Medicalisation of childbirth - have we gone too far?

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A trip over the waters

- Brief history of childbirth and midwifery

- What is normal – what is natural

- The most frequently used interventions in normal labour: Oxytocin augmentation and epidural analgesia

- Balancing women's wishes and evidence

- Challenges for midwifery

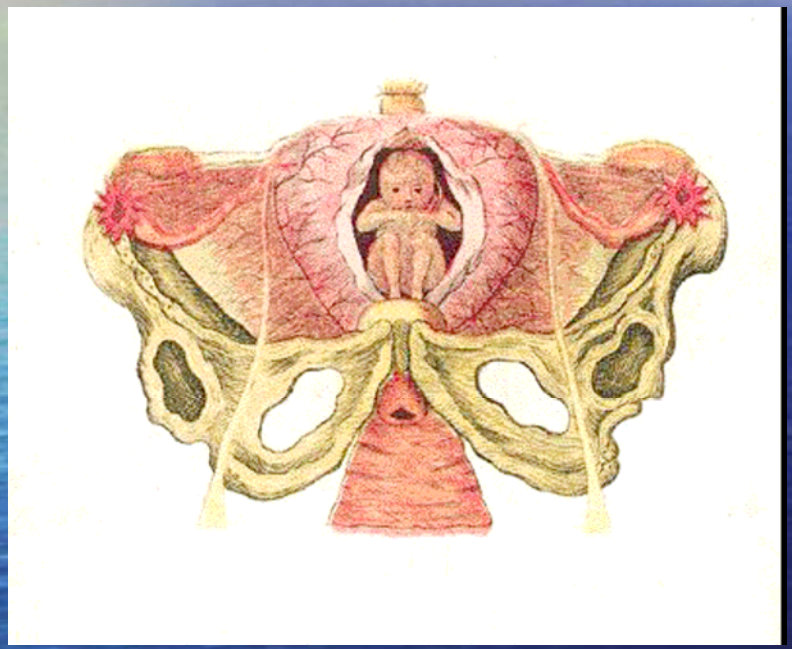
Medicalisation of childbirth

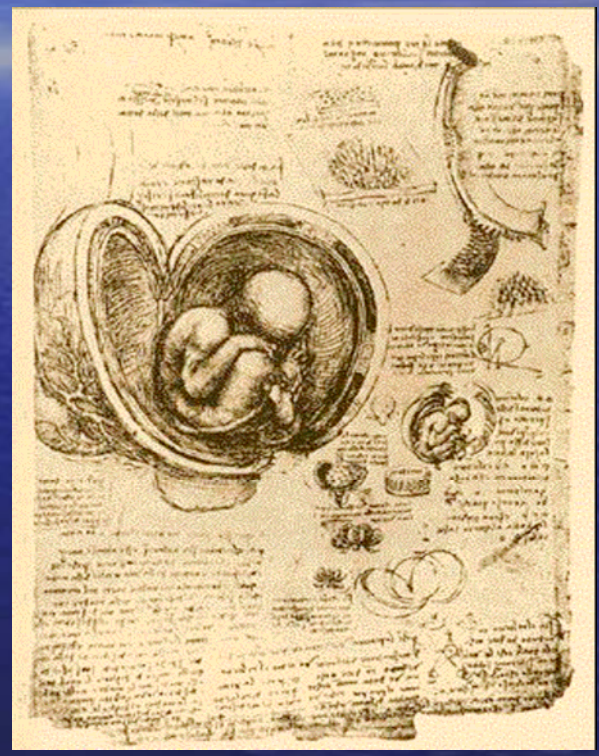
have we gone too far?

- Always a female concern

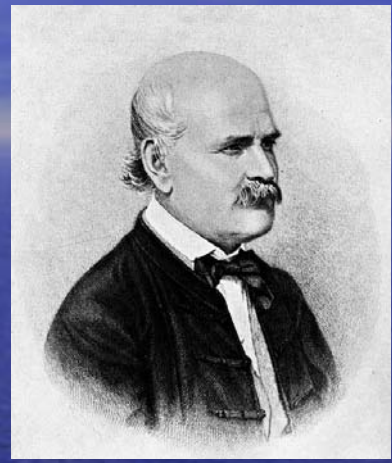
- Middle age: Care for women in labour was under the dignity of doctors and males in general
- During the 16th century - increasing interest from males

- Anatomy and physiology in 1400-1500





- Untill the 17th century: Experience among women
- Forceps 17th Century



- Chloroform anaesthesia
- Semmelweis post partum infection
- Lister and Pasteur antiseptics

- Cesarean section 1870’ies low transversal: 1921 reduces the risk of haemorrahge and ruptures in future pregnancies

- Rubber gloves 1890’ies

A brief history of childbirth and midwifery

- 1930’ies and 1940’ies sulpha and antibiotics
- ABO blood group system approx. 1900
- Blood donors 1930, first blood transfusion 1932.

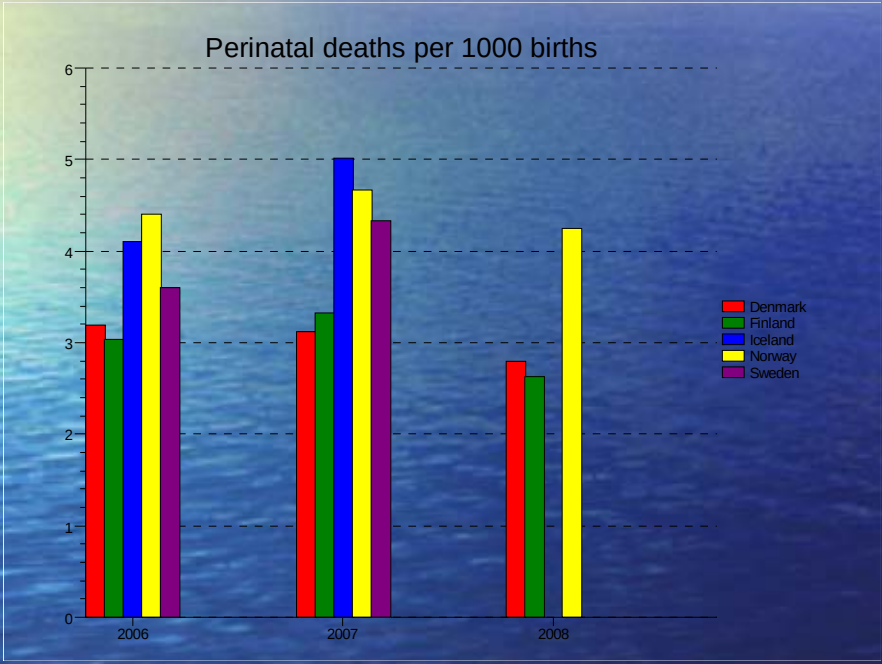
- Malmströms vacuum extractor 1953

- Nutrition and social welfare

A brief history of childbirth and midwifery

- Organisation of health care including antenatal and postnatal care
- Training of midwives and doctors
- Reduction in maternal and perinatal morbidity and mortality
- Finland, Sweden, Iceland rapid reduction
- Smoking among pregnant women, 2005 Denmark: 13.4%, Sweden: 10% Norway: 8.6% (2008)

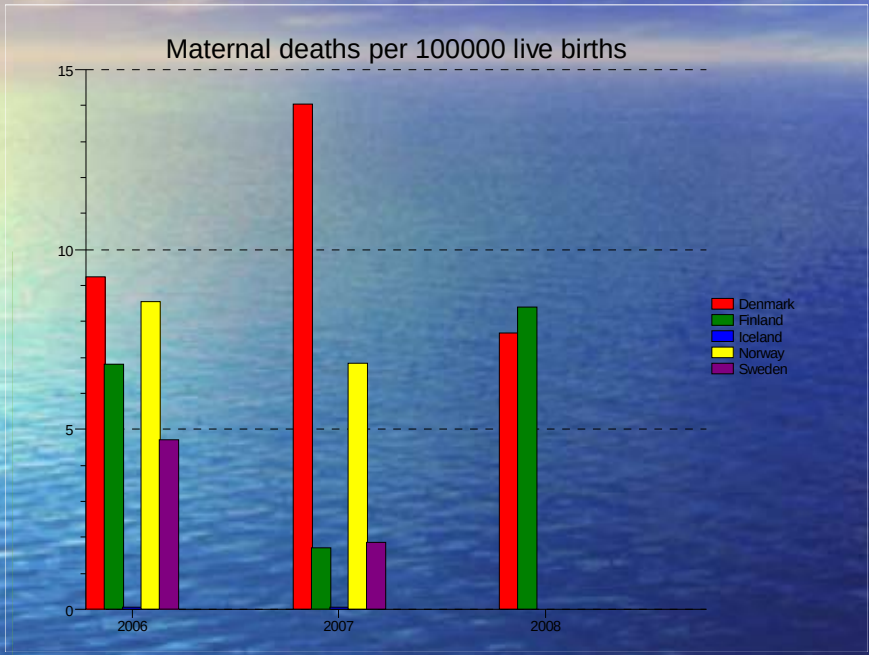
Perinatal deaths in Finland, Iceland, Norway, Sweden, Denmark 2006, 2007. 2008:



Less than 5 perinatal deaths in 1000 births

European health for all database
WHO Regional Office for Europe, Copenhagen, Denmark

Maternal deaths: Finland, Iceland, Norway, Sweden, Denmark 2006, 2007. 2008:



3-8 maternal deaths
pr. 100.000 deliveries

European health for all database
WHO Regional Office for Europe, Copenhagen, Denmark

Worldwide – every minute one woman dies from complications related to childbirth

Natural – Normal?

Keeping normal labour normal

Making normal birh a reality

Unnecesareans

Making normal birth a reality

Consensus statement from the Maternity Care Working Party

our shared views about the need to recognise, facilitate and audit normal birth 2007

The Royal College of Midwives

Royal College of Obstetricians and Gynaecologists

Setting standards to improve women's health

The National Childbirth Trust

The ‘normal delivery’ group includes

- women whose labour starts spontaneously, progresses spontaneously without drugs, and who give birth spontaneously;

and women who experience any of the following:

- augmentation of labour
- artificial rupture of the membranes
- Entonox
- opioids
- electronic fetal monitoring
- managed third stage of labour
- post partum haemorrhage, perineal tear, repair of perineal trauma, admission to NICU

The ‘normal delivery’ group excludes:

- induction of labour
- epidural or spinal
- general anaesthetic
- forceps or ventouse
- caesarean section or
- episiotomy

In the Nordic countries:

Collaboration between
the obstetricians' associations and
the midwifery organisations

Clinical guidelines and guidelines for collection of birth statistics.

Beware of definitions !!!

Natural – Normal?

Natural labour– Normal labour?

Natural – in accordance with nature, not formed by human intervention

- Positive emotional content – ‘good’
- As opposed to artificial – ’bad’

Accordingly: is natural labour ‘good’ whilst non-natural (artificial) labour is ‘bad’ ?

Wacherhausen, BJOG 1999

Medicalisation of childbirth – have we gone too far?

Are all interventions bad because they compromise natural birth? If not - -

How should we distinguish between the good intervention in ‘natural’ labour and the intervention that is bad?

Antibiotics and analgesia as such - ?

A woman who suffers from her pain and wishes an EDA should have it – right?

Should all children born of women who had an EDA have antibiotics because they present with a light fever – a well described side effect to EDA?

Medicalisation of childbirth – have we gone too far?

In the name of nature we can argue that the use of intervention can be good and can be bad

Nature's pain is too rough and should be overcome

In overcoming this we inflict the child a potential unnecessary treatment

Normal – the norm, a statistical mean

or

- what most - or at least lot of people do, -
- or find to be “the” way to do something

Bound to a time-period

Normal – the norm – Nordic countries 2010

- To give birth in a hospital
- Not knowing the midwife who will assist
- Not being able to ‘produce’ sufficient powerful contractions
- Finding the pain unbearable

Normal labour

Natural labour

Spontaneous labour

Troubled water?
Threatening thunderclouds?
The fate of spontaneous labour - -

Dystocia

The major clinical problem - - -

Labour dystocia

Prolonged labour

Arrest of labour

Risvekkelse

Värksvakhet

Vesvækkelse

Dystocia is the major clinical problem in midwifery and obstetrics

The major clinical problem - - -

- The incidence of augmented labour in nulliparous women is aprox. 50% in the Nordic countries National Birth Statistics

The Danish Dystocia Study
Why?

Background, the literature:

- Dystocia accounts for most interventions during labour Gifford D 2000. Mawdsley SD 2000, Landon M 2005
- Literature sparse on riskfactors and prevention
- Negative labour experience Nystedt A 2005, Waldenstrom 2004

Definition of dystocia?

No consensus on the length of spontaneous term labour and criteria for dystocia.

Problems when defining too strictly

- Based on “time in labour”, - when was the onset of labour?
- The time-dimension most likely has a normal biologic variation
- Any cut-off level will be arbitrary based and will most likely comprise pathologic as well as non-pathologic conditions

Does the length of labour have any impact on outcomes?

Rosen et al.	Obst Gynecol 1992
Saunders et al.	BJOG 1992
Menticoglou et al.	Am J Obst Gynecol 1995
Hagelin et al	Acta Obstet Gynecol Scand 1998
Janni et al.	Acta Obstet Gynecol Scand 2002
Myles et al.	Obstet Gynecol 2003
Cheng et al.	Am J Obst Gynecol 2004
Altman et al.	Birth 2006

Child: In these studies no correlation with negative outcomes during 1st stage of labour

Mother: Increased risk of post partum haemorhage, perineal lacerations, instrumentel or operative delivery

Haemorrhage - - related to operative delivery??

The Danish Dystocia Study

Among 2810 nulliparous, 37% had dystocia, among these:

62% in labour's second stage

Women with dystocia and augmentation:

- Older
- Shorter
- Higher BMI
- More coffee (random finding?)

The Danish Dystocia Study

Women with dystocia and augmentation had:

- more caesarean deliveries
- more ventouse deliveries
- more non-clear amniotic fluid
- more post partum haemorrhage ≥500 ml

Neonates had more often lower Apgar scores after 1 minute, but not after 5 minutes

Interventions – The hen or the egg?

Oxytocin is on the list of medication, that

“is bearing a heightened risk of harm,” which may “require special safeguards to reduce the risk of error”

Institute for Safe Medication Practices

Clark SL et al Oxytocin: new perspectives on an old drug. Am J Obstet Gynecol 2009

Subsequent interventions – The hen or the egg?

Association between augmentation and fetal asphyxia

- Herbst 1997, Milsom 2002, Bugg 2006

Augmentation after spontaneous onset of labour
≤ 12 hours in labour (active phase, N= 58.598):

- Emergency cesarean section: 60% increased
- Vacuum/forceps: 5 times increased

Augmentation with Oxytocin in 71.6% of al instrumental deliveries

Oscarsson M 2006

”När Oxytocin blir oxytoxin”

”When Oxytocin turns into ocytoxin”

Andreas Herbst; Lund

Statement at SFOG annual meeting 2006

The hen or the egg?
Physiology
Oxytocin

- After long and repeted stimulation the oxytocin-sensitivity is reduced
- After 12 hours in labour the receptor-concentration is reduced by 50 times
- Does continuous treatment with oxytocin increase the risk of labour dystocia? Phaneuf 1998
- Does the underlying cause(s) for dystocia or does the treatment for dystocia bear the increased risk...??

Definition of dystocia

A historic view

1920 Leopold Meyer

1935 Ebbe Hauch

1967 Dyre Trolle

2002 Williams' Obstetris and Gabbe's Obstetrics

Leopold Meyer
1852-1918
Professor, dr.med.

Overaccoucheur Fødselsstiftelsen in Amaliegade 1887 and Rigshospitalet 1910-18

Founder of DSOG 1898
Chairman 1902-18

Founder of DADJ 1902
Chairman 1902-11

LEOPOLD MEYER

FØDSELENS OG BARSELSENGENS PATOLOGI

FOR LÆGER OG STUDERENDE

ANDEN UDGAVE

GENNEMSET OG UDGIVET AF

S. A. GAMMELTOFT OG ELIS ESSEN-MØLLER

GYLDENDALSKE BOGHANDEL · NORDISK FORLAG · KJØBENHAVN OG KRISTIANIA
MDCCCCXX

Leopold Meyer: Textbook for physicians and students in medicine, 1920

Once disproportio feto-pelvina has been eliminated in the first stage of labour, page 46:

"--- there is no danger to neither the mother nor the fetus. It may be uncomfortable, tedious, painful that labour is lengthy *but it is not dangerous* [LM's italics].

The dangers of ineffective contractions are not consequences of the lengthy labour itself, but rather that it easily leads to procedures that are not indicated and that these are often disastrous for the mother or the fetus (or for both). It should especially be emphasised that ineffective contractions when the membranes are not yet ruptured are completely harmless".

And further: "- - - the main treatment of ineffective contractions is **patience**" (LM's bold)

Professor E Hauch, Textbook for midwives, 1935:

- 18 hours in labour is normal in nulliparous women with variations up to several days
- the main treatment of ineffective contractions in labour's first stage is patience

Professor Dyre Trolle, Ars Pariendi, 1967:

- "Partus Spontaneus Perfectissimus" is described as a total length of labour less than 30 hours
- 80% of all parturients will deliver within this time span and that these women can give birth outside an obstetric department

Gabbe's Obstetrics 2002, p. 371

Dysfunctional labour should be diagnosed in labour's first stage, when

"---the rate of active phase cervical dilatation is less than 1.2 cm per hour in nulliparas. --- Once diagnosed, augmentation with amniotomy and/or oxytocin should be attempted. Reports from the National Maternity Hospital in Dublin suggest that this approach is effective, but not all investigators have been able to confirm these results"

The major clinical problem - - -

Augmentation

Has become a part of the culture of delivery

- *"Early acceleration with oxytocin ensures efficient uterine action and normal progress in nulliparous women"*
- *"Efficient uterine action is the key to normal labour"* *(O'Driscoll 2003 pp 47, 61)*

"The package known as active management of labour should not be offered routinely" *(Nice Guidelines Sept. 2007 p 152)*

A shift of paradigm

From patience to impatience?

A shift of paradigm?

In clinical practice we deal with

- non-evidence based criterea for the diagnosis of dystocia
- a ”disease”which approx half of all obstetrically healthy nulliparous women ”suffer” from
- and these women are treated with a medication that

“is bearing a heightened risk of harm”

Does ”normal – natural – physiological - labour” include augmentation for nulliparous women ?

Dystocia

Epidural

Epidural analgesia - EDA

Incidence af EDA in the Nordic countries almost doubled within the last 10 years

30% - 55% for nulliparous women

POLITIKEN

VIDENSKAB 08. NOV 2009 KL. 13.31

Smertelindring kan give sværere fødsler

UDGANG. En læge lægger første snit til et kejsersnit. (Arkivfoto) - Foto: Joachim Adrian

Epiduralblokade tidligt under fødslen øger risikoen for, at den ender med sugekop eller kejsersnit.

The Question –

Risks and side effects?

The reply -

Research design?

The question
Side effects and risks of EDA?

The advantadges

-More effective
-Makes Cesarean section safer
-Enables pain-free vaginal delivery
-Useful for women with tocophobia or PTSD
-May 1994, Amin-Somuah 2009, Midirs 2006, Heinze 2003)

Risks

-Prolongation of labour
-Need for more oxytocin
-Increased incidence of malposition
-Increased incidence of 3. and 4. degree tears
Amin-Somuah 2009, Rortveit 2003

The question
Side effects of EDA?

Maternal side-effects

- Reduced mobility
- Inability to pass urine
- Hypotension, headache
- Pyrexia
- Reduced breastfeeding on discharge

Neonatal side effects

-Tachycardia due to temperature rise
- Hypoglycamia
- Diminishes breast seeking

-MIDIRS 2006, Yancey 2001, Wiklund 2009, Lieberman 2002, Ransjo-Arvidson 2001

The question
Side effects of EDA?

Prolongation of labour?

Consensus in the literature ☺

But how much?

And why?

Fall in plasma Oxytocin –

May be one of the mechanisms behind prolongation of labour

Rahm 2002

The Danish Dystocia Study

Epidural analgesia

Does epidural analgesia prolong labour?

Odds Ratios:

- 5.49 (Crude)
- 5.35 (4.12 – 6.96)*
- 4.65 (3.53- 6.13)†

Risk: Approx. 5 times increased

* age, height, pre-pregnancy BMI, physical activity

† infertility, cervical conditions, descent of fetal head, BW

The Danish Dystocia Study

Epidural analgesia

Does epidural analgesia prolong labour?

Confounding by indication?

- **Long labour**
- **Severe pain**
- **Need for pain relief**

Different approaches to pain

”Pain is a problem – approach”

Solution: Eliminate pain - EDA

”Working with pain – approach”

Solution: Depending on how the woman can cope?

The central question: can the woman cope with the pain?

Is the woman suffering?

No woman should suffer during labour

No woman should be withheld from a midwife when treated with EDA-(nor at any other time)

Pain – Suffering

~~Pain score~~

Our role as midwives? in guiding the woman to her ”right” decision

Women have become more willing to accept interventions - - - (Green 2007)

In Denmark: 1/3 (of 2349) did not consider it important to avoid medical intervention –

Had more interventions and more negative birth experience than those who favoured birth without intervention (Laursen, in manus)

Our role as midwives? – in guiding the woman to her ”right” decision

The gap between epidemiological data and individual councelling

- Older and lower and heavier women have more prolonged labours
- Women in fear, feeling lonely, not feeling heard have difficulties in coping with pain

Our role as midwives? – in guiding the woman to her ”right” decision

The gap between epidemiological data
and individual councelling
and the difference
between having pain and suffering

Lets us give the older woman her
time needed to dilate her cervix provided
she does not suffer

~~Standardised criterea for augmentation~~

And let us give the suffering woman her EDA,
But let us not inflict an EDA
on all other women who are not suffering

~~Pain-score~~

The role of the midwives? in guiding the woman to her ”right” decision

-- So don’t make a group of 100 nulliparous deathly scared of having an EDA based on a handful of experiences from a midwifery career (Schroll unpublished)

- - I think midwives are incompetent and stick to Middle Age conceptions and are in no way able to think pragmatically (Schroll unpublished)

- - I found that she was incredibly good at guiding me. I needed guidance and pushing a little bit all the time, but at the same time I was allowed to decide what I wanted (Kjærgaard 2007)

Our role as midwives? – in guiding the woman to her ”right” decision

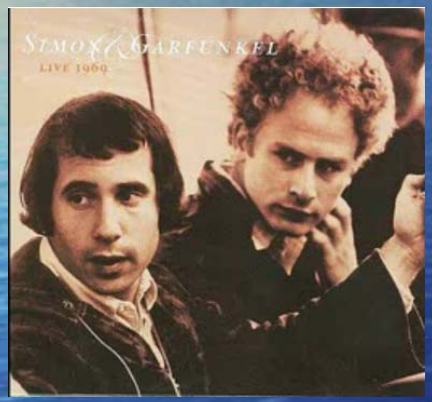
Providing policies based on a belief that the individual woman should be treated individually

Guidelines based on individual assessments of risks

Be the captain

HALV
FULD

48 - Simon And Garfunkel - Bridge Over Troubled Water - Collected Works CD3 (1990).mp3



Simon and Garfunkel
1969
Bridge over troubled water

When you're weary
Feeling small
When tears are in your eyes
I will dry them all

I'm on your side

When times get rough - - -

48 - Simon And Garfunkel - Bridge Over Troubled Water - Collected Works CD3 (1990).mp3

Thank you for your attention