

## The complexity of measuring growth

In 2006 the WHO released new growth standards. The Multicentre Growth Reference Study collected data on 8500 children between 0 and 5 years of age. Children from Brazil, Ghana, India, Norway, Oman and the US were included in the study. Producing these growth standards was a difficult task. Did WHO select children from the appropriate countries? Were these children truly healthy? Were they fed exclusively by breast for the first 4–6 months of age? And most importantly, were these children raised under socio-economic conditions that allowed them to reach their full growth potential. This is particularly important because as new immigrants acculturate into a society, the growth patterns of these children change. Finally, because of the obesity epidemic, were too many “overweight” children included in the reference sample, thereby inflating appropriate growth curves. In the past we only had to worry about growth faltering; now obesity is just as important. These are just some of the important issues to consider when using the WHO standard.

In this issue, reports from Hong Kong and the United Kingdom, along with a perspective from van Buuren and colleagues, highlight and expand on some of the issues raised above. Assessing growth is usually done in three contexts: the individual child, a population sample, and for international comparison. For the individual child, it is still critical to see an entire growth record, and interpret the picture in the context of the child and family. Population comparisons are more difficult, raising issues of comparability of the sample, including issues of acculturation, socio-economic status, and genetics. International comparisons pose many of the same problems, but nevertheless are critically important when international organisations establish long-term goals for growth. *See pages 549, 561 and 566*

## Improving child outcomes

Most of us recognise that for the majority of children living in countries with sufficient resources, their health and well

being is far more dependent on social rather than medical conditions. Poverty in these countries is linked to virtually every poor health outcome, including under-immunisation, weight faltering, asthma, infectious diseases, obesity and school performance. Duursma, Augustyn and Zuckerman review the literature on the impact of reading aloud to children. The review reflects experience from the Reach Out and Read programme founded at Boston City Hospital in 1989. Each year over 5 million books are distributed at well child visits by paediatricians, nurses and other health professionals, to over 3 million children in all 50 US states, the District of Columbia, Guam, Puerto Rico and the US Virgin Islands. Making a difference to the lives of poor families is difficult, however—seeing the look on a young child’s face when a parent reads a book with them is priceless. Some of you will recognise that my current affiliation, Boston Medical Center (BMC), was formerly Boston City Hospital. The faculty members in the Department of Paediatrics at BMC are enormously proud of this programme, and its founder Barry Zuckerman, MD, the Joel and Barbara Alpert Chair of the Department of Paediatrics at Boston University School of Medicine... *See page 554*

## Is it an adverse drug reaction?

The British Paediatric Surveillance Unit provides us with another important study. Conducted over 13 months, they identified seven possible fatal adverse drug reactions (ADRs). An ADR was defined as “an appreciably harmful or unpleasant reaction resulting from an intervention related to the use of a medicinal product, which predicts hazard from the future administration and warrants prevention or specific treatment, or alteration of the dosage regimen, or withdrawal of the product.” Of the seven possible cases, which are presented in vignette form, a group of experts independently concluded that in five cases, causality between the drug error and death was unlikely, and that in the other two, there was uncertainty. They point out in their discussion that both the type and number of drugs generally increase when patients are more ill, often making it difficult to

determine if a fatal outcome was related to an ADR or the underlying medical condition. *See page 609*

## The continuing diagnostic dilemma of child abuse

In a simple, but rather powerful study by Simon Power, four vignettes were mailed to 200 doctors, of whom 100 had expertise in child abuse and neglect. There were no clinically meaningful differences in the certainty in which both groups judged the vignettes to be consistent with either accidental or non-accidental injury. According to the author, two of the vignettes were meant to pose uncertainty in the diagnosis. This is reflected in the scoring. In these two vignettes the two groups appear to be equally divided as to whether an accidental or non-accidental injury occurred. It would have been interesting if the author had provided more detail about the scoring based upon the demographic details of both the physicians and patients. I suspect that age, gender and race/ethnicity influence these judgments. This study highlights the continuing diagnostic dilemma of child abuse and neglect. *See page 612*

## This month in *Fetal & Neonatal Edition*

- ▶ Walter and colleagues report on the relationship between congenital sensorineural hearing loss (SNHL) and cytomegalovirus (CMV) viral load on the Guthrie cards—it would indeed be remarkable if children with undiagnosed SNHL had CMV infection. *See page F280*
- ▶ I first heard of B-type natriuretic peptide (BNP) about 3 years ago when a paediatric resident suggested we use it to differentiate pulmonary from cardiac disease. There is a report indicating that BNP may be helpful in identifying neonates with haemodynamically significant patent ductus arteriosus. *See page F257*
- ▶ In a provocative report from Italy, Bellieni and colleagues report that incubators may produce electromagnetic fields that influence newborn heart rate variability. *See page F298*