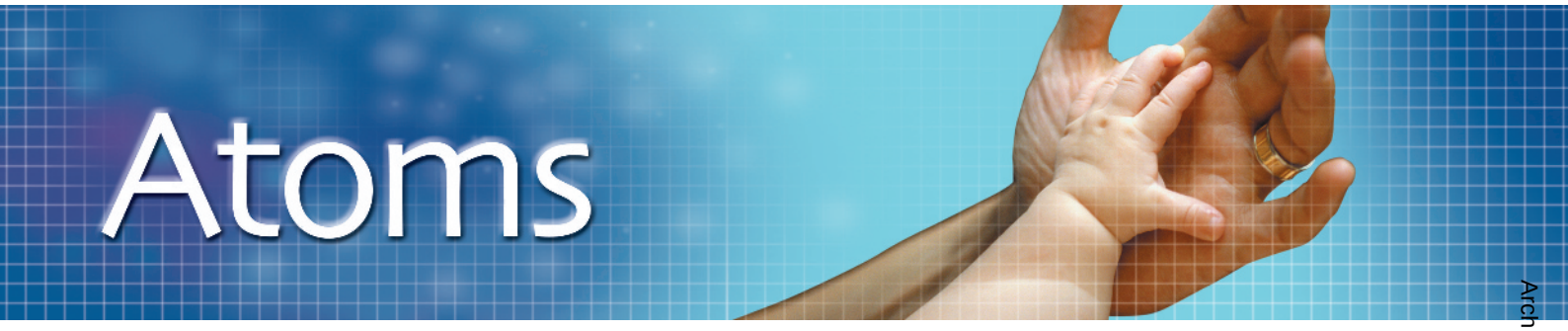
Atoms



Howard Bauchner, *Editor-in-Chief*

THE SCIENCE OF CLINICAL DECISION MAKING

The growth in fame, fortune and influence of evidence-based medicine has led to greater interest in the science of clinical decision making. Numerous "experts" have speculated that clinicians use their experience, coupled with evidence and patient characteristics, to make decisions.[1 2] In a fascinating report, Jenkins and colleagues, using clinical judgment analysis, explore which variables drive decision making when physicians decide to prescribe systemic steroids or antibiotics for a wheezing child, or admit a child to hospital. Sixty-two vignettes, which varied key characteristics, such as age or respiratory rate, were presented to 62 paediatricians, A&E specialists and general practitioners. Their conclusions—the importance of specific variables varies depending upon the decision and paediatricians place greater emphasis on some variables compared with other types of clinicians. How do we use these data to help us make better decisions? The authors speculate that clinical judgment analysis could help us to understand why specialists and generalists, given the same information, make different decisions, and that it also could play a role in educating physicians in training.

See page 672

THE STRESS OF ECZEMA

I have always been struck by the concern parents express when their children have skin disorders, such as eczema, acne, atopic dermatitis, warts or molluscum. Faught and colleagues from Australia found that 33 mothers of children with moderate to severe eczema had very high scores on the Parenting Stress Index-Long Form. In fact, the scores were significantly higher than those of parents whose children had diabetes or cystic fibrosis – although the comparison scores were extracted from other studies and it is unclear when stress was measured. With this limitation in mind, it is still interesting that parents of children with extensive eczema report such high levels of stress. Perhaps a more aggressive approach to therapy and follow-up is warranted.

See page 683

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THE POTENTIAL OF ELECTRONIC HEALTH

The term has changed over the past couple of years, from electronic medical record to electronic health record (EHR). As more and more countries migrate to the EHR, it is clear that we are just beginning to understand how to harness these systems to assess and improve quality of care. The goal is to ensure that the EHR does more than just provide a fancy structured encounter form for physicians. Mussaffi and Omer describe how they incorporated a measure of quality of life for children with asthma into a medical record and then made the results of these assessments available to physicians during a subsequent healthcare visit. This study incorporates many concepts of evolving care: collection of data prior to a visit, incorporation of information into EHR, and ensuring the data are available to clinicians in subsequent health visits. Many questions remain: which data should be collected, will we simply be overwhelmed with more information, and will the health of patients actually improve.

See page 678

IUGR INFANTS FIVE DECADES LATER

When a child develops a medical problem, parents want to know the prognosis. Often there are times we can reassure parents. For example, numerous studies have shown that children with febrile seizures grow and develop normally. Investigators from Queen's University, Belfast, in a five-decade follow-up study of infants who were born between 1954–1956 with intrauterine growth restriction (IUGR), compared 111 IUGR infants with 124 appropriate for gestational age infants. Both groups completed the short form-36 health survey, a reliable and valid measure of health-related quality of life. No differences emerged on any of the eight dimensions of quality of life.

See page 700

MEDICINES FOR CHILDREN

There have been numerous articles decrying the lack of evidence with respect to medicines for children. The majority of drugs we prescribe are off-label. Terence Stephenson from Nottingham details the changes in Europe, following the new European Union paediatric regulations that were adopted earlier this year encouraging more research on children's medicines. Although I applaud such efforts, for example, in the US the Food and Drug Administration, through a financial reward system adopted in 1997, led to revised labelling for 63 medicines, it is not likely that we will ever be able to "test" the majority of drugs that we use in paediatrics. Post-marketing analysis will continue to be critical. As we have seen in adults, even after trials involving thousands of patients, new issues develop when drugs are used inappropriately (erythropoiesis-stimulating agents) or additional data become available from tens of thousands of patients (cyclooxygenase-2 inhibitors).

See page 661

THIS MONTH IN EDUCATION AND PRACTICE

- E&P continues to evolve. In this issue the second dermatophile column, which focuses on warts and molluscum, appears. If you have any other ideas for recurring columns please let me know (howard.bauchner@bmc.org). ***See page ep123***
- Although, gastro-oesophageal reflux disease (GORD) is uncommon, gastro-oesophageal reflux (GOR) is common. A pharmacy update on drugs for GORD and GOR is always welcome. ***See page ep118***
- Two best practices (management of pain and toxic shock in burns) and one problem solving case (the importance of re-investigation of adrenal insufficiency) complete the issue. ***See pages ep97, ep101 and ep109***

REFERENCES

1 **Bauchner H**, Simpson L, Chessare J. Changing physician behaviour. *Arch Dis Child* 2001;**84**:459–62.
2 **Haynes RB**, Devereaux PJ, Guyatt GH. *Evid Based Med*, 2002;**7**;36–38..