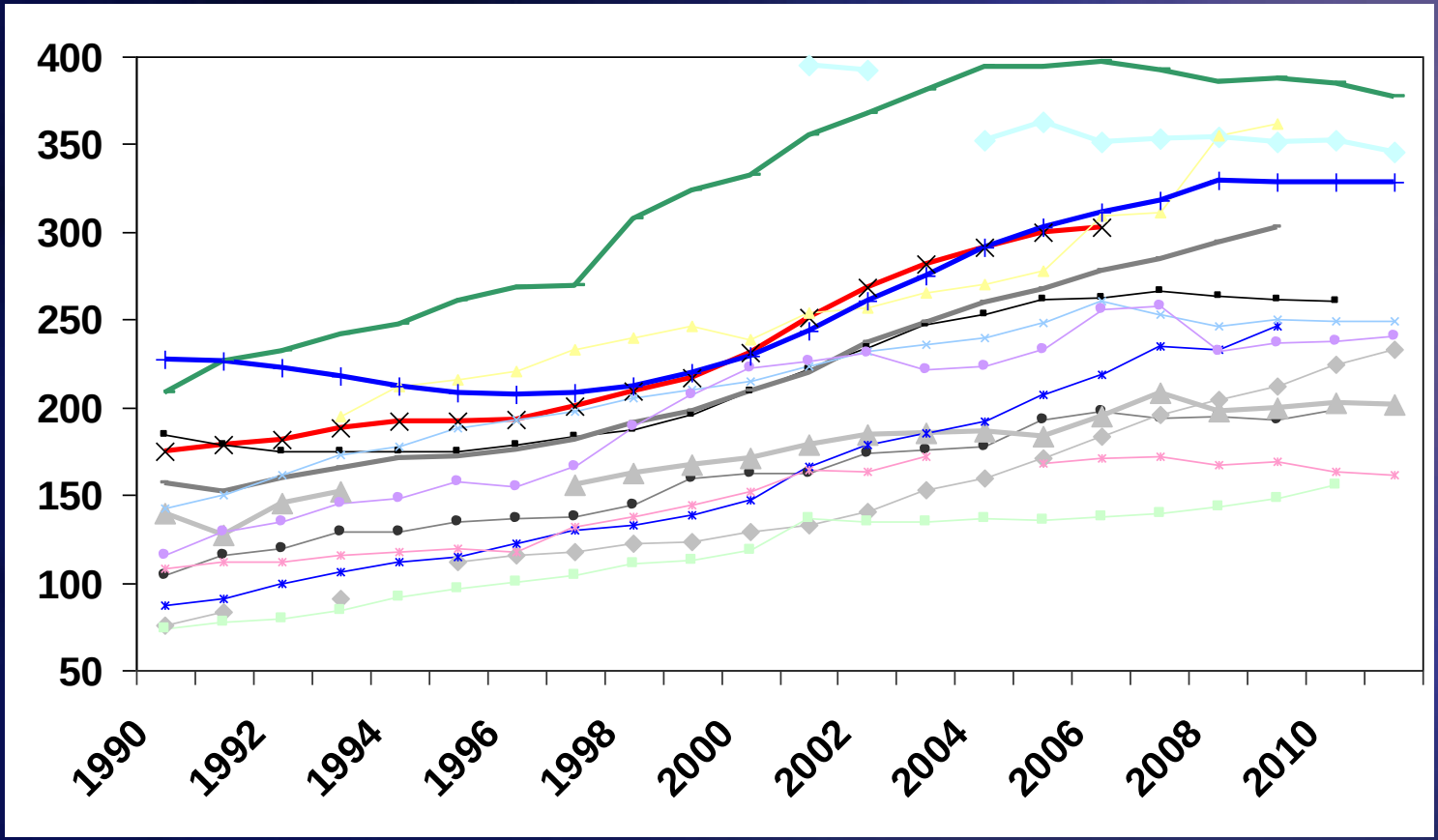
# Do we use this research?



# CS rates are rising



# CS rate of 10 - 15%

WHO re-iterated that no country/area should have a CS rate greater than 15% (WHO 2009) and said “caesarean section rates higher than 10% are not associated with reductions in maternal and newborn mortality rates (WHO 2015)

Rates above 15% seem to do more harm than good (Althabe and Belizan 2006, Ronsmans et al 2006).

# CS rate of 15%

Risk of postpartum maternal death was 3.6 times higher after caesarean than after vaginal birth (Deneux-Tharaux 2006)

Maternal morbidity increases with increased number of CSs (systematic review of 21 studies across the world, including over 2 million births) (Marshall et al, 2011)

# Why are CS rates increasing?

Maternal request (?), breech (why?), higher BMIs (?), previous CS (why?)

Private ‘patients’ have higher rates in Italy (Malvasi et al 2009) and Ireland: 34.4% vs 22.5% (Brick and Layte 2009, Murphy and Fahey 2013)

Fear of litigation – maybe we should be afraid of litigation for over-using CTG, etc

# Why are CS rates increasing?

Over-use of oxytocin for induction or acceleration (Kaul et al 2004, Malvasi et al 2009, Thaens et al 2011)

Over-use of fetal monitoring

- admission CTG increases risk of CS by 20% compared to intermittent auscultation (Devane et al 2012)
- continuous CTG increases CSs and instrumental vaginal births, with no improvement in neonatal status (Alfirevic et al 2013)

# Why are CS rates increasing?

**Over-diagnosis of prolonged labour:**

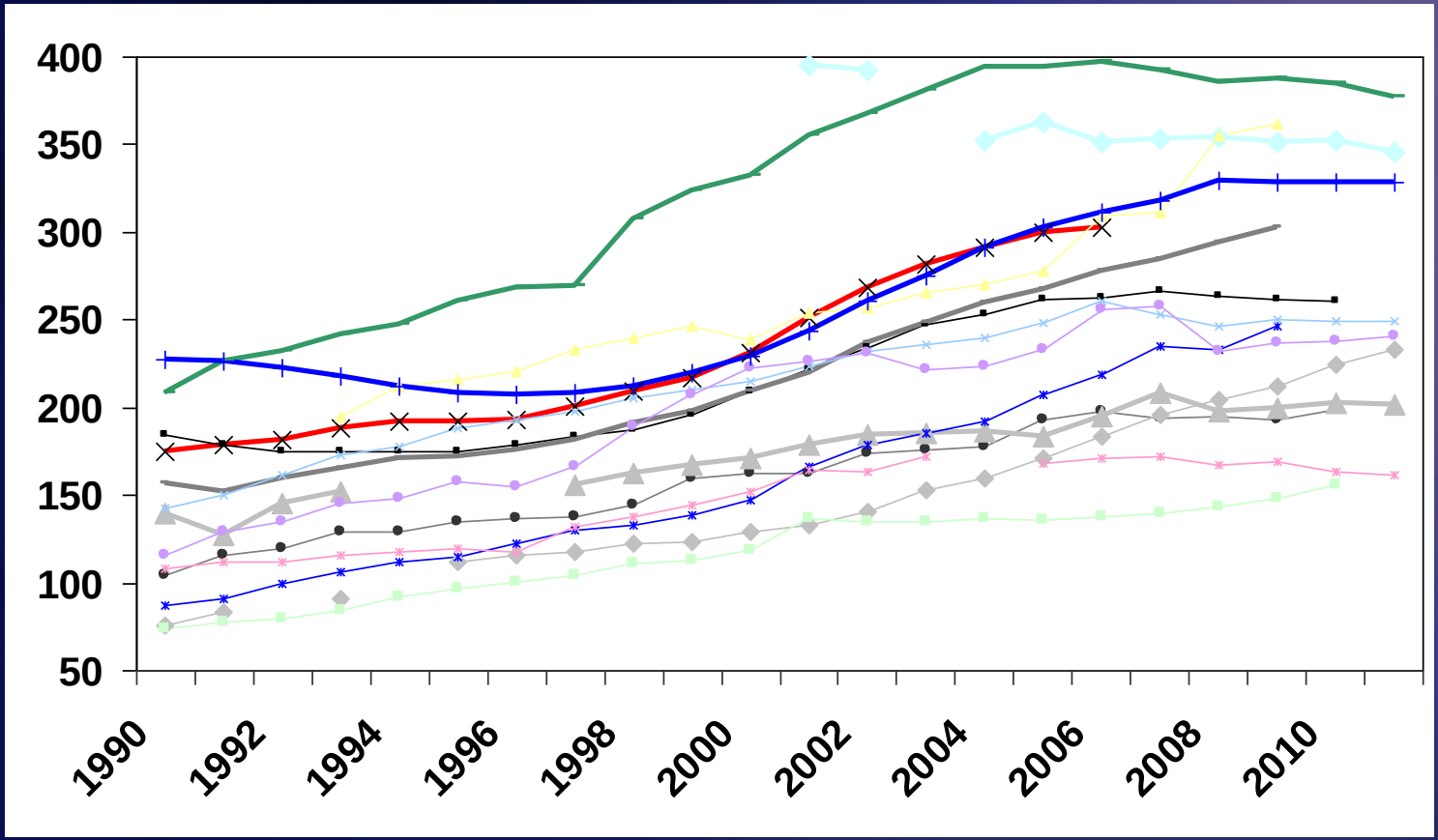
- Premature diagnosis of active labour – ignoring the latent phase of labour (Panda & Begley 2014: 47 women cared for in AN ward in early labour – 1 CS)

- Different clinicians assessing cervical dilatation, or assessing too often

Aggressive treatment of prolonged labour – oxytocin could be turned down when labour is established (Daniel-Spiegel et al 2004, Ustunyurt et al 2007, Girard et al 2009)

# How to keep your good rates?

# Don’t get complacent



# Read the American College of Obstetricians and Gynecologists document:

Safe prevention of the primary cesarean delivery (2014)

Encourage women to avoid excessive weight gain

Advise vaginal birth for twins, 1st twin cephalic

Offer ECV at 36 weeks for breech

Latent phase can be >20 hours (primip) >14 hours (multip)

Before 6cm dilatation, standards of active phase should not be applied

Second stage – allow at least 2 hours pushing (multip), 3 hours pushing (primip)

# Think about the old days

- In 1979, episiotomy rates were 65% in US (Schoon 2001)
- In 1990s, episiotomy rates were 92% in Latin America (Althabe et al 2002), 62% in US, 38% in Canada (Goldberg 2002)

# But now we know

- Episiotomy does not prevent severe perineal trauma, healing complications, painful intercourse or urinary incontinence (Carroli et al 2012)
- In the absence of a valid reason to do one, episiotomy is an unjustifiable assault on women.
- Rates have fallen to 4.9% in Denmark and 6.6% in Sweden

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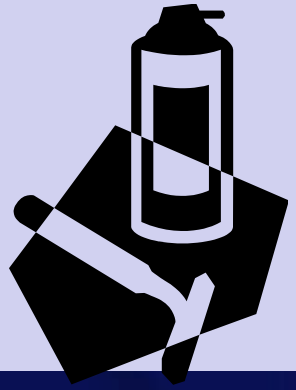
# Think about the old days

Enemas (Reveiz et al 2013) and perineal shaving (Basevi and Lavender 2000) were part of normal practice – and are not evidence-based.



Caused great discomfort to millions of women across the world.

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# Think about the old days

- Women died of puerperal sepsis because we did not know about the importance of hand-washing.

- Semmelweis in 1847 documented the mortality rate due to puerperal sepsis as 11% (Waterstone 2001).

# Why did these things happen?

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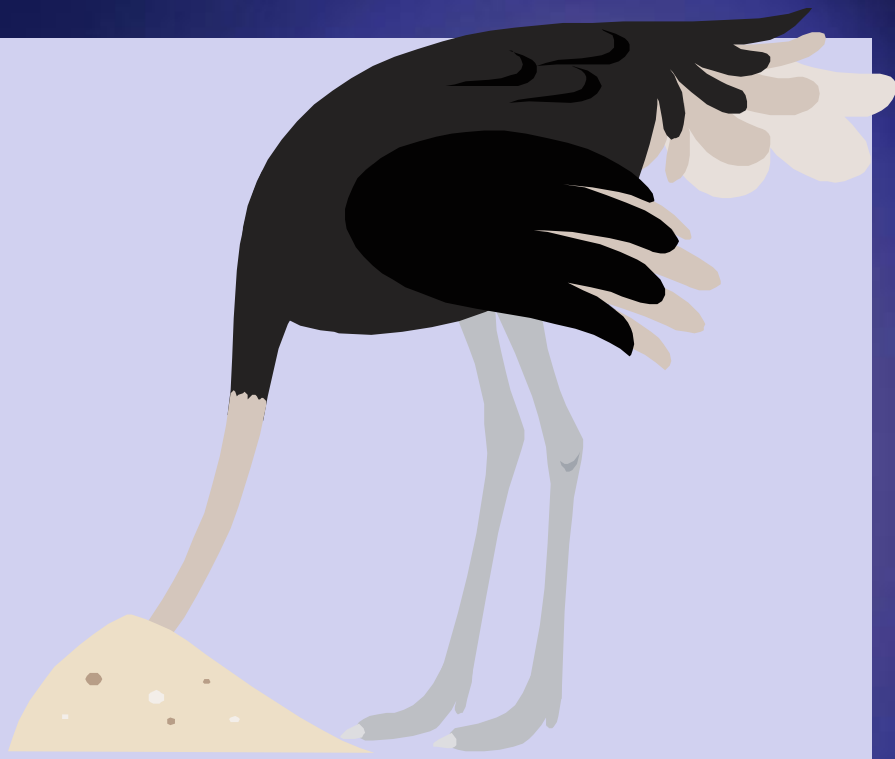
# Think about the future….



What will the women and midwives of 2036 be saying about us?

Have we got our heads in the sand, and are not recognising the silly, or time-wasting, or harmful things we are doing to women?

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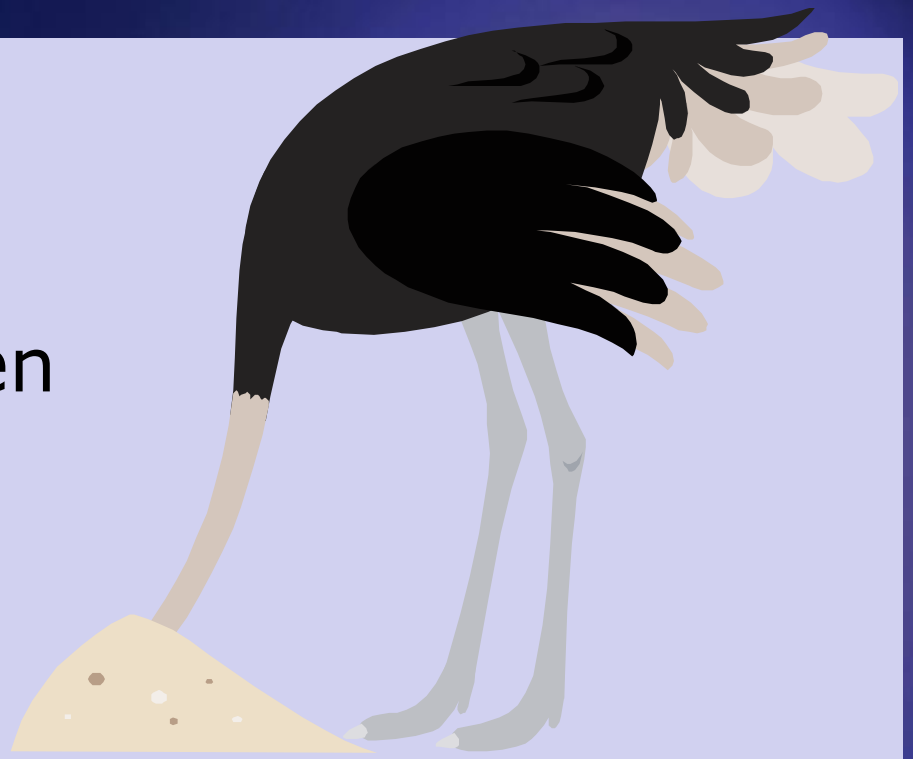
# Will they say....

Why did they not stop using routine practices such as amniotomy in spontaneous labour (even when prolonged)?



(Smyth et al 2013:
artificial rupture of membranes has no beneficial effect and is not recommended routinely).

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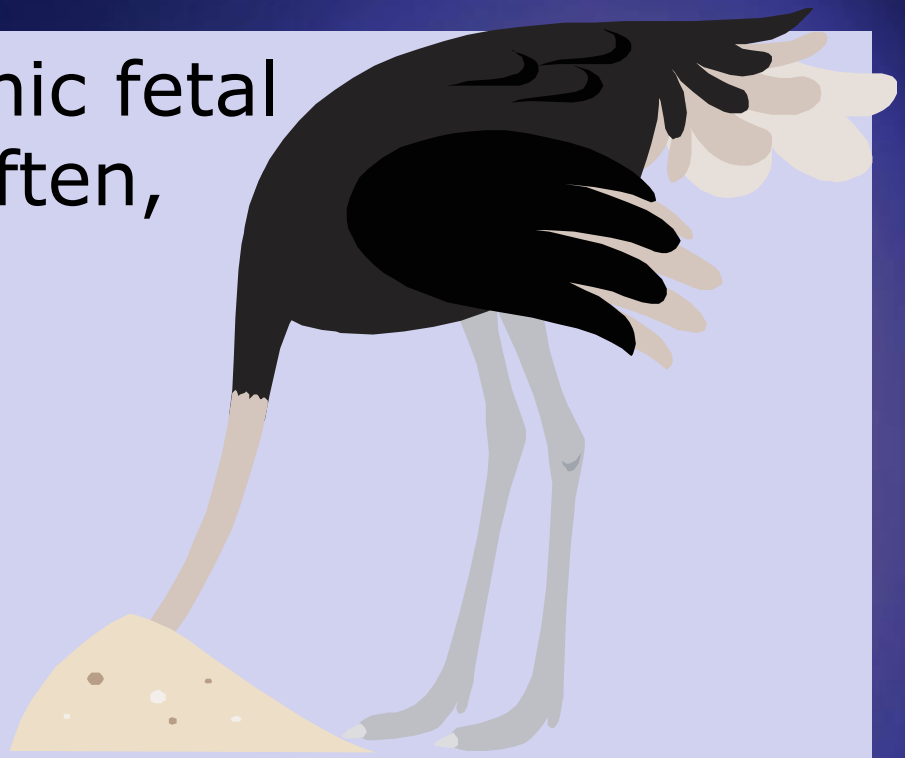
# Will they say....

Why did they use electronic fetal monitoring in labour so often, even in normal, healthy, low-risk women?



(Alfirevic et al 2013:

EFM increases CS and instrumental birth rates with little or no benefit to babies)

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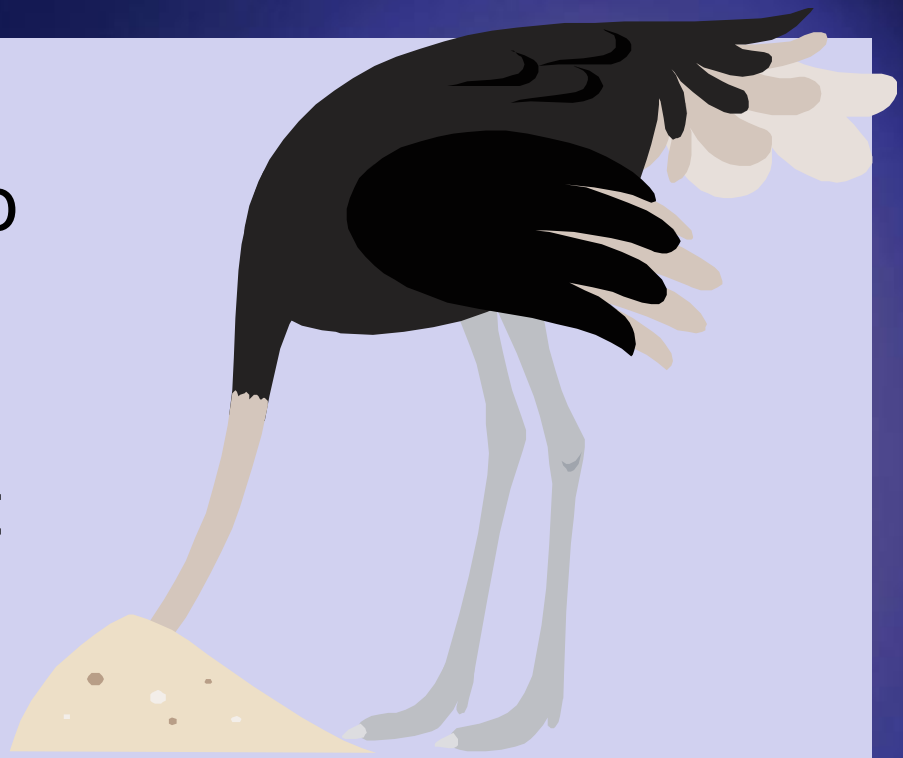
# Will they say....

Why did they not listen to what women wanted?

Why did they not support women's autonomy, and advocate for them?

Why were they not true midwives?



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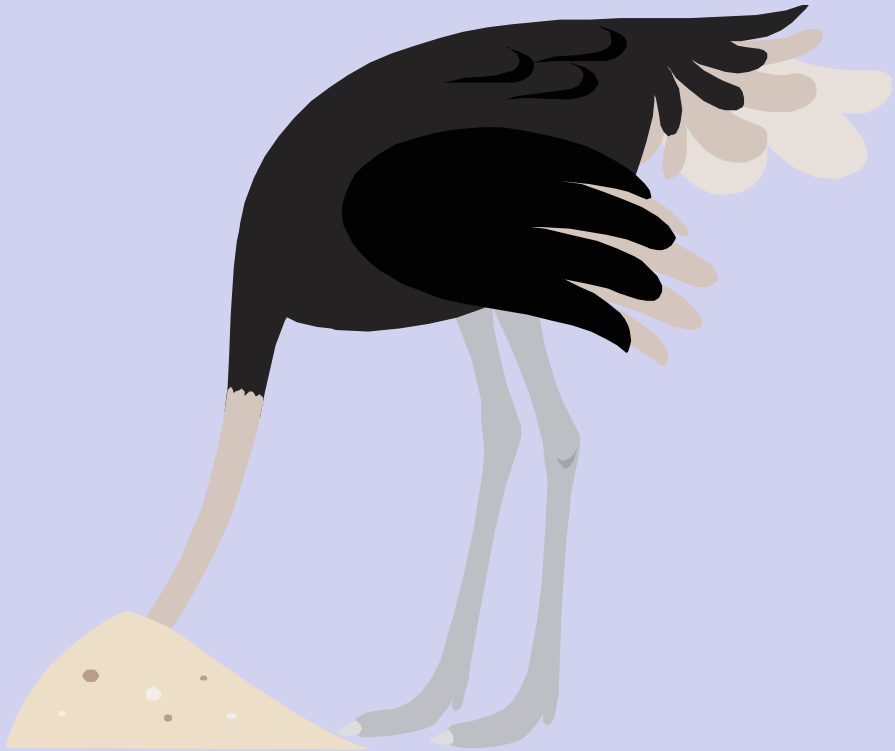
# We need to….

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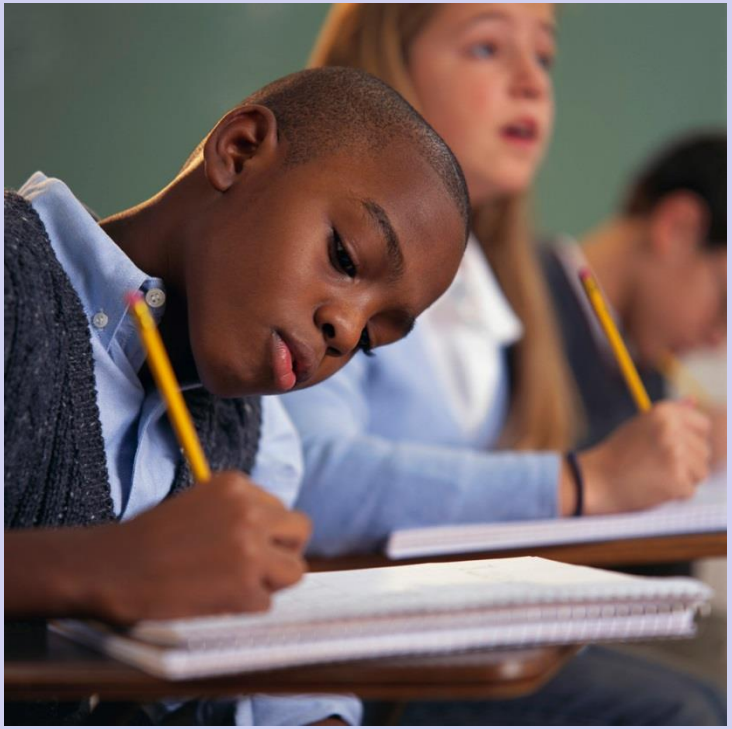
# We need to….

- Use research to

  - Educate ourselves

  - Inform women

  - Inform the public



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# We need to….

- Read and use the research that has been done, so that our practice will be evidence-based.

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# How can I find research?


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# It's easy....

- Access the Cochrane database:
- Just type "Cochrane Pregnancy and Childbirth" into Google.
- Then click on "Our Reviews" and click on any topic you are interested in.

NHS National Institute for Health Research

# Cochrane Pregnancy & Childbirth Group

Abdominal surgical incisions for caesarean section

Absorbable suture materials for primary repair of episiotomy and second degree tears

Active management of spontaneous labour versus routine care in women who have had one or more previous caesarean sections

Active versus expectant management for women in the third stage of labour

Acupuncture for induction of labour, treatment of insufficient lactation, turning a breech baby, pain management in labour, reducing blood loss in the third stage of labour

Admission tests other than cardiotocography for fetal assessment during labour

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# Have you access to Cochrane?

Type “free online access to Cochrane database” into Google and then look at the table

– some countries pay for their citizens to have it (Norway, Finland, Denmark) – not Sweden

– most low-income countries have it provided free.

# Pain management in labour

Jones et al 2013 (review of 18 reviews):

- Immersion in water, relaxation, acupuncture and massage all gave pain relief and better satisfaction with pain relief.
- Relaxation and acupuncture decreased the use of forceps and ventouse.
- Acupuncture decreased the number of caesarean sections.

# Pain management in labour

So we need to encourage
use of birthing pools,
baths, showers, relaxation,
acupuncture and
massage

# Preventing urinary incontinence

Teaching women pelvic floor muscle exercises results in 30% less risk of urinary incontinence (UI) at 6 months postpartum (Boyle 2012).

Even better for women who have persistent UI at 3 months postpartum – teaching them pelvic floor muscle exercises results in 40% less risk of UI at 12 months.

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# Preventing urinary incontinence

We need to encourage use of pelvic floor exercises both antenatally and postnatally, so that women can be freed from UI and go on to do other healthy forms of exercise that they enjoy.

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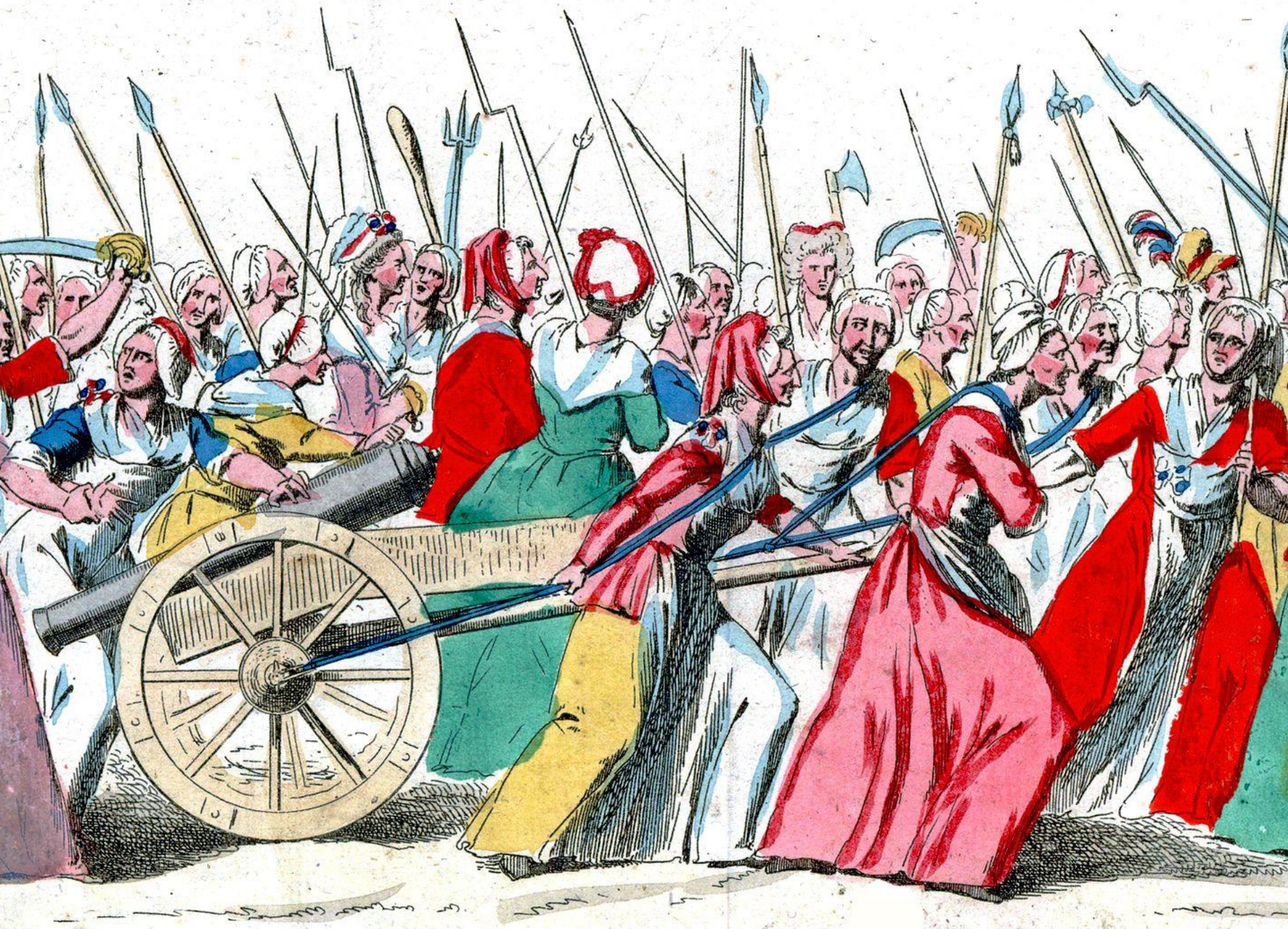
# Then…we need to inform women

Remember, knowledge is power.

So, once we have gained the knowledge, we need to pass it along to women, so that they are empowered also.

If midwives and women band together, we can change the world.



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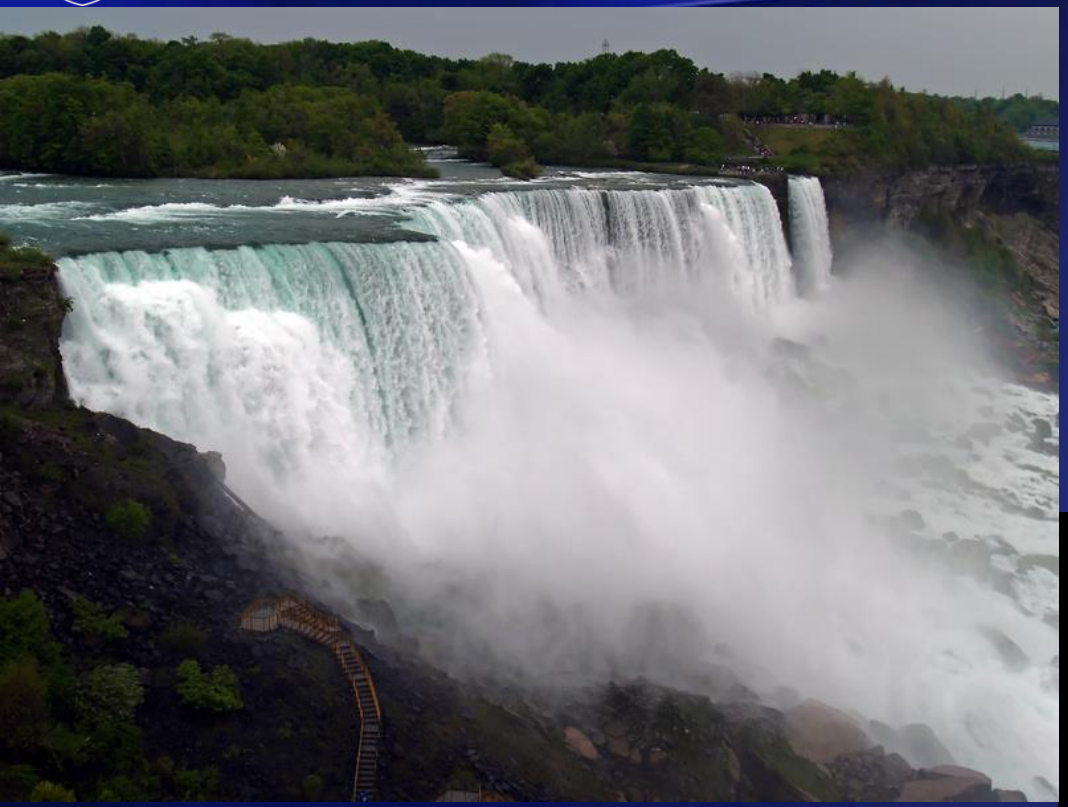
# If women only knew....



…how powerful

…they really are

1982 Hampstead Heath, London, UK

# Birth rally delivers a thriving protest

"SQUATTERS rights" declared a slogan draped around a two-year-old in a pushchair. "Stand and deliver" read a banner carried by a pregnant woman.

"Don't take it lying down" was another favourite placard waved among the thousands of mothers, fathers and small children at Sunday's Birthrights Rally on Parliament Hill.

They came from France, Holland and Switzerland, Sheffield, Manchester and Hampstead, to protest against the ban on natural childbirth methods imposed at the Royal Free Hospital.

The rally was the climax of a raging controversy over the policies adopted in the obstetrics department of the Royal Free—where the hospital has openly admitted that women do not have the right to choose the method by which their babies are delivered.

Estimates of the turnout varied between 2,000 and 5,000 and the original intention of the rally organisers to meet at South End Green had to be scrapped because too many people turned up.

Instead the demonstrators marched to Parliament Hill to hear a distinguished panel of speakers claim the right of women to give birth in whatever manner and position they wanted—squatting, standing up or on all fours.

Organisers of the rally were delighted at the number of people who demonstrated. "This shows what women are thinking and feeling," said Mrs Janet Balaxas, who, along with the National Childbirth Trust and Mrs Sheila Kitzinger, the natural childbirth campaigner, was among the prime movers of the rally. "So much for the so-called minority of women who want active childbirth."

Dr Michel Odent, the French obstetrician whose methods of delivering babies without using medical technology was recently featured on a BBC television programme and who came from Paris for the rally, got the loudest cheers.

"This rally represents the end of an era," he claimed. "It is an historic day, marking the end of the epoch when human beings are under the control and

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# How can we inform women (and clinicians, and the public?)

One-to-one while caring for/working with them

In evidence-based antenatal classes/lectures

Through free public lectures (e.g., "Tell-me-about" series) https://nursing-midwifery.tcd.ie/events-conferences/public_lecture_series_2013-14.php

Through newspaper articles, radio, TV

Through press releases of research results

# In order to give the best possible care….

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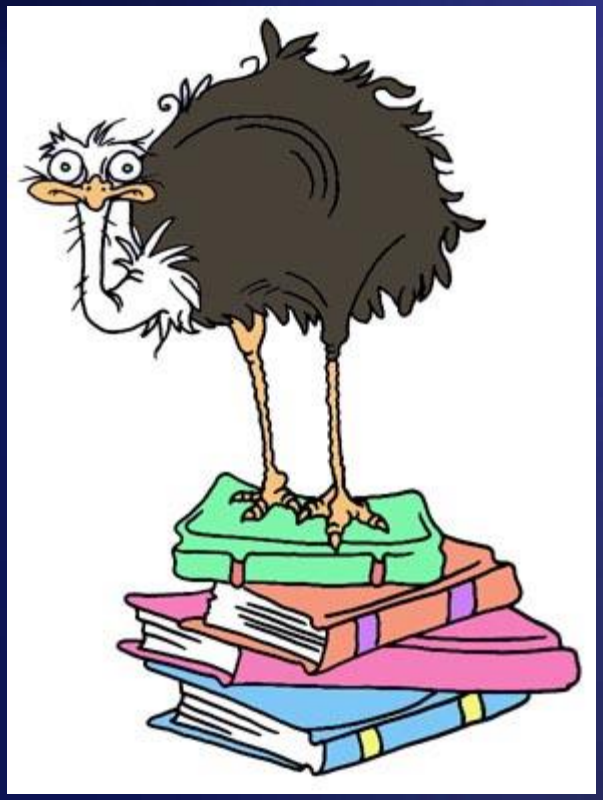
# We need to…

…read and use the research that has been done, so that our practice will be evidence-based.



# Evidence-based practice - the key to excellent midwifery care

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