Closure of isolated atrial septal defect by catheter implantation of an occlusive device causes less short term disturbance to children and their families and is cheaper than surgical closure (Heart 2002;88:67–70). In Victoria, Australia 43 children who had device closure were compared with 19 who had surgical closure. Average hospital stay was 29 hours (device) and 88 hours (surgery). The surgery group had more postoperative pain and used more analgesia. One week after the procedure 36 (84%) children in the device group and 22 (21%) in the surgery group were back to their usual activity level. Total cost was Aus $11,845 (device) vs $12,969 (surgery). Four patients in the device group, but none in the surgery group, had a small residual shunt after 3 months.

Influenza may spread among babies in neonatal intensive care units. In Barcelona in 1999 (Pediatric Infectious Disease Journal 2002;21:196–200) there were two outbreaks in one hospital (in late winter and spring and again in autumn) and one (autumn) in another. In all, 30 infants had nasopharyngeal secretions positive for influenza A virus and 22 of these infants were symptomatic, 19 with respiratory symptoms (11 lower respiratory tract, 8 upper respiratory tract) and four with gastrointestinal symptoms (poor feeding, vomiting, abdominal distension). (One infant had both respiratory and gastrointestinal symptoms). All recovered. Extra infection control measures were implemented and staff and parents were given influenza vaccine and a 7-day course of amantadine.

Do breastfed babies become more intelligent adults? In Copenhagen (Journal of the American Medical Association 2002;287:2365–71) two birth cohorts, one of 490 men and 483 women and one of 2280 men, all born between October 1959 and December 1961, underwent intelligence testing at age 27 years (mixed cohort) and 19 years (male cohort). After allowance for 13 potential confounding factors mean full scale IQs (Wechsler Adult Intelligence Scale) for breast feeding durations of <1 month, 2–3, 4–6, 7–9, and >9 months were 99.4, 101.7, 102.3, 106.0, and 104.0 in the mixed-sex cohort. In the all-male cohort corresponding mean scores (Borge Priens Prove test) were 38.0, 39.0, 39.9, and 40.1. There was a significant association between duration of breastfeeding and intelligence test results in both cohorts.

An estimated two out of every three preschool children in the United Kingdom visit their general practitioners at least once a year with acute respiratory infections and most will have a cough. A systematic review of eight randomised controlled trials and two cohort studies, all from general practice, (British Journal of General Practice 2002;52:401–9) has shown that recovery for these children may not be as rapid and uncomplicated as is often supposed. Up to a quarter of children were no better after 2 weeks and one in eight suffered a complication such as rash, ear pain, diarrhoea, vomiting, or progression to bronchitis or pneumonia. Persisting nasal discharge and cough are so common that these authors suggest general practitioners might advise parents that, provided their child is otherwise well, they do not need to come back simply because of the persistence of these symptoms, for another 2 or 3 weeks.

Rotavirus infection in young children causes diarrhoea, vomiting, and fever but rotavirus isolation is much less likely when there is only one of these symptoms. At children’s hospitals in California, Ohio, and Virginia (Pediatric Infectious Disease Journal 2002;21:221–7) stool samples were tested from 763 children aged 15 days to 4 years admitted with any one, two, or three of these symptoms. Overall, 31% of samples contained rotavirus. The positivity rate was 56% when all three symptoms were present but only 3% with diarrhoea alone, 11% with vomiting alone, and 6% with fever alone. Children with two symptoms had intermediate positivity rates (diarrhoea and vomiting 38%, diarrhoea and fever 19%, vomiting and fever 13%).

Low parental socioeconomic status is a major determinant of the risk of violent death in young people. In Sweden (Journal of Epidemiology and Community Health 2002;56:688–92) data were analysed for almost 1500 violent deaths of people aged 5–25 years in 8 million person-years. Parental socioeconomic status as determined by the occupation of the head of the household was a main determinant of all causes of violent death apart from suicide. The estimated contribution of parental social factors was 58% for homicides, 47% for motor traffic injuries, 30% for other traffic injuries, and 25% for non-traffic accidental injuries. Such factors did not, however contribute to the risk of suicide.

A study in the Gaza strip (Lancet 2002;359:1801–4, see also commentary, ibid: 1793–4) has again illustrated the mental traumas suffered by children in war zones. In the first two months of 2001 91 children aged 9–18 years whose homes had been demolished by bombardment were compared with 89 control children who lived in areas of the Gaza strip that had not been bombarded. Severe or very severe post-traumatic stress disorder affected 54 (59%) of the study group and 22 (25%) of the controls. The controls, however, scored higher on an anxiety scale (clinical anxiety in 20 (22%) of the study group vs 35 (39%) of controls) possibly because the control group anticipated violence whereas the dominant emotional disorder in the study group was post-traumatic stress disorder. The commentators emphasised a public mental health approach to management of these disorders.

Ghrelin is a recently identified hormone secreted by the stomach. Plasma concentrations fall after meals and then gradually increase until the next meal. Infusions of ghrelin increase the feeling of hunger. A study in Seattle (New England Journal of Medicine 2002;346:1623–30; see also editorial, ibid: 1662–3) has shown that obese adults have low plasma concentrations of ghrelin that increase after weight loss induced by dieting. Mealtime-related fluctuations remain normal, however, both before and after dieting. By contrast, gastric bypass surgery eliminates mealtime-related changes in plasma ghrelin concentration and results in consistently low concentrations. This may explain why gastric bypass surgery often reduces appetite whereas the success of dieting is usually limited by increased appetite. Ghrelin agonists and antagonists might prove to have therapeutic uses but it must be remembered that ghrelin first came to light as a promoter of growth hormone secretion.