Prof d-r Elizabeta Zisovska, National coordinator for neonatal health, Republic of Macedonia

Organization of the neonatal health care-Macedonian model

In Republic of Macedonia the neonatal health care is regionalized by law in three main levels: First level of health care, comprising well-newborn nurseries providing basic level of newborn care to infants at low risk, capable to perform neonatal resuscitation at every delivery; secondary level of health care is capable to take care for infants of corrected gestational age > 34 weeks or weight greater than 1800 g with mild illness expected to resolve quickly, to initiate and maintain intravenous access and medications, ooxygen therapy with oxygen saturation monitoring. A level above is Level 2-a, with possibility for care of infants with a corrected gestational age of 32 weeks or greater or a weight of 1500 g or greater who are moderately ill with problems expected to resolve quickly or who are convalescing after intensive care; tertiary level of care is provided in NICU's, with all intensive procedures: care of infants of all gestational ages and weights, assisted ventilation, homeostasis stabilization, ultrasonography and radiography, total parenteral nutrition, exchange transfusion, all other examinations and interventions, immediate access to the full range of subspecialty consultants (neonatal surgery, cardiologist, neurologist, ophthalmologist, social worker, ophthalmologic examination of the premature infants according to the Guidelines, referral of the risk newborns to the center for follow up and early intervention.

The advantages of such approach is that it ensures reasonable geographical coverage, tertiary level units to sustain the clinical skills, high utility of the tertiary care beds, makes a balance between the good quality of care, costs, risks and benefits. Considering this approach, the strengths in the country are: implemented regionalization of the neonatal health care, improvement of the "transport in utero" of high risk pregnancies in Academic Gynecology and obstetric clinic (tertiary level of care), sufficient doctoral staff, introduced majority of intensive investigations and therapeutic procedures, positive approach by the authorities towards the maternal and neonatal health, readiness for change management, and several ongoing Projects. And the weaknesses are: high rates of neonatal and perinatal mortality, non-standardized education for the medical staff (successful attempts in Continuous medical education for the neonatal teams), lack of midwives and nurses, implementation of the Guidelines-beginning level, insufficient computer literacy and internet use and weak system of data collection.

Considering mortality data, the age of the died newborns show these results: within the first 12 hours 33% of the dead newborns, next 12 hours die about 31% (cumulative 64 %), and 27% within the second day (91 % cumulative in 48 hours).

Further needs, tasks and activities: health promotion, improving the data collection system, improving the transport "in utero", improving the implementation of evidence based guidelines), sustaining the ten standards for Baby friendly hospital Initiative, continuous medical education for the medical staff working with neonates.

And, at the end, all activities are directed towards the reduction of the neonatal/perinatal death rates and ensuring healthy and happy offspring.

Key words: newborn, health care, mortality