Maternal height and child mortality (*JAMA 2009 ; 301:1691-1701*)

Data were retrieved from the 2005-2006 National Family Health Survey-3 in India (released in 2008). The study population constituted a nationally representative cross-sectional sample of singleton children aged 0 to 59 months (n = 50 750) to mothers aged 15 to 49 years from all 29 states of India. Information on children was obtained by a face-to-face interview with mothers, with a response rate of 94.5%. In adjusted models, a 1-cm increase in maternal height was associated with a decreased risk of child mortality, underweight, stunting, wasting, and anemia. Children born to mothers who were less than 145 cm in height were 1.71 times more likely to die compared with mothers who were at least 160 cm in height.

COMMENT In a nationally representative sample of households in India, maternal height was inversely associated with child mortality and anthropometric failure.

Fetal antiepileptic drug exposure and cognition (*N Engl J Med 2009; 360:1597-1605*).

Between 1999 and 2004, pregnant women with epilepsy who were taking a single antiepileptic agent were enrolled in a prospective, observational, multicenter study in the United States and the United Kingdom. This report focuses on a planned interim analysis of cognitive outcomes in 309 children at 3 years of age. After adjustment for maternal IQ, maternal age, antiepileptic-drug dose, gestational age at birth, and maternal preconception use of folate, the mean IQ of children exposed to valproate was lower than those exposed to lamotrigine, phenytoin and carbamazepine. The association between valproate use and IQ was dose dependent.

COMMENT Valproate should not be used as a first-choice drug in women of childbearing potential.

Magnesium sulfate improves outcome in severe perinatal asphyxia (*Pediatrics 2009; 123: e764-769*).

Forty term (≥37 weeks of gestation) neonates with severe perinatal asphyxia were randomly assigned to receive either 3 doses of magnesium sulfate infusion at 250 mg/kg per dose 24 hours apart (treatment group) or 3 doses of normal saline infusion (placebo group), in addition to supportive care. At discharge, 22% of infants in the treatment group had neurological abnormalities, compared with 56% of infants in the placebo group. Neuroimaging on day 14 yielded abnormal findings for fewer infants in the treatment group than in the placebo group. Infants in the treatment group were more likely to be receiving oral feedings (sucking) at discharge. Good short-term outcomes at discharge occurred for 77% of the patients in the treatment group, compared with 37% of the patients in the placebo group.

COMMENT Postnatal magnesium sulfate treatment improves neurological outcomes at discharge for term neonates with severe perinatal asphyxia.

Highway traffic and asthma (*Int J Environ Health Res 2009; 19:139-145.)*

Cross-sectional analyses were conducted to evaluate the effects of exposure to highway traffic on pulmonary function in Fresno, California. Traffic and spirometry data were available for 214 children (enrolment ages six to 11 years). Evaluation of effect modification by FEV(25-75)/FVC (a measure of intrinsic airway size) showed that all pulmonary function measures of flow were significantly inversely related to a traffic metric that incorporates traffic intensity and roadway proximity.

COMMENT Proximity of the residence to highway traffic is associated with lower pulmonary functions.

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