

Accessing and understanding the evidence

Trevor Duke,^a Harry Campbell,^b Philip Ayieko,^c Newton Opiyo,^c Mike English,^c Julian Kelly,^a Susanne Carai,^d Giorgio Tamburlini,^e & Martin Weber^d

WHO regularly gathers, evaluates, and cites evidence to support its recommendations. How this is done varies between departments, but highly centralized processes, complex methods and expert consultations are often used. WHO guidelines are distributed to health workers and policy-makers in developing countries, but few of these people have the opportunity to be involved in the process of choosing and weighing the evidence to formulate the guidelines that are ostensibly designed for their use. Such incomplete engagement may impede ownership of WHO recommendations, and thus be an obstacle to full implementation.

In 2005 WHO published the Pocketbook of Hospital Care for Children,¹ a comprehensive clinical resource for nurses and doctors in developing countries. The Pocketbook contains recommendations on the management of all common conditions, including serious infections, malnutrition, neonatal and surgical problems, injuries, burns and poisoning. These guidelines are an extension of the Integrated Management of Childhood Illness (IMCI) to the first-referral hospital, providing consistency across all levels of health care systems. The Pocketbook aims to address many of the deficiencies in quality and safety of hospital care for children identified in recent years.²⁻⁴ However, the mere production of high-quality guidelines will not ensure implementation, or be sufficient to improve quality of care. A comprehensive approach to the implementation of the WHO Pocketbook includes training strategies and quality assessment tools. Another key component is a process of documenting, updating and disseminating evidence which engages doctors, medical students and nurses in countries throughout the

world. This process and the evidence it is collecting are described at the International Child Health Review Collaboration (ICHRC) web site: www.ichrc.org.

ICHRC uses Pubmed, a database which references over 4800 journals, including publications from the Cochrane Collaboration. Pubmed is free online and has validated search filters that provide about 95% sensitivity and specificity when compared with the most comprehensive search strategies, involving multiple (often costly) databases and hand-searching of the literature.⁵

Reviews given priority in this project are those addressing issues that are critical to the implementation of the guidelines, such as recommendations which challenge common practices in some countries. A reviewer's toolkit is available on the web site, and support for reviewers is provided by project coordinators. Standardized search strings are developed with the assistance of a librarian. Drafts are written by primary reviewers, further reviewed by an acknowledged expert in the field, and edited before posting on the web site.

The ICHRC process is similar to that used by the Cochrane Collaboration, but there are some important differences. ICHRC has a focus that is broader than therapeutic questions (including diagnosis, etiology and implementation); search strategies prioritize randomized trials, but include other research designs when these are more appropriate. ICHRC provides short summaries of its comprehensive reviews and direct links to specific guidelines (in this case, the WHO Pocketbook).

In 2005, paediatricians, trainees and medical students were invited to contribute via child health interest email lists, all national paediatric associations, and medical schools and coordinating

institutions in Australia, Italy, Kenya, Pakistan, Scotland and elsewhere. More than 100 reviews have been commissioned and more than 30 completed within the first 8 months.

This collaborative effort aims to provide evidence to support countries in adopting guidelines, and resolve areas of uncertainty. It highlights deficiencies in the guidelines and indicates where more research is needed, and provides a continuous resource for updating WHO child health guidelines. By registering search strings on Pubmed, email alerts can be used to provide automatic updates.

More than 130 paediatricians and child health experts were involved in writing the Pocketbook of Hospital Care for Children. Now, more doctors and medical students throughout the world have an opportunity to understand how evidence is synthesized, and WHO guidelines generated. They have also engaged directly with the principles of evidence-based practice through a process that is reproducible anywhere with internet access. In places without internet access, it will be necessary to distribute the evidence in hard copy.

The ICHRC aims to build capacity in evidence-based child health in developing countries. We strive to engage more people in this important WHO activity of developing clinical guidelines. We want to summarize evidence in a way that is relevant to health workers at all levels, and propose this as a first step to bridging the well-recognized gap between evidence and implementation. By getting more people involved in weighing the evidence to formulate guidelines, we hope to ensure country ownership, uptake and sustainability. ■

References

Web version only: <http://www.who.int/bulletin>

^a Centre for International Child Health, University Department of Paediatrics, Royal Children's Hospital, Flemington Road, Parkville, Vic 3052, Australia. Correspondence to Dr Duke (email: trevor.duke@rch.org.au).

^b University of Edinburgh, Edinburgh, Scotland.

^c Kenya Medical Research Institute, Nairobi, Kenya.

^d Child and Adolescent Health and Development, WHO, 1211 Geneva, Switzerland.

^e Institute of Child Health Burlo Garofolo, Trieste, Italy.

Ref. No. 06-037515