tions against HIV MTCT is increasing; furthermore there are opportunities to improve outcome by encouraging early in pregnancy testing especially in immigrants from epidemic areas. Low transmission rate suggests the rate of MTCT can be substantially reduced in our population even in advanced disease.

**FCO6**

**CLINICAL-ULTRASONIC CORRELATIONS OF BRAIN'S HYPOXIC-ISCHEMIC INJURY IN NEWBORNS**

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Among various harmful factors of newborn's brain the main place takes hypoxy which causes deep metabolic and cerebrovascular disorders and is due to different kinds and severity of clinical manifestation of central nervous system (CNS) injury.
The aim of our study was to determine the injurious affect of hypoxic-ischemic factors upon the newborns brain, prognosing the correlations of clinical and ultrasonic patterns and CNS disorders.
198 full-term newborns in the age from 1 to 10 days were investigated. The ultrasonic investigation was produced on the devices of "Siemens Sonoline Elegra" and "Logic 700". Along with neurosonography cerebral hemodynamic was examined by using Colour Flow Mapping which permitted measurement the resistive index (RI), pulsatility index (PI), systolic and diastolic velocity in the anterior,middle, posterior and basilar arteries. In neonatal period the investigation was produced once per 10 days, later –once per month. Katamnestic period covered 1,5-2 years.
By clinical manifestation of CNS injury the patients in neonatal period were devided into 3 groups according to the course of disorder: mild, moderate and severe. The decrease of PI preceded the development of neurosonographic patterns of brain injury and clinical manifestation. The increased parametres of RI was observed in patients with intracranial hypertensy. In mild injuries clinical-dopplerographic disorders had transient character. In those newborns who were observed to have pathological findings of RI, PI and especially diastolic velocity of blood flow, subsequently developed brain leukomalacia and clinically was observed organic injury of CNS.
Conclusions:

1. The decreased parameter of PI presents the high risk of development of brain hypoxic-ischemic injury.
2. Stable dopplerographic pathological patterns indicate to severity of brain injury and poor prognose.
3. Color Flow Mapping represents the high effective method for estimation the degree of brain's hypoxic-ischemic injury and prognosing the course of disease.

**FCO8**

**HIGH RISK NEONATES AND REFERRAL PATTERN TO A SECONDARY LEVEL CARE RURAL BASED HOSPITAL IN SOUTH INDIA**

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Background: The CMCH is situated south of Chennai, 55 Kms away from the capital city of Tamilnadu. CMCH caters to rural population from Kancheepuram district and Chengalpattu Taluk with a population of 10,78,190. High-risk cases are referred from 4 peripheral hospitals (1Head Quarters & 3 Taluks), 24 Primary health care centers and also from home by the Traditional Birth Attendants.
Aim of the Study: To investigate into the reasons for referral from primary health centers and Taluk hospitals to the secondary care center and to study the high-risk deliveries and the perinatal outcome.
Methods: The study was carried out at CMCH from January 1st - December 31st 2000-2001. It was a retrospective study using the existing records in the labour room, and neonatal ward by trained persons under the supervision of the pediatrician in the neonatal unit. The information pertaining to the condition at the time of admission, mode of delivery, the place from where the cases are referred, the distance from home to the place of delivery, mode of delivery were recorded. The STATA version 5 was used

to analyze the results.
Results: 30% of the mother had to travel more than 10Kms to reach the PHC, and 36% had to travel more than 20 Kms from home.68% come from linked villages. In this study 30-40% were high-risk mothers, and 7-8% had more than one complication. Nearly 40% of mothers had CPD or previous history of cesarean section. 20% had prolonged 2nd stage with fetal distress, 12% had premature rupture of membranes, 11% were non vertex presentation, and 11% arrived at a critical state with threatened rupture.
Conclusion: Neonatal care is not affordable to many developing nations, early referral to the center with adequate facilities can prevent perinatal deaths in developing nations.

**FCO9**

**COMPARISON OF WEIGHT INCREASE IN INFANTS WITH BREASTFEEDING-FORMULA-MILK SUPPLY**

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Introduction: Human milk is the most appropriate of all available milks for the human infant because it's uniquely adapted to his or her needs. Sometimes breastfeeding is incriminated for unsatisfying increase of weight without other parameters examined (illness, nutritional faults, negligence), it is interrupted, the profits of breast milk are lost and the problem still remain.
Aim: Study the increase of weight in healthy infants who are inclusively breastfed, fed with formula or they use milk supply to correlate the increase of weight with the kind of nutrition
Material-Method: For 4 years we studied the weight of 580infants (228males, 352females)-BW2,3-4,2 Kgr (average3,2 Kgr) in 2 phases; the time they stayed at the obstetric clinic and then until the age of 6 months We trained mothers to feed their babies properly and we encouraged those who used milk supply to use breast milk inclusively. At the end of the study we had 116 infants breastfeeding, formula 290,milk supply174
Results: Breastfed infants had the birth weight or few gr less the time they left the clinic without nutritional problems. 90%of them had 40gr/day increase of weight-first trimester, 25-30gr/day-2nd trimester. The rest had respectively 30-20gr/day. With milk supply had 3-5%loss of the birth weight the first days, the increase of weight was 15-35gr/day. Formula fed infants had normal range of growing (0,7-1,3 Kgr/month) but they had mainly nutritional faults, hypoglycemia (they weren't fed for 8-10h in the night), digestive problems (vomit, refluxes), the loss of birth weight when they left the clinic was 0-5%
Conclusions: All kinds of nutrition have good or excellent weight increase. Breastfed infants have more regular development with few divergences. With milk supply have smaller increase of weight because mothers give involuntarily less milk. Formula fed infants grow as well but they have digestive problems. Unsatisfying increase of weight is result of bad nutrition, other factors, not due to the kind of milk better with breastfeeding.

**FCO10**

**OUTCOME PREDICTION IN CRITICALLY ILL NEWBORN USING TWO SCORING SYSTEMS**

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Background: Beside Apgar Score (AS), the oldest scoring system used in neonatology, several scoring systems recently have been developed: Clinical Risk Index for Babies (CRIB), Score for Neonatal Acute Physiology (SNAP), Neonatal Therapeutic Intervention Scoring System (NTISS) etc.
Objective: To evaluate the ability of 2 scoring systems in predicting neonatal mortality in very low birth weight (VLBW) newborns.
Settings: Pediatric intensive care unit (PICU) at Institute for Child`s and Youth`s Healthcare, Novi Sad, Yugoslavia.