Systematic reviews in the *Bulletin*

Maria Luisa Clark[a] & Shyam Thapa[b]

The *Bulletin* has previously published systematic reviews in the section for original research papers but, beginning in 2011, systematic reviews will have their own section. We have been encouraged by the response to the editorials that made the case for appraising and summarizing scientific evidence in public health.[1,2] In recent months, systematic reviews submitted to the *Bulletin* have increased substantially and have covered subject areas as wide-ranging as nutritional and behavioural interventions, government policies, environmental risk exposure, epidemiology, vaccine safety, intervention cost-effectiveness, equity, the social determinants of health and drug effectiveness. By setting systematic reviews apart, we hope to trigger still more systematic review submissions and strengthen the *Bulletin* as a source of high-quality evidence for public health action, especially in low- and middle-income countries.

Systematic reviews (including meta-analyses) make evidence-based public health possible by delivering reliable packages of evidence to inform policy decisions and promote best practices. They are also needed to apply the Grading of Recommendations Assessment, Development and Evaluation (GRADE) tool, which has been used since 2007 by the World Health Organization (WHO) to generate guidelines. Because this tool was designed primarily for developing clinical guidelines,[3] there is some contention about its widespread applicability to non-clinical policy questions. In recent years it has been applied to selected nonclinical policy questions[4–6] and it will take some time before its effectiveness in nonclinical domains is fully assessed and known.

Not so long ago, evidence-based public health was viewed as a questionable corollary to evidence-based medicine. Systematic reviews are now established as a useful format for appraising and summarizing evidence obtained though both experimental and observational approaches.[1] Not limited to randomized controlled trials, systematic reviews have been used to explore issues beyond intervention effectiveness and to address a range of complex questions: questions dealing with areas such as clinical testing and diagnostic accuracy, health economics, population screening, health equity, epidemiology, service quality and delivery, risk factor exposure and government policies.[7]

In addition to global reviews, regional or national evidence can also be usefully summarized. In December 2010, the *Bulletin* published two such examples: one on adverse events resulting from acupuncture in China[8] and the other on the risks of traditional male circumcision in South Africa.[9] The possibility of formulating questions that are context-specific is one of the strengths of systematic reviews in public health.

Systematic reviews can be time-consuming, labour-intensive and potentially costly undertakings. Most are written by authors in high-income countries. But when the review addresses a topic pertinent to low- and middle-income settings, this tends to leave out the insider's perspective on the choice of study questions and on the feasibility of implementing different options. So while the *Bulletin* welcomes systematic reviews from all sources, we especially welcome those focused on the public health problems of developing countries and based on research initiatives within those countries.

Systematic reviews and meta-analyses submitted to the *Bulletin* should be accompanied by a structured abstract and must comply with reporting guidelines for systematic reviews. Editorial specifications and information on accessing reporting guidelines for systematic reviews of different types of studies are provided in the "Guidelines for contributors", available at: http://www.who.int/bulletin/contributors/current_guidelines.pdf ■

References

1. Petticrew M. Systematic reviews in public health: old chestnuts and new challenges. *Bull World Health Organ* 2009;87:163. doi:10.2471/BLT.09.063719 PMID:19377705
2. Waters E. Evidence for public health decision-making: towards reliable synthesis. *Bull World Health Organ* 2009;87:164. doi:10.2471/BLT.09.064022 PMID:19377706
3. Guyatt GH, Oxman AD, Vist GE, Kunz R, Falck-Ytter Y, Alonso-Coello P et al. GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. *BMJ* 2008;336:924. doi:10.1136/bmj.39489.470347.AD PMID:18436948
4. *WHO recommendations on the diagnosis of HIV infection in infants and children.* Geneva: World Health Organization; 2010. Available from: http://whqlibdoc.who.int/publications/2010/9789241599085_eng.pdf [accessed 6 December 2010].
5. *Increasing access to health workers in remote and rural areas through improved retention.* Geneva: World Health Organization; 2010. Available from: http://www.who.int/hrh/retention/guidelines/en/index.html [accessed 6 December 2010].
6. *The joint WHO ILO UNAIDS policy guidelines for improving health workers' access to HIV and TB prevention, treatment, care and support services.* Geneva: World Health Organization, International Labour Organization, United Nations Joint Programme on HIV/AIDS; 2010. Available from: http://www.who.int/occupational_health/publications/hiv_tb_guidelines/en/index.html [accessed 6 December 2010].
7. Centre for Reviews and Dissemination. *Systematic reviews: CRD's guidance for undertaking reviews in health care.* York: University of York; 2008.
8. Zhang J, Shang H, Gao X, Ernst E. Acupuncture-related adverse events: a systematic review of the Chinese literature. *Bull World Health Organ* 2010;88:915. doi:10.2471/BLT.10.076737 PMID:21124716
9. Wilcken A, Keil T, Dick B. Traditional male circumcision in eastern and southern Africa: a systematic review of prevalence and complications. *Bull World Health Organ* 2010;88:907. doi:10.2471/BLT.09.072975 PMID:21124715

[a] Department of Knowledge Management and Sharing, World Health Organization, Avenue Appia 20, 1211 Geneva 27, Switzerland.
[b] Department of Reproductive Health and Research, World Health Organization, Geneva, Switzerland.
Correspondence to Maria Luisa Clark (e-mail: clarkmar@who.int).