

## **EDITORIAL**

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## The Cochrane Ne

#### Who are we?

We are neurologists willing to build our personal clinical decisions on the results of clinical scientific research. Although we are looking for certainties on which to base these decisions, we believe that the 'grey areas' of uncertainty in neurological treatment can be gradually reduced by a continuous scientific process that moves from clinical experience through experimental research synthesis and back again to clinical work.

As a medical discipline, there is no doubt that neurology is expanding in many neuroscience and clinical practice areas. Now, more than ever, it is important that our therapeutic decisions are based on clinical evidence, allowing us to respond with effective interventions. Randomised controlled trials, systematic reviews of those trials, and meta-analysis should be used more frequently to improve the evidence-based approaches to evaluating the effectiveness of healthcare interventions. There are many treatment options available to us, and we must ensure that we make the right therapeutic decisions in order to give our patients the maximum value from our interventions. Without proven parameters for choosing the most appropriate treatment options, we cannot adequately serve the interests of our patients. The time has come when interventions related to prevention, acute treatment, management and organisation of care must be evaluated and then implemented

Archie Cochrane (1909–88) did not found the Cochrane Collaboration himself. He was a British medical researcher who made a huge contribution to the science of epidemiology. The Cochrane Collaboration was founded in 1993, the brainchild of Iain Chalmers who used the Cochrane name because of Archie's enormous influence over what came to be known as Evidence-based Medicine. Cochrane's influential book 'Effectiveness and efficiency: random reflections on health services', published in 1972, exorted us to properly evaluate interventions in health care by means of randomised controlled trials: there was no meta-analysis in those days. He later wrote, 'It is surely a great criticism of our profession that we have not organized a critical summary by speciality or subspecialty, adapted periodically, of all relevant controlled trials.'

in a scientific way. With this in mind, a group of neurologists founded the Cochrane Neurological Network in 1998.

## The Cochrane Neurological Network and the Cochrane Collaboration

The aim of the Cochrane Neurological Network (www.cochraneneuronet.org) is to help clinicians and others to produce, understand and use the results of clinical trials in neurological practice. This Network is a part of the Cochrane Collaboration, an international not-for-profit

www.update.software.com). There are now more than 9000 references to neurological clinical trials and more than 100 neurological Cochrane reviews available in the Cochrane Library, which is published on the Internet and CD ROM every four months. These systematic reviews have been produced by 10 Collaborative Review Groups: Back, Dementia and Cognitive Improvement, Epilepsy, Incontinence, Injuries, Movement Disorders, Multiple Sclerosis, Neuromuscular, Pain, Palliative and Supportive Care, and Stroke.

### What makes systematic reviews work?

Traditionally, reviews have been written by experts in the field. They almost inevitably have strong opinions, which may well alter their conclusions. Systematic reviews reduce this risk of bias by using an explicit search strategy to find as many reports of relevant trials as possible; by using pre-specified inclusion/exclusion criteria and standard methods to assess trial quality; and by producing a synthesis of the actual numerical results whenever possible: so-called meta-analysis. Systematic reviews also provide an overview of what the results of all relevant trials mean. It does not follow that they can answer all our questions. However, they do give us the best summary of the current evidence that can be used when making individual treatment decisions, or when planning new clinical trials.

## **Activities of the Cochrane Neurological Network**

Based in the Department of Neurology in Milan, Italy the Cochrane Neurological Network helps Cochrane Collaborative Review Groups in the production and maintenance of systematic reviews. It notifies the neurological community of specific reviews through oral presentations and a twice-yearly newsletter,

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organisation that includes more than 5000 people around the world. The aim of the Collaboration is to help people make well-informed treatment decisions by bringing together all the available evidence on the effects of interventions for a wide variety of areas of health, and to provide up-to-date and reliable summaries of the evidence (http://www.cochrane.org). The core work of the Cochrane Collaboration is done by Collaborative Review Groups. Their function is to prepare and maintain systematic reviews on related topics: stroke, multiple sclerosis, epilepsy and so on. They provide the systematic reviews for the Cochrane Database of Systematic Reviews, contained in electronic format within the Cochrane Library (http://

and it sponsors meetings, workshops and additional teaching activities.

Anyone looking for an unbiased summary of data on a neurological intervention is invited to take advantage of the resources provided by the Cochrane Neurological Network. The organisation keeps neurologists informed about systematic reviews of neurological interventions and works to recruit participation from growing numbers of neurologists in the field. The Cochrane Neurological Network is always looking for contributors to help address new questions about problems in clinical practice, or to participate in the production of systematic reviews in a specific field of interest.

For information or to become involved with the valuable work being done by your colleagues in the neurology field, contact cochrane.neuronet@unimi.it or visit http://www.cochraneneuronet.org.