

# PRENATAL / ANTENATAL MEDICAL CARE

prof. Damir Roje

# ANTENATAL CARE

All we do before the birth in order to achieve the best possible perinatal outcome!

- before, during (and after) pregnancy
- the birth of a healthy child with protection of the mothers health

natalis *lat.* "born on Christmas"

## What is what?

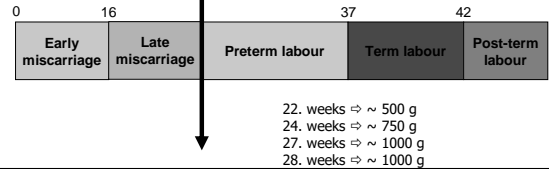


- antenatal ⇒ before birth
- postnatal ⇒ after birth
- peripartal ⇒ "just around" the moment of birth
- perinatal ⇒ antenatal+ peripartal + postnatal
- early neonatal period ⇒ to 7 days of life
- late neonatal period ⇒ until 7 to 28 day of life
- puerperium ⇒ 42 days after childbirth

# PREGNANCY



22 LABOUR!



# PERINATAL MEDICINE?



- interdisciplinary medicine
- part of gynecology:  
(*obstetrics & feto-maternal medicine*)
- part of pediatrics:  
(*neonatology*)

notice: all seats are reserved for pregnant women

# ANTENATAL CARE – WHY?



## HISTORY OF ANTENATAL CARE

- women "with experience"
- midwives
- obstetrics & gynecology – beginning of the XX. century
- homebirths
- after the second world war – childbirth in hospitals
- ~ 1950. organised antenatal exams for the first time!
- different guidelines (until now)
- ultrasound ~ in the early seventies

## Perinatal mortality, Europe 1900. – 1920.

- Perinatal mortality 50‰ !!!
- Mothers mortality rate : 3 - 9 / 1000 !!!

## Perinatal outcome, Croatia 2014. godine

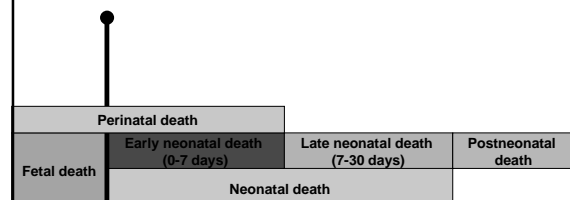
- perinatal mortality < 5‰
- Split 4,3‰
- Maternal mortality rate ~ 8 / 100 000 poroda

That's the answer

<10‰ ⇒ low perinatal mortality  
 10-20‰ ⇒ moderate perinatal mortality  
 >20‰ ⇒ high perinatal mortality

?

## LABOUR !



## Evolution of obstetrics and perinatal medicine

- technics & science
- medicine in global view
- evolution of pediatrics, anesthesiology, surgery, transfusiology, .....
- antibiotics !!!



## ANTENATAL CARE before pregnancy:

- gynecologic exam, ultrasound, PAPA smear
- treating uro & gynecologic infections
- general woman health
- treating chronic disease
- dental protection, cure & hygiene



## ANTENATAL CARE during pregnancy

- gynecological exam every 4 weeks, later every 3 and every 2 weeks at the end
- ultrasound exams – No. ?
- Determinating the date of delivery!
- lab: KG, Rh, red and white blood cels, thrombocytes, urine
- hepatitis "B" yes!, hepatitis "C" no!
- microbiology: cervical smears and urine-culture
- PAPA obligaotry !
- blood glucose, OGTT
- from case to case .... (individually)



## DETERMINE THE DAY OF DELIVERY

- up to the first day of last menstrual period:  
+ seven days and the result decline for three months!
- biometry – ultrasound in the first trimester
- conception day
- first fetal movement : promigravidae 18-20 weeks,  
multiparous one to two weeks earlier

The duration of pregnancy:  
- 280 days  
- 10 lunar months  
- 9 "calendar months" + 7 days

## ANTENATAL CARE last weeks & around the term

- amnioscopy
- cardiotocography (CTG)



## ANTENATAL CARE, AIM:

- notice high risk pregnancies as early as possible
- recognize all that is "non-physiologic"
- prevent pregnancy complications
- minimize potential pregnancy complications
- treat treatable complications (causal or symptomatic way)



## ANTENATAL CARE IN CROATIA - ORGANISATION:

- primary gynecology: – physiology – normal pregnancy
- gynecologist & pediatrics are the only specialists in primary medical care in Croatia (beside dentists and GP)
- secondary gynecology – hospitals – pregnancy complications, high risk pregnancies
- maternity hospitals: I., II., & III. level



## HIGH RISK ?

- < 18 years
- primigravidae > 35 years
- multiparae (5 & more labours)
- DM, hypertension, pretille women (obese), kidney problems, autoimmune diseases ...
- low woman < 160cm (150cm)
- habitual miscarriages, C sections, ...
- previous pregnancy(ies) with complications
- smokers, drug abusers



