

## **La Cochrane Library permet de répondre aux questions liées à l'efficacité des soins infirmiers**

**Dorothy Forbes et Kathie Clark**

En présentant une synthèse des principales études portant sur les soins infirmiers et en résumant les résultats des interventions, les recensions systématiques offrent aux infirmières un moyen de gérer la quantité impressionnante d'information disponible. La Cochrane Library compte parmi les sources fiables de données en cette matière; son fonctionnement, de même que celle de la Cochrane Collaboration, sont brièvement présentés. Les auteurs encouragent les infirmières cliniciennes et administratrices à consulter la base de données et incitent les chercheuses à y contribuer en menant des recensions systématiques dans le domaine de l'efficacité des soins infirmiers.

Mots clés : Cochrane Library, Cochrane Collaboration, recensions systématiques, efficacité

# **The Cochrane Library Can Answer Your Nursing Care Effectiveness Questions**

**Dorothy Forbes and Kathie Clark**

Systematic reviews help nurses to manage the overwhelming volume of available information by synthesizing valid data from primary studies and summarizing the results of interventions. One reliable source of systematic reviews of health-care interventions is the Cochrane Library. This paper briefly describes the Cochrane Collaboration and the Cochrane Library. It also encourages nurse clinicians and nurse administrators to use the Cochrane Library and encourages nurse researchers to contribute to the Cochrane Library by conducting systematic reviews in the field of nursing care effectiveness.

**Keywords:** Cochrane Library, Cochrane Collaboration, systematic reviews, effectiveness questions

Nurses and other health-care professionals are expected to base their practice on the best available evidence. However, accessing reliable and valid evidence is a challenge in today's busy practice environment with its explosion of health-care information. Information overload is a daily reality for nurses as they struggle to cope with the tens of thousands of health-care journals published every year, hundreds of thousands of Web sites, an avalanche of electronic mail, and electronic information from a variety of sources (Booth, 1996; Palmer & Brice, 1999).

Systematic reviews can help nurses manage the overwhelming volume of information available by synthesizing valid data from primary studies and summarizing the results of interventions. The knowledge derived from systematic reviews of multiple studies is superior to that derived from the findings of individual studies, because reviews provide a more precise estimate of treatment effects (Clark & Ohlsson, 2003). This knowledge allows nurses to integrate the best available evidence from systematic reviews with information from contextual sources (e.g., patient and family values, preferences, costs, and resources) when making clinical decisions. One reliable source of reviews of health-care interventions is the Cochrane Library. The Cochrane reviews are prepared systematically, have limited possibility of bias, and are kept up to date (Clark & Ohlsson, 2002, 2003). A systematic review is defined as "a review of a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant research, and to collect and

analyze data from the studies included in the review” (Cochrane Collaboration, 2003, p. 27). This paper briefly describes the Cochrane Collaboration, the Canadian Cochrane Network and Centre (CCN/C), and the Cochrane Library. Nurse clinicians and administrators are encouraged to use the Cochrane Library. Nurse researchers are urged to contribute to the Cochrane Library by conducting systematic reviews that address nursing care effectiveness questions. In addition, nurses are encouraged to participate in the Cochrane Collaboration and the CCN/C.

### **The Cochrane Collaboration**

Archie Cochrane, a Scottish physician and epidemiologist, inspired the formation of the Cochrane Collaboration by stating, “It is surely a great criticism of our profession that we have not organized a critical summary, by specialty or subspecialty, adapted periodically, of all relevant randomized controlled trials” (Cochrane, 1979, p. 8). In 1992 the first Cochrane Centre was opened in Oxford in order to “help people make well informed decisions about health care by preparing, maintaining, and ensuring the accessibility of systematic reviews of the effects of health-care interventions” (Cochrane Collaboration, 2001, p. 1). In response to a call for the establishment of centres in other countries to promote the Cochrane agenda, the Canadian Centre was opened in 1993 at McMaster University and there are now national centres in Australia, Brazil, China, Germany, Italy, the Netherlands, South Africa, Spain, the United Kingdom, and the United States, as well as a Nordic Centre serving Denmark, Finland, Norway, and Russia.

The Canadian Cochrane Network, established in 1994, comprises representatives from 16 academic health sciences sites across Canada. The Site Representatives and Site Groups engage in a variety of activities to promote regional awareness of and participation in the Cochrane Collaboration, access to the Cochrane Library, local recruitment and support of reviewers, and training workshops (Clark & Ohlsson, 2002). The Site Representative(s) at your nearest health sciences university (which can be found at <http://cochrane.mcmaster.ca>) can connect you with others who are conducting or promoting the use of systematic reviews. For example, the University of Saskatchewan Site Group regularly holds luncheons featuring presentations on the use and conduct of systematic reviews. Recent workshops on developing a Cochrane protocol and completing a review attracted researchers from across Canada as well as from Michigan, Rhode Island, and the Mayo Clinic in Minnesota.

Information about upcoming workshops on Cochrane reviews can be found at <http://cochrane.mcmaster.ca>.

Preparation and maintenance of Cochrane reviews are the responsibility of 50 international Collaborative Review Groups, which cover every important area of health care. Six of these — the Back, Neonatal, Inflammatory Bowel Disease, Musculoskeletal, Hypertension, and Effective Practice and Organization of Care Collaborative Review Groups — have their editorial base in Canada. If you are interested in conducting a Cochrane review, contact the Collaborative Review Group associated with your particular area of interest ([www.cochrane.org](http://www.cochrane.org)).

If your nursing care effectiveness question is broader than the issues addressed by the Collaborative Review Groups, you may wish to contact a Field ([www.cochrane.org](http://www.cochrane.org)). Fields have a broader scope of interest and activities than Collaborative Review Groups. They do not conduct reviews but support the relevant Review Groups in their preparation of reviews. Currently, there are 10 Fields (e.g., Cancer Network, Primary Health Care, Health Promotion and Public Health, Health Care of Older People, Complementary Medicine), one of which has its editorial base in Canada: the Child Health Field located at the University of Alberta.

If your interest is the methodology of systematic reviews, then a Cochrane Statistical Methods Group is the place for you ([www.cochrane.org](http://www.cochrane.org)). The Methods Groups, of which there are 11 at present, support the Cochrane Collaboration's commitment to the principle of "ensuring quality" (Clark & Ohlsson, 2002). They contribute to the ongoing improvement of the validity and precision of Cochrane systematic reviews. Their members provide advice on all statistical issues relevant to systematic reviews, co-ordinate practical statistical support for the Review Groups, monitor training materials, and develop and validate the statistical software used within the Collaboration.

To better inform your patients and clients about the effectiveness of their health-care treatments, you may wish to direct them to a useful and valid resource: the Consumer Network ([www.consumernetwork.com](http://www.consumernetwork.com)). Brief, plain-language consumer synopses of Cochrane reviews and abstracts can be found at this Web site.

Lastly, there are opportunities to serve on the Advisory Board of the CCN/C. The Board comprises the 16 Site Representatives plus representatives of 19 Affiliate Organizations (national health professional and consumer organizations) who promote the Cochrane Collaboration among their members and identify the needs and interests of their members with regard to strategic planning by the CCN/C. The Canadian Nurses Association's current representative is Dr. Carole Estabrooks, a member of the Faculty of Nursing at the University of Alberta.

## The Cochrane Library

The Cochrane Library is published four times a year and comprises the Cochrane Database of Systematic Reviews that currently consists of 1,669 completed reviews and 1,266 protocols (Issue 2, 2003). In addition, the Library houses the Database of Abstracts of Reviews of Effectiveness (DARE: 4,006 abstracts of non-Cochrane reviews), Cochrane Central Register of Controlled Trials (CENTRAL: 362,540 citations of clinical trials), Cochrane Database of Methodology Reviews (16 reviews on methodological issues), Health Technology Assessments (3,138 citations of HTA Reports), and the NHS Economic Evaluations Database (11,485 abstracts of health economic studies), as well as information about the Cochrane Collaboration. The Cochrane Library is available through academic libraries and by subscription, either on CD-ROM or via the Internet, at a cost of approximately \$350 CAN for individual subscribers ([www.update-software.com](http://www.update-software.com)). Structured abstracts of all Cochrane reviews are available free on the Internet at <http://www.update-software.com/Cochrane/abstract.htm> (available soon through Wiley InterScience). Specialized databases derived from the main databases are also being planned.

Nurse clinicians, administrators, consumers, and researchers can access high-quality, up-to-date information from reviews found in the Cochrane Library. Nurse clinicians and administrators may seek answers to their questions about the effectiveness of health-care interventions that will assist them in their health-care decision-making. Consumers may seek information on their health conditions and how best to treat them. Researchers may gain an understanding of the state of the science and areas requiring further research. Members of review teams that make funding allocation decisions may ensure that the proposed research question fills a gap in the state of the science and has not been previously addressed.

The Cochrane Library also provides the following support to those who wish to conduct systematic reviews: (a) contact information for Review Groups and other Cochrane Collaboration entities; (b) the references in the Cochrane Review Methodology Database; (c) manuals such as *Reviewers' Handbook* (<http://cochrane.mcmaster.ca>) or *Open Learning Material for Cochrane Reviewers* ([www.cochrane-net.org/open-learning](http://www.cochrane-net.org/open-learning)); (d) a Frequently Asked Questions (FAQ) list for RevMan; (e) software for preparing and maintaining Cochrane reviews (e.g., Review Manager [RevMan 4.2: [www.cochrane.org](http://www.cochrane.org)]); and (f) contact information for the CCN/C and its Statistical Consultant (<http://cochrane.mcmaster.ca>).

## Why Become Involved?

Cochrane reviews have historically been prepared and used primarily by physicians. However, this situation is changing as nurses and other health-care professionals seek reliable and relevant information on effectiveness. The Cochrane Library houses many reviews that are relevant to nurses. Subjects include water for wound cleansing, bladder training for urinary incontinence in adults, fibre for the prevention of colorectal adenomas and carcinomas, interventions for preventing eating disorders in children and adolescents, education interventions for asthma in children, interventions for helping people to follow prescriptions, interventions for preventing falls in the elderly, community interventions for preventing smoking in young people, vitamin A supplementation for reducing the risk of mother-to-child transmission of HIV infection, case management for people with severe mental disorders, specialist nurses in diabetes mellitus, the effects of nursing record systems on nursing practice and health-care outcomes, and home care versus in-patient hospital care.

Nurses are also beginning to conduct their own reviews (e.g., Forbes et al., 2002; Hodnett, 2002a, 2002b, 2002c, 2002d; Moore, Cody, & Glazener, 2001; Shea, Cranney, et al., 2002). As more nurses become involved in developing protocols and completing systematic reviews, the findings will be more relevant to the questions raised by nurses and their patients/clients. By participating as either the first reviewer or a peer reviewer, you will gain in-depth knowledge in your field of study, learn new research methods, become aware of areas requiring further research, and establish links with local, national, and international researchers with similar interests but with a diversity of professional and cultural backgrounds (Shea, Wells, & Tugwell, 2002).

Other opportunities to participate in the Cochrane Collaboration include joining a Field, a Methods Group, or the Consumer Network, or hand searching a journal. If you are interested in learning more about the Cochrane Collaboration or wish to participate, contact the CCN/C Site Representative nearest you (<http://cochrane.mcmaster.ca>). Let us take up Archie Cochrane's challenge to "organize a critical summary" of findings relevant to the questions raised by nurses and our patients/clients, by using and contributing to the Cochrane Library and participating in the Cochrane Collaboration or the CCN/C.

## References

- Booth, A. (1996). In search of the evidence: Informing effective practice. *Journal of Clinical Effectiveness*, 1(1), 25–29.

- Clark, K., & Ohlsson, A. (2002). Evidence-based chiropractic care: The contribution of the Cochrane Collaboration and the Canadian Cochrane Network and Centre. *Journal of the Canadian Chiropractic Association*, 46(3), 137–143.
- Clark, K., & Ohlsson, A. (2003). Evidence-based chiropractic care: Cochrane systematic reviews of healthcare interventions. *Journal of the Canadian Chiropractic Association*, 47(1), 8–16.
- Cochrane, A. L. (1979). 1931–1971: A critical review, with particular reference to the medical profession. In *Medicines for the year 2000* (pp. 1–11). London: Office of Health Economics.
- Cochrane Collaboration. (2001). *The Cochrane Collaboration: Preparing, maintaining and promoting the accessibility of systematic reviews of the effects of health care interventions*. Oxford: Author.
- Cochrane Collaboration. (2003). *Cochrane reviewers' handbook 4.1.6 and glossary*. Oxford: Author.
- Forbes, D. A., Morgan, D., Bangma, J., Peacock, S., Campbell, T. D., & Adamson, J. (2002). Light therapy for managing sleep, behaviour, mood, and cognitive disturbances associated with Alzheimer disease (Protocol for a Cochrane Review). In *The Cochrane Library*, 4. Oxford: Update Software.
- Hodnett, E. D. (2002a). Caregiver support for women during childbirth (Cochrane Review). In *The Cochrane Library*, 4. Oxford: Update Software.
- Hodnett, E. D. (2002b). Continuity of caregivers for care during pregnancy and childbirth (Cochrane Review). In *The Cochrane Library*, 4. Oxford: Update Software.
- Hodnett, E. D. (2002c). Home-like versus conventional institutional settings for birth (Cochrane Review). In *The Cochrane Library*, 4. Oxford: Update Software.
- Hodnett, E. D. (2002d). Support during pregnancy for women at increased risk of low birthweight babies (Cochrane Review). In *The Cochrane Library*, 4. Oxford: Update Software.
- Moore, K. N., Cody, D. J., & Glazener, C. M. A. (2001). Conservative management of post prostatectomy incontinence (Cochrane Review). In *The Cochrane Library*, 4. Oxford: Update Software.
- Palmer, J., & Brice, A. (1999). Information sourcing. In S. Hamer & G. Collinson (Eds.), *Achieving evidence-based practice* (pp. 61–83). Edinburgh: Bailliere Tindall.
- Shea, B., Cranney, A., Tugwell, P., Welch, V., Ortiz, Z., Adachi, R., Peterson, J., & Wells, G. (2002). Calcium for treating osteoporosis in postmenopausal women (Protocol for a Cochrane Review). In *The Cochrane Library*, 4. Oxford: Update Software.
- Shea, B., Wells, G., & Tugwell, P. (2002). The Cochrane Collaboration: For family physician researchers. *Canadian Family Physicians*, 48, 1–4. Retrieved December 4, 2002, from the World Wide Web: <http://www.cfp.ca/cfp/2002/jun/vol48-june-resources-3.asp>.

**Authors' Note**

We would like to acknowledge the past financial support provided to the University of Saskatchewan Site Representatives by the Canadian Cochrane Network and Centre.

Comments or questions may be directed to Dorothy Forbes, College of Nursing, University of Saskatchewan, 107 Wiggins Road, Saskatoon, Saskatchewan S7N 5E5 Canada. Telephone: 306-966-8239. Fax: 306-966-6703. E-mail: [dorothy.forbes@usask.ca](mailto:dorothy.forbes@usask.ca)

---

*Dorothy Forbes, RN, PhD, is University of Saskatchewan Site Co-Representative, Canadian Cochrane Network and Centre; CIHR Scholar; Adjunct Assistant Professor, Faculty of Nursing, University of Alberta, Edmonton, Canada; and Associate Professor, College of Nursing, University of Saskatchewan, Saskatoon, Canada. Kathie Clark, RN, PhD, is Co-Director, Canadian Cochrane Network and Centre, Faculty of Health Sciences, McMaster University, Hamilton, Ontario, Canada.*