

Labor and delivery

IIE 366: Developmental
Psychology
Greg Francis
Lecture 08



Labor and Delivery

- I. Historical Perspectives
- II. Prelabor Events
- III. Three Stages of Labor
- IV. Controlling Pain



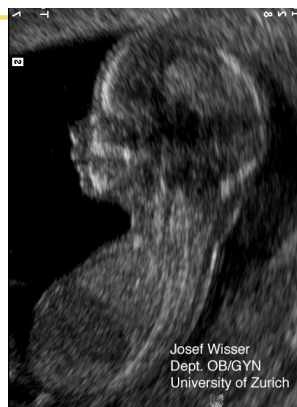
10-week-old fetus



Twins at 10 weeks

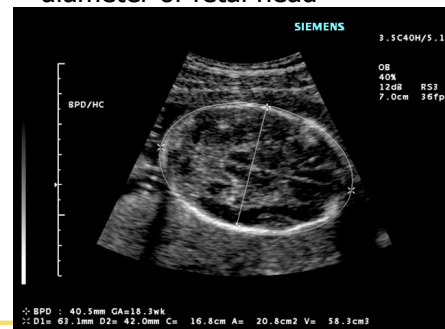


Fetal face, 14 weeks

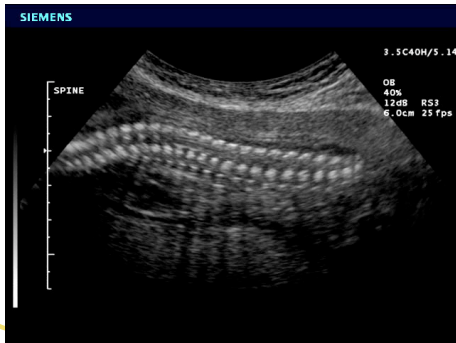


Josef Wisser
Dept. OB/GYN
University of Zurich

Third semester, measuring diameter of fetal head



Third trimester, spine

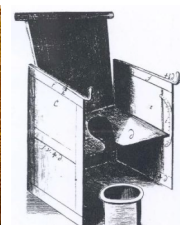


I. Historical Perspectives

- A. Who delivers? How?
Where?
- B. Maternal and Infant
Mortality

- Who? For most of recorded history, midwives.
- Obstetricians first became common in the 18th century.

- Who? For most of recorded history, midwives.
- How? Seated upright.

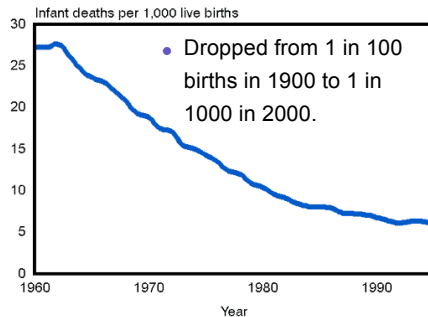


- Who? For most of recorded history, midwives.
- How? Seated upright.
- Where? At home.

Maternal Mortality

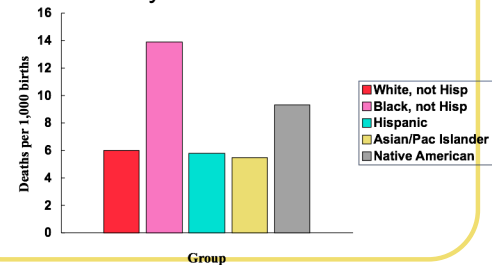
- In the early part of the 20th century, about 1 in 100 women died from complications of pregnancy or childbirth; 2nd most common cause of death in 15- to 45-year-old women.
- Much, much safer today: 1 in 100,000 women die from complications of pregnancy or childbirth.

Infant Mortality



Infant Mortality

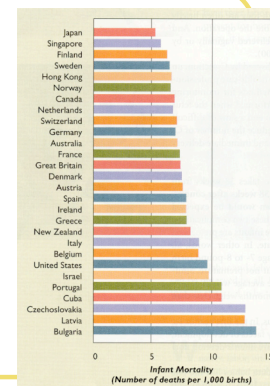
- There are large group differences in infant mortality.



Infant Mortality

- Dropped from 1 in 100 births in 1900 to 1 in 1000 in 2000.
- There are large group differences in infancy mortality.
- Rate is three times as high with no prenatal care.

- US has one of the highest infant mortality rates of all industrialized countries.
- South Korea is not much better



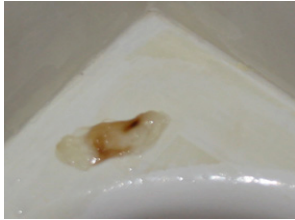
II. Prelabor Events

- “Lightening” or engagement
- Rupture of membranes (water breaks)



II. Prelabor Events

- “Lightening” or engagement
- Rupture of membranes
- Loss of mucous plug



II. Prelabor Events

- “Lightening” or engagement
- Rupture of membranes
- Loss of mucous plug
- Weight loss
- Diarrhea
- Burst of energy

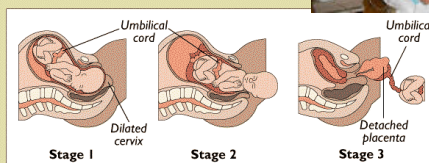
III. Stages of Labor

1: Dilation and effacement of cervix.

2: Expulsion of baby

3: Expulsion of placenta

The Three Stages of Labor

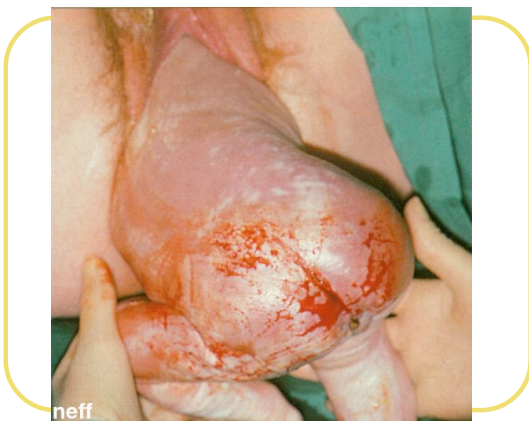
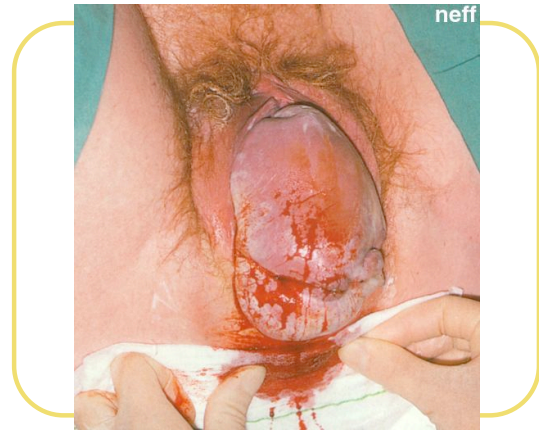
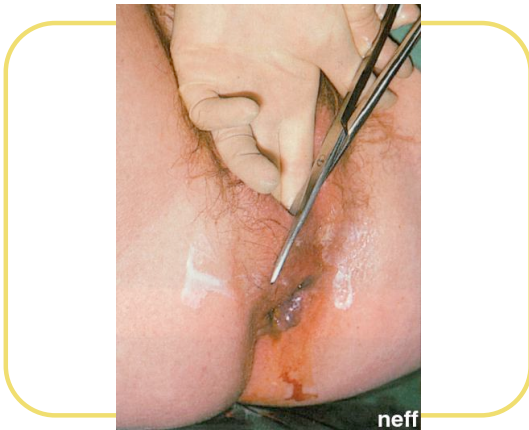


Stage 1 of Labor

- Latent phase: Can last up to 20 hours; cervix dilates to 5 cm.
- Accelerated or active phase: Usually lasts 2-4 hours, during which the cervix dilates from 5 to 8 cm.
- Transitional phase: Usually lasts 30-60 minutes; cervix finally dilates to 10 cm.
- Times vary enormously across women, but almost always faster after first birth.

Warning!!



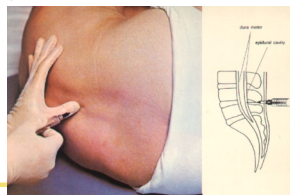


IV. Controlling Pain

- Analgesics: medications that reduce pain, e.g., Demerol. Often used, but rapidly cross the placenta and affect the newborn, at least temporarily.

IV. Controlling Pain

- Analgesics
- Anesthetics: General is rarely used today but regional are common. Epidural: anesthetic injected in epidural space in backbone.



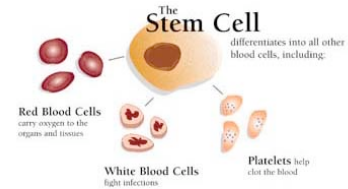
IV. Controlling Pain

- Analgesics
- Anesthetics
- Childbirth preparation classes (e.g., Lamaze, Bradley) focus on reducing anxiety and ignoring pain, using breathing, imaging.



A new issue: saving cord blood

- Why? source of stem cells



Cord Blood Registry - The Name to Trust
www.cordblood.com

A new issue: saving cord blood

- Why? source of stem cells
- Stem cells can be used for blood and bone marrow transplants used to treat leukemia and other blood or immunological diseases.
- No problem of donor match.
- Cost: \$1k start up, \$100 annually

Next time

- Growth and health