

## The Cochrane collaboration in the third world

**T**he publication of a paper by the Cochrane Injuries Group Albumin Reviewers [BMJ 1998; 317(7153):235-240] gives us a good example of the importance of the Cochrane Collaboration for medical practice and research.

In spite of have being used for more than 50 years, albumin infusion in critical patients has not yet been properly studied. This systematic review, initially published in the Cochrane Library, shows that the use of albumin in patients with shock, large burns and even critical disease associated with hypoalbuminemia increases the mortality from 3% to 6%, when compared with non-use or with the use of crystalloid. This means that when 15 to 30 patients are treated with albumin, such treatment will be associated with one excessive death.

An additional and very relevant fact is that human albumin is not cheap. In Brazil it costs about US\$ 50 per unit and usually it is prescribed at a rate of 3 to 4 units per day, costing US\$ 150 to 200 per day. From personal information, this can be illustrated by the fact that a teaching hospital such as the Hospital São Paulo at The Federal University of São Paulo spends about US\$ 260,000 per year on this kind of treatment.

In this case and in many others, the use of good evidence in the general internist's practice will reduce deaths and costs.

The BMJ editor received various interesting letters disagreeing with the Cochrane paper, but none of them altered the conclusion, by even one millimeter, that there

is no evidence that the use of albumin causes more good than harm to patients, and so its use in the described population must be restricted to randomized clinical trials, properly designed and conducted.

This kind of information, which is essential in medical practice, is regularly offered by the Centro Cochrane do Brasil (<http://www.epm.br/cochrane>). Well-informed authors, like Naylor, consider that the Cochrane Collaboration work rivals the Human Genome Project in its importance for medical science and practice (Lancet 1995; 345:840-2).

During the 8th Brazilian Congress of Epidemiology, in Rio de Janeiro, Prof. Olly stated that there have been two major revolutions in the philosophy of medical practice this century. The first was a consequence of Flexner's report at the beginning of the century stressing the need for the use of basic science in medical decisions. The second came with the convergence between basic science, epidemiology and clinical research, formerly called Clinical Epidemiology and, more recently, Evidence-Based Medicine. This was the revolution started by Archibald Cochrane.

To derive medical practice solely from the application of physiopathological theories to daily practice without the appropriate clinical assay is to be stuck in the past. Thus, accepting the essential link between basic science and clinical science as a natural requirement for practice may prevent the unnecessary loss of thousands of lives and huge resources. While it is important for the developed countries to save resources and lives, it is even more important for the developing ones, where the human, social and financial burden caused by lack of education alone is already too high.

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