countries despite improvements in mortality rates. In the UK, the deprivation gap is widening in spite of attempts to address it. We aimed to investigate time trends in socioeconomic inequalities in cause-specific neonatal mortality in England 1997-2007.

Methods: Information about all live births and neonatal deaths (18524 deaths) of singleton infants were obtained. Deprivation was measured using the UK Government Index of Multiple Deprivation. Socioeconomic inequalities in cause-specific neonatal mortality rates over time were estimated using Poisson regression models.

Results: The all-cause mortality rate ratio between the most deprived decile and the least deprived decile increased from 2.08 in 1997-1999 to 2.68 in 2003-2005 before a slight fall to 2.35 in 2006-2007. Mortality due to immaturity (< 24 weeks gestation) did not decrease over time and had the widest deprivation gap. Mortality rates for all other causes fell over time. The deprivation gap widened between 1997-1999 and 2003-2005 before a slight fall in 2006-2007 for congenital anomalies; immaturity; and accidents and other specific causes. In contrast mortality rates fell slightly more among the more deprived quintile for intra-partum events and sudden infant deaths leading to a narrowing of the deprivation gap but they comprised only 16.8% of deaths.

Conclusions: 80% of the deprivation gap in all-cause mortality was explained by immaturity and congenital anomalies. Understanding the link between deprivation and preterm birth should be a major research priority so interventions to reduce preterm birth can be identified.

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CLINICAL ASPECTS OF PNEUMONIA WITH TACHYPNEA IN PEDIATRIC PATIENTS WITH H1N1 INFLUENZA

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Purpose: We evaluate the clinical and laboratory characteristics, and progress of pediatric patients hospitalized for pneumonia and laboratory-confirmed H1N1 influenza infection.

Methods: From September through December, 2009, a total of 101 patients were enrolled. They were divided into group 1 with fast respiration rate for age (n=66), and group 2 with appropriate respiration rate for age (n=35). We reviewed retrospective medical chart to collect data on the hospitalized patients.

Results: Group 1 was significantly older than group 2 (median age 7 years vs. 4years, $P< 0.001$), and 57% were between 6 and 8 years of age. Sixteen (24%) of the group 1 had underlying medical conditions, most of all had asthma; the other 50 were previously healthy. Oxygen saturation on admission day was significantly lower in group 1 than in group 2 (92% v. 98%, $P< 0.001$) and 46 (70%) of the group 1 had hypoxia (oxygen saturation 92%). The frequency of lymphopenia was significantly higher in group 1 than in group 2 (n=59 v. 11, $P< 0.001$). Some of group 1 received systemic corticosteroid therapy, intravenous immunoglobulin infusion, and oxygen supplement (respectively, n=28, 16, 48). The frequency of systemic corticosteroid therapy and oxygen supplement was higher in group 1 than in group 2 (respectively, P< 0.001).

Conclusions: H1N1 influenza infection complicated with pneumonia can cause severe illness in previously healthy children without risk factors. Multi-center study is needed to evaluate clinical and epidemiologic characteristics in pediatric patients with 2009 H1N1 influenza.

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GLOMERULAR HYPERFILTRATION INJURY IN CHILDREN WITH A SOLITARY FUNCTIONING KIDNEY: A PREDICTION MODEL - THE KIMONO-STUDY

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Objective of study: Renal mass reduction leads to glomerular hyperfiltration injury and is associated with hypertension, (micro-)albuminuria and glomerulosclerosis in animal studies. By definition, renal mass reduction exists in children with a solitary functioning kidney (SFK) and as such they are eligible for the study of glomerular hyperfiltration in humans.