

## History of Obstetrics (in Split) & Perinatal mortality



prof. dr. Damir Roje



## History of Obstetrics

- Development of Midwifery - as old as mankind
- "women with experience"
- Europe in the modern age - women trained in special education ...
- ... Begins Parisian French school Louise Bourgeois (1564-1640): a school for midwives, regular training and examinations



## History of Obstetrics XIX. century

- pregnancy control and childbirth still performed by midwives
- (chirurgien-accoucheur, master obstetriciae) only in the complications of childbirth
- At that time, operative gynecology was performed by surgeons



## History of Obstetrics

- focus on saving lives of women and only secondarily a child's life
- routine birth in bed (expulsion) - Mauriceaux and other (17th-century French obstetricians)
- first birth age, the age of opening: often used obstetrical chair was often used, and sometimes performed for the expulsion of the child too
- for example, the Austrian Empress Maria Theresa (1717-1780) bore 19 children, six of them using obstetrical chair



## History of Obstetrics

- early 20th century: first medicine specialization in certain fields including obstetrics
- merged obstetrics & gynecology in a new profession (specialization)
- in the first half of the 20th century, still home birth
- in maternity hospitals only complicated deliveries or neglected and / or single women (social reasons)



## History of Obstetrics

- from the fifties of the 20th century obstetrics started rapid development
- antenatal care started !!!  
(*examinations during pregnancy on regular basis*)
- new technologies: amnioscopy, amniocentesis, cardiotocography, fetal pH-metry, ...



## History of Obstetrics

- only the fifties of XX. century a major role in the management of labor takes a doctor, medical Ob & Gyn specialist
- midwives task is reduced
- 60s introduced a new discipline, perinatology
- 70-80-ies developed new sub-specializations: maternal-fetal medicine in obstetrics and neonatology in pediatrics
- great development in ultrasound medicine



Rösslin: *Der Swangeren Frawen und Hebamen Rosengarten*  
first illustrated textbook for midwives  
current over 200 years  
more than 40 publications in English and German



Two sisters assist delivery  
Eucharius Roselin 1526



Smellie William 1697. – 1763.



Adolphe Pinard (1844. – 1934. )

Belive it, or not!!!



## History of Obstetrics in Split

- first history evidence of midwifery in Croatia
- second century B.C.
- tombstone: midwife Elija Soteri
- found in parts in the Solin region from 1885 to 1941.



Barović I. Povijesni pregled razvoja Klinike za ženske bolesti i porode u Splitu. Med an 1990.

## History of Obstetrics in Split

- first Split "maternity hospital" was established in 1704 as part of the orphanage (*establishments devoted to the acceptance and care of abandoned children*)
- Mercy Hospital (Ospitale di Pietà) (110-140 children)
- Archbishop Stjepan I. Cosmi (1678-1707)
- founded the Archbishop's Seminary (1700)
- dedicated care preserving Glagolitic liturgy
- foundlings mortality greater than 90% (*impossible hygienic conditions, uneducated staff and a lack of basic supplies*)



Banović I. Povijesni pregled razvoja Klinike za ženske bolesti i porode u Splitu. Med an 1990.



## History of Obstetrics in Split

- Hospital of Split ("Civic Hospital St. Lazarus") was established in 1794
- Three institutions: hospital, orphanage and maternity
- first opstetrician in Split was prof. Jakov Mirkovic, physician, surgeon, obstetrician
- 1792 sent letter to Padova (Italy) about the need of establishing the first Medical school in Split.

Banović I. Povijesni pregled razvoja Klinike za ženske bolesti i porode u Splitu. Med an 1990.



## History of Obstetrics in Split

- 1919 Dr. Peter Rismondo came to Split from Wiena
- Gyn & Obst Department 52 births/year
- Maternity "mixed with the foundlings"
- basement with dark and damp rooms
- Water was brought from a distant kitchen
- The death rate among the foundlings was 80 - 90% !!!



## History of Obstetrics in Split

- In 1945 the Provincial Midwifery School
- 1947, two-year schools & four-year school in 1963 - the first in Yugoslavia
- 1946 Department and School moved to the building of Classical gymnasium (restored in 1944) - Delivery room with 4 beds, 72 beds Department
- organization of modern maternity hospital
- soon in Maternity 95% of deliveries in town

## History of Obstetrics in Split

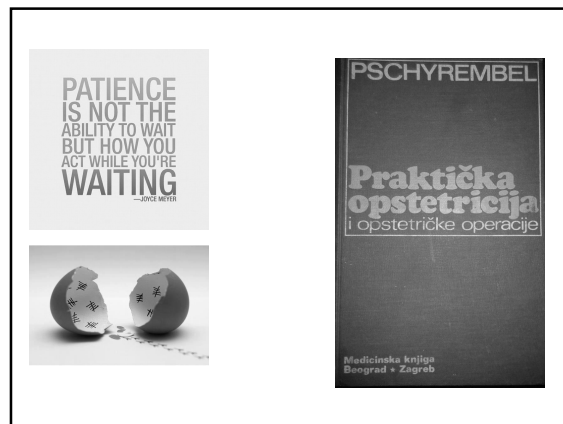


1977.

## History of Obstetrics in Split

- since 1975 – participating Medical School
- 1986, by the decision of Scientific and Educational Council of the Medicine School University of Zagreb, Department became CLINIC.





$\Sigma$  (2015. god.)

History of the Split hospital obstetrics = 221 years  
 History of the Department of Obstetrics & Gynecology = 95 years  
 History of the Obstetrics and Gynecology Clinic = 29 years

Perinatal mortality

**PERINATAL MORTALITY –  
THE MOST IMPORTANT  
PERINATAL INDICATOR**

*... and health system of any country (region etc.) indicator at all.*

- FETAL MORTALITY (‰)**
- fetal mortality rate by gestational age, birth weight, and plurality
  - The number of fetal deaths at or after 22 completed weeks of gestation in a given year per 1000 live and stillbirths in the same year calculated by gestational age, birth weight and plurality.
  - *lat. in graviditatae* – during pregnancy
  - *lat. sub partu* – during labour



## NEONATAL MORTALITY (‰)

- Neonatal mortality rate by gestational age, birth weight, and plurality
- The number of neonatal deaths (day 0 through 27) after live birth in a given year per 1000 live births *in the same year* calculated by gestational age, birth weight and plurality.
- This rate is presented for all births *at or after 22 completed weeks of gestation*. This rate is sub-divided by timing of death into early neonatal deaths (0-6 days of life) and late neonatal deaths (7-27 days).

## EARLY PERINATAL MORTALITY (‰)

- early neonatal deaths (0-6 days of life)
- late neonatal deaths (7-27 days)

## PERINATAL MORTALITY (‰)

- Perinatal mortality rate by gestational age, birth weight, and plurality
- **The number of fetal and early neonatal deaths (day 0 through 6) after live birth in a given year per 1000 live births ...**
- ... *in the same year* calculated by gestational age, birth weight and plurality.

## Perinatal mortality depends of:

- gestational age (*inversely*)
- birth weight (*mostly inversely*)
- antenatal care (*proportionally*)
- .....

## Perinatal mortality- grstational age:

This distribution is presented, as follows:

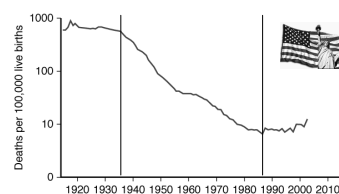
22-36 weeks of gestation (preterm births)  
37-41 weeks (term births)  
41+ weeks (post-term births)

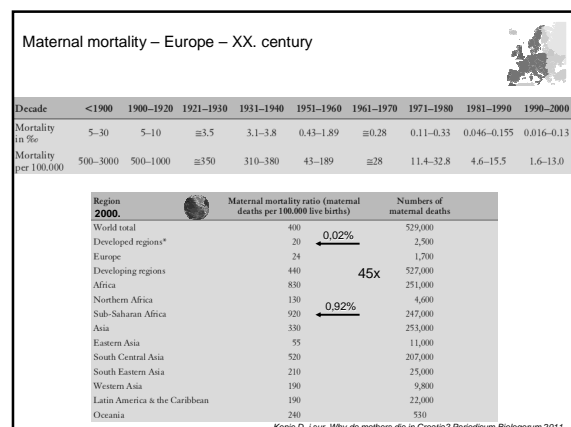
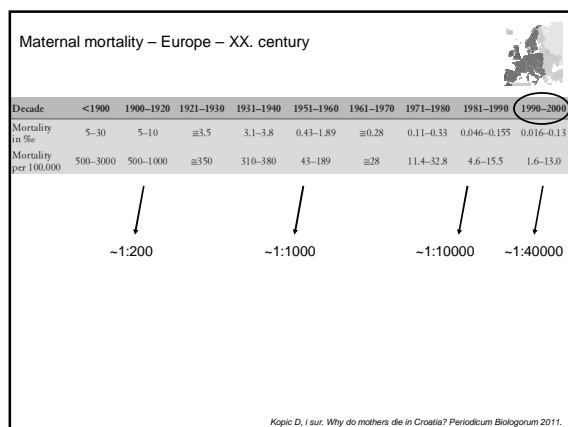
Preterm births can also be presented as:

22-27 weeks (extremely preterm)  
28-31 weeks (very preterm)  
32-36 weeks (moderately preterm)

## Maternal mortality

- The number of maternal deaths during (and because of pregnancy), during labour and puerperium (No. / 100 000 pregnancies)
- Maternal death (Europe & Croatia) ~ 8 / 100 000





Σ (2015. god.)

History of "hospital obstetrics" = 221 years  
 History of the Ob. & Gyn. Depart. = 95 years  
 History of the Ob. & Gyn. Clinic (University) = 29 years

*Thank you.*