Patients and methods: Cohort of ex-preterm infants < 33 weeks g.a. born in 1999. Extraction from patients' records: case history, neurological findings, developmental scores at age 1-3 years, school achievements and QOL at age 8-9 years. Reference group for QOL: age-adapted reference group born at term.

Statistical methods: Chi square test and stepwise logistic regression

Results: Complete data sets available for 54 patients (93% of the survivors), neurological follow-up examination for further 3 patients. Risk factors for abnormal neurological findings at age 1-3 years: abnormal cerebral US scan (OR 33.4), low socioeconomic or migrant status (OR 20.9), SGA status (OR 17.0), male gender (OR 9.5). Risk factors for low school achievements: ELBW status (OR 514), low socioeconomic status (OR 266), abnormal neurological findings at age 1-3 years (OR 16). Neurological development at age 8-9 years was normal in 35%, moderately impaired in 46%, severely impaired in 11%. 83% of children attended mainstream school. Compared to reference group scores of QOL was 76.9 vs. 79.0 (global scores), 84.3 vs. 80.5 (subscale „physical well-being“), 76.0 vs. 70.8 (subscale „self-esteem“).

Discussion: Rate of impairment and developmental scores were in the range given in other studies, as were risk factors. In the view of their parents QOL of most ex-preterm infants is not reduced. It must be awaited if these positive results persist into adulthood and will be confirmed by the subjects themselves.

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CRITICALLY ILL CHILDREN WITH PANDEMIC INFLUENZA (H1N1) 2009 IN PEDIATRIC INTENSIVE CARE UNITS IN TURKEY

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Objective: To demonstrate the epidemiological features, clinical presentation, clinical courses and outcomes in critically ill children with pandemic influenza (H1N1) 2009 in pediatric intensive care units (PICU).

Design and setting: Prospective, observational, multi-center study and 13 tertiary PICUs.

Patients: 83 children with confirmed infection due to pandemic influenza (H1N1) 2009, detected by RT-PCR between November 1 and December 31, 2009 who required PICU.

Results: In two months period, 532 children were hospitalized with pandemic influenza (H1N1) 2009 and 83 (15.6%) of them needed critical care. For the 83 patients requiring critical care, the median age was 42 months. Twenty of these patients (24.1%) had no underlying illness. The PICU admission indications were respiratory distress/respiratory failure in 66 (79.5%), neurologic deterioration in 6 (7.2%) and gastrointestinal symptoms in 5 (6.0%) of the patients. Acute lung injury was diagnosed in 23 (27.7%), acute respiratory distress syndrome

in 34 (41%) of the critically ill children and 51 (61.4%) patients needed mechanical ventilation (MV). Oseltamivir was used in 80 (96%) patients. During the study period, overall mortality rate was 13.7%, however, mortality rate was 30.1% (n=25) in children with pandemic influenza A (H1N1) 2009 (p=0.0016) in PICUs. Cause of death was primary H1N1 infection in 16 (64%), nosocomial infection in 4 (16%) and primary disease progression in 5 (20%) patients.

Conclusion: Severe disease and high mortality were seen in children with pandemic influenza (H1N1) 2009. Death occurred in all age groups of children with or without underlying illness.

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**CAUSES OF CHILDHOOD MORTALITY:
10 YEAR AUDIT OF POST MORTEM
EXAMINATIONS IN CUH TEMPLE STREET,
DUBLIN**

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Background: Despite the marked reduction in SIDS, the rate of childhood mortality has remained fairly constant. Many childhood deaths are unexpected and potentially avoidable.

Aim: To analyse data relating to all deaths in CUH, Temple Street, and to assess the feasibility of establishing a National Enquiry in order to identify avoidable factors in childhood death.

Methods: We conducted a retrospective review of all post mortems reported over ten years. Deaths were analysed and classified as follows: expected or unexpected; unavoidable, avoidable or potentially avoidable.

Results: 246 autopsies were studied. 78% were performed at the direction of a coroner. 11 deaths (4.5%) were referred to the State Pathologist. Deaths were categorised into the following groups; SIDS, (33.7%), infection (19.1%), neurological and metabolic disease (16.7%), injury/suicide (13.4%), cardiac (4.9%), miscellaneous (12.2%). A marked reduction in SIDS was noted reflecting national trends. Of the deaths attributed to accidental injury almost two thirds were in boys. All of these deaths were deemed potentially avoidable or avoidable.

Of the total number of deaths at least 48% were unexpected. Just over half the deaths undergoing post mortem were avoidable or potentially avoidable.

Conclusion: Our data highlights the reasons why children die in an Irish population. Our ability to assess all associated factors in detail was limited by the data available. Establishing a national enquiry into paediatric mortality would provide information to the avoidable factors associated with childhood deaths. This could inform institutional policies and public health measures to reduce the incidence of untimely and preventable deaths.

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**AN EVALUATION OF THE BURDEN OF
PREMATURE BIRTH ON A UNITED KINGDOM
REGIONAL PAEDIATRIC INTENSIVE CARE
SERVICE**

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Background and aims: Premature birth is increasing in frequency. Long term health complications can occur, some of which may require paediatric intensive care (PICU) support. This study aims to define the characteristics and resource requirements of the ex-preterm children under the age of 2 years within a regional PICU.

Methods: Comparisons were made between term born and ex-preterm children admitted to the PICU at Leeds Teaching Hospitals NHS Trust over a 1 year period in 2008.

Results: 471 admissions were children under 2 years of age with 98 being premature at birth. There were no significant differences in sex or age at presentation. Earlier gestational age at birth correlated with increasing chronological age at presentation to PICU (p< 0.001). Ex-preterm children have increased odds of presenting with a respiratory diagnosis (OR=5.12, 95%CI 3.13-8.34, p< 0.001) and decreased odds of a cardiovascular diagnosis (OR=0.41, 95%CI 0.25-0.66, p< 0.001). Ex-preterm children have lower odds of invasive ventilation (OR=0.32, 95%CI 0.12-0.89, p=0.047) but when necessary it is for longer (p=0.018). Ex-preterm children had lower odds of requiring inotropes (OR=0.47, 96%CI 0.29-0.75, p=0.002).