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?
A brief history of childbirth and midwifery

• 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
A brief history of childbirth and midwifery

- **Anatomy and physiology in 1400-1500**

- **Untill the 17th century: Experience among women**

- **Forceps 17th Century**
A brief history of childbirth and midwifery

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

- Cesarean section 1870’ies low transversal: 1921 reduces the risk of haemorrhage 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
- 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:

Maternal deaths per 100,000 live births

3-8 maternal deaths pr. 100,000 deliveries

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

European health for all database
WHO Regional Office for Europe, Copenhagen, Denmark
Natural – Normal?
Keeping normal labour normal
Making normal birth a reality
Unnecessary C-sections
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 ‘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?
Medicalisation of childbirth – have we gone too far?

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?
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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?
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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.
Medicalisation of childbirth – have we gone too far?

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
Medicalisation of childbirth – have we gone too far?

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 - -
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 approx. 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 risk factors 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?

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

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

Haemorrhage -- related to operative delivery??

Rosen et al. Obst Gynecol 1992
Saunders et al. BJOG 1992
Menticoglou et al. Am J Obst Gynecol 1995
Myles et al. Obstet Gynecol 2003
Altman et al. Birth 2006
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?)
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

Subsequent interventions – The hen or the egg?

Association between augmentation and fetal asphyxia

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 all 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 repeated 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’ Obstetrirs 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

FØR LÆGER OG STUDERENDE

ANDEN UDGAVE

GJENÆVTET OG UDGIVET AF

S. A. GAMMELTOFT OG ELIS ESSEN-MØLLER

GYLDENDALSK BOGHANDEL - NORDISK
FORLAG - KØBENHAVN OG KRISTIANIA
MDCCCXXI
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)
A historical view

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
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”
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?
In clinical practice we deal with
- non-evidence based criteria 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?
Incidence of EDA in the Nordic countries almost doubled within the last 10 years

30% - 55% for nulliparous women
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 advantages
- More effective
- Makes Cesarean section safer
- Enables pain-free vaginal delivery
- Useful for women with tocophobia or PTSD

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
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

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)†

* age, height, pre-pregnancy BMI, physical activity
† infertility, cervical conditions, descent of fetal head, BW

Risk: Approx. 5 times increased
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 counselling

- 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 counselling and the difference between having pain and suffering

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

And let us give the suffering woman her EDA, But let us not inflict an EDA on all other women who are not suffering
The role of the midwives? in guiding the woman to her “right” decision

-- So don’t make a group of 100 nulliparous
deadly 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
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 - - -

Simon and Garfunkel
1969
Bridge over troubled water
Thank you for your attention