Atoms

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Improving the care of children with leukaemia in Indonesia

Interest in global health has grown substantially over the last decade. This heightened popularity has been fuelled by the HIV crisis, the numerous series on global health published in Lancet, the creation of new organisations such as the Global Fund to fight AIDS, tuberculosis and malaria and finally, the Gates/Buffett monies. For child health, the continued focus on wider availability of current vaccines, the development of new immunisations, and progress in the prevention and treatment of malaria, pneumonia and other diseases, has led to substantial gains. In this issue, Mostert et al explore the treatment for childhood leukaemia in Indonesia. The cure rate for acute lymphoblastic leukaemia (ALL) approaches 90% in developed countries, compared to just 35% in resource limited environments. These authors suggest that the treatment of ALL in Indonesia lags behind other countries in part because of parental scepticism about chemotherapy. In a study conducted with colleagues from the Netherlands - an excellent example of twinning, where public hospitals in developed countries are paired with established cancer centres elsewhere—they introduced an educational program for parents about treatment, and report an increase in survival form 13% to 29% among poor patients. ALL is an excellent paediatric cancer to focus on because cure rates are high, and although the treatment regimen is intensive, it does not require extensive resources. See page 20

A "new" treatment for gastrooesophageal reflux

Vandenplas *et al* from Brussels describes a new treatment for regurgitation, the Multicare AR-Bed. This bed keeps infants at 40° supine. In a preliminary study of 30 infants, eight of whom did not tolerate the bed, 73% of the infants showed improvement in signs and symptoms of GOR and

acid reflux as measured by 24 hour pH monitoring. There have been a number of recent articles about reflux. Campanozzi describes the natural history of GOR in 210 Italian children.1 Horvath reports that when new data are included in a systematic review of the effect of thickened feeds on GOR they appear effective.² Finally, in a double-blind randomized clinical trial, Orenstein found that protein pump inhibitors are not effective in the treatment of infants with GOR.3 In the US experts estimate that 1 in 7 infants are treated with a protein pump inhibitor sometime during their first year of life. There is some speculation that the increase in allergic disease maybe related to the use of PPIs. PPIs dramatically raise the gastric pH. There are reports that when adults are placed on PPIs the number of positive RAST tests to allergens increase. Whether the Multicare AR-Bed truly represents an advance in the treatment of GOR awaits a randomised clinical trial. See page 26

Exposure to second hand smoke in children

Tobacco control efforts, including taxes and restrictions on where people can smoke, have reduced smoking prevalence among adults in many countries. In an epidemiologic study from Dublin, Kabir et al report a dramatic decline in smoking among children aged 13-14 in Ireland, from 19.9% in 1995 to 10.6% in 2007. Importantly, there was no increase in the prevalence of children exposed to second hand smoke, which was a concern following the restriction on smoking in public places. Since the majority of adult smokers report that their smoking started during the teenage years, these results are extremely encouraging. Perhaps they will translate in a continued reduction in overall smoking in Ireland. See page 42

This month in F&N:

► McGuire, Fowlie, and Roger explore the benefits of the Cochrane Collaboration.

I have always admired this "movement." It is of particular importance in a specialty, child health, where many small RCTs are performed. Although much work has been done on how to conduct literature searches, account for publication bias, and assess heterogeneity among studies, in many of the meta-analyses defining the precise intervention remains a struggle. For example, antibiotics hasten recovery from acute otitis media, however, which antibiotic, in what dose, and for how long remains uncertain. The next major methodologic advance in meta-analyses will be a solution to this problem. In the words of one of my colleagues, combining great French food in a blender is not appealing.

- Murphy *et al* compare the performance of 14 participating centres in Ireland and Northern Ireland to performance in the Vermont Oxford Neonatal Network on three measures—incidence of severe intraventricular haemorrhage and rates of chronic lung disease and late onset nosocomial infection. Benchmarking is the first step in reducing variation in care and improving quality.
- ▶ Rajesh *et al* from India found that a delay in the processing of cerebrospinal fluid is accompanied by a reduction in WBC count, and may impact on the percentage of infants diagnosed with CSF pleocytosis.

References

- Campanozzi A, Boccia G, Pensabene L, et al.
 Prevalence and Natural History of Gastroesophageal
 reflux: pediatric prospective survey. Pediatrics
 2009;123:779–783.
- Horvath A, Dziechciarz P, Szajewska H. The effect of thickened-feed interventions on gastroesophageal reflux in infants: systematic review and meta-analysis of randomized, controlled trial. *Pediatrics* 2008;122:e1268–1277.
- Orenstein SR, Hassall E, Furmaga-Jablonska W, et al. Multicenter, double-blind, randomized, placebocontrolled trial assessing the efficacy and safety of proton pump inhibitor lansoprazole in infants with symptoms of gastroesophageal reflux disease. J Pedatr 2009:154:514–520.