[95% CI: 1.11-1.93], and neonatal septicemia: HR=1.59 [95% CI: 1.21-2.10]. Generally, the increased risk of ASDs after neonatal complication was most prominent for children born preterm. Same pattern of association was found for infantile autism.

Conclusions: Different neonatal complications are likely to cause neurological damage and alter brain development, and hence increase the risk of ASDs, and infantile autism. This effect seems to be mediated through different pathways including lack of oxygen, glucose, and possibly through activated immune function during early neonatal life.

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THE INCIDENCE OF VISUALLY IMPAIRED CHILDREN CAUSED BY ROP AND THEIR CONCOMITANT DISABILITIES IN THE NETHERLANDS: A THIRTY YEAR OVERVIEW

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Background/Aim: To determine the incidence of visual impairment (VI) caused by ROP in The Netherlands in infants born between 2000 and 2009 and to determine the incidence of associated disabilities. To detect changes in data, we compared our data with data of three previous comparable studies conducted between 1975-1987, 1986-1994 and 1994-2000.

Method: Data of children born between 1st of January 2000 and 31 December 2008 were retrieved from the Dutch institutes for the partially sighted and blind. Besides ophthalmologicdata, data on behavioral abnormalities, epilepsy, hearing deficit, developmental delay, and neurological handicaps were gathered.

Results:

Period	1975-1987	1986-1994	1994-2000 (III)	2000-2009 (IV)	p-value III vs IV
No.Infants retrieved	76	87	51	42	
ROP sequelae/ 100.000 live births	4.22	5.49	3.93	2.05	0.005
Behavioral abnormalities and problems	9.2%	21.8%	46.9%	40.0%	ns
Epilepsy	5.3%	6.9%	16.3%	0%	0.007

[Results 1]

Developmental delay	35.5%	47.1%	52.9%	65%	ns
Neurological handicaps	30.3%	49.4%	45.1%	42.5%	ns
Multiple disabled	39.5%	58.6%	68.2%	73.8%	ns

[Results 2]

Completely blind(VA = 0)	38.4%	26.4%	27.5%	7.1%	0.012
Treatment of acute ROP	24.5%	43.9%	56.9%	66.7%	ns

[Results 3]

Conclusion: There is a decrease in the incidence of VI caused by ROP in The Netherlands. Incidence of concomitant disabilities remained the same, except for a decrease in epilepsy. There was also a decrease of completely blind children due to ROP. Still 1/3 of the infants did not receive acute-phase ROP treatment.

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SOCIOECONOMIC INEQUALITIES IN NEONATAL MORTALITY: THE IMPACT OF PRETERM BIRTH ON THE WIDENING DEPRIVATION GAP

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Backgroundandaims: Socio-economicinequalities in neonatal mortality exist within many developed

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.