

diastolic in 7 children. The mean standard deviation score (SDS) of weight/height ratio was -0.45 (range:-1.8 to 1.2 SDS) and mean SDS of fat fold thickness was -1,04 (range: -2.6 to 1.1 SDS). None of the examined children was obese (mean BMI: 14.9; range 10.9-20.1). Serum IGF-1 levels were within normal limits in all children.

**Conclusions:** Lipids abnormalities and increased blood pressure are common in preschool ELBW infants, although the children examined were slimmer than their peers. It may be speculated that ELBW might be a risk factor for atypical metabolic syndrome not related to obesity.

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### DROWNING IN CHILDREN: THE ROTTERDAM EXPERIENCE

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**Background and aims:** To assess the incidence and outcome of drowning in children.

**Methods:** A retrospective, medical chart review study. All children admitted to the Erasmus MC-Sophia Children's Hospital because of drowning between January 2005 and December 2009, were included.

**Results:** The study population consisted of 37 children (73% boys, mean age 4 years). 46% was not Dutch Caucasian. Most drowning events (62%) occurred in natural water. In 76% inadequate supervision by adults was the cause of drowning (children without swimming skills). In 5% the cause was non-unintentional, whereas 19% with swimming skills drowned due to an accident. In most cases the submersion time was unknown. At the scene 11 of the 37 children (30%) had no cardiac arrest (survivors n=11), whereas 26 (70%) had cardiac arrest due to hypoxia. Eleven of these 26 children had return of spontaneous circulation (ROSC) after Basis Life Support (BLS) (survivors n=11), whereas 15 required cardiopulmonary resuscitation (CPR). Of these 15 children, 8 had no ROSC and died at the emergency room. Seven children had ROSC after

CPR and were admitted to the PICU: non-survivors n=3 (withdrawing treatment due to unfavourable neurological outcome or brain death) and survivors n=4.

**Conclusion:** In most cases the cause of drowning was inadequate supervision in children without swimming skills. The overall survival was 70%. Children requiring CPR are likely to die in the emergency room or PICU (73%). Prevention including swimming programs should consider differences in age and ethnicity.

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### PILOT STUDY ON ASSISTING PRIMARY CARE DECISION MAKING IN PRESCHOOLERS WITH ASTHMA-LIKE SYMPTOMS (PALS-PC STUDY)

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**Objective:** The primary objective of the study was to evaluate the feasibility and consistence of an objective tool in assisting primary care decision making in children with asthma-like symptoms. Secondary objective was to collect data on prevalence of asthma-like symptoms in preschoolers.

**Methods:** Cross-sectional pilot study, using a structured questionnaire with close-ended questions, administered in 15 sites (GP's practices), chronologically, to all preschoolers with current episodes of acute respiratory infections meeting the inclusion criteria. The sites were randomly selected from the database of a Regional Centre for Children with Asthma. Data were collected in frequency tables and were analysed using multivariable linear statistics.

**Results:** 754 questionnaires were administered/collected, and 719 (95,35%) were validated. The analysis included two age groups: ≤ 2 years (n = 247;100 girls) and 2-5 years-old (n = 472;232 girls). During last 6 months, the overall prevalence

of symptoms was 47,3% for wheezing, 70,8% for cough and 37,8% for difficult breathing. A final open-ended evaluation of the procedures applied was completed by each investigator, and the overall appreciation was that it was not time-consuming, fitted well within their routine of this patient group visits, and was acceptable to parents/caregivers.

**Conclusions:** The analysis of data collected during this pilot study yielded consistent results, representing actually the unspecific burden of asthma-like symptoms upon which doctors decide to administrate the treatment and advocate the feasibility of a larger study to obtain epidemiologic data to support the implementation of a unitary approach/methodology in allocating resources by Romanian healthcare institutions/HMOs.

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### SOCIOECONOMIC IMPACT OF PRETERM BIRTH IN GERMANY AND AUSTRIA: A PARENTAL PERSPECTIVE

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**Objective:** Infants born preterm are at increased risk of adverse health and developmental outcomes. Our objective was to measure the socioeconomic burden of preterm birth on their parents and the society.

**Methods:** A novel web-based technology was constructed to perform a survey of parents of preterm infants. It was developed in collaboration with parents, pediatricians and socio-economic researchers. Main focus were morbidity, social status, and direct and indirect costs. Parents were invited to participate to this online-questionnaire from an information letter sent out to pediatricians and therapists and from websites targeting parents of preterm birth. Data were collected between September 2007 and March 2008 in Germany and Austria.

**Results:** Parents of 588 preterm-birth children responded. 76% of these children were born less

than 32 weeks of gestation. In the first five years of age after discharge from perinatal services, parents travelled in total 11 950 km (patient visits, doctor visits, ambulant checkups). Costs for drugs, supportive devices, travel and child care were 6614€. In this five year period, children spent 476 hours in therapies like occupational and physiotherapy (95hours/year). Consequences for parents at place of work ranged from lack of understanding from colleagues to loss of income (1200€) due to missing working days.

**Conclusions:** This survey is a novel approach to assess the social and economic burden on parents of preterm infants. Moreover, it helps to measure the impact of preterm births also to the society. After adaptation, this survey will be expanded to a European level.

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### METHODOLOGICAL APPROACHES TO CONCEPTUALIZING AND MODELING THE EFFECT OF DYNAMIC FAMILY STRUCTURE ON CHILD BEHAVIOR

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There is an accumulating body of evidence suggesting that being raised in a non-intact family may adversely affect child outcomes across a number of developmental domains. Given the dynamic nature of family life for some children today, changes in family structure may need to be captured in a more comprehensive manner. The scientific question is how capturing dynamics of family structure can be achieved. The sample comprised individuals aged 11-14 in cycle five of the Canadian National Longitudinal Survey of Children and Youth. We examined different approaches to conceptualizing and modeling the effect of the family structure effect: current family structure; previous family structures; trajectories of family structure; and change in family structure on externalizing and internalizing behavior in pre-adolescence. Main methodological findings included confounding of the current family structure effect by previous experience, collinearity among family structure main effects, and low analytic power for trajectories. We also considered the time-varying nature of family income and employment status of the primary household respondent using inverse probability weighting to estimate the causal