

How do you incorporate information on adverse events into EPOC reviews?



Cochrane reviews have, until now, concentrated on assessing the effectiveness of interventions in randomised trials for two reasons.

First, it was the only realistic way of getting to grips with the huge heap of trials that had to be reviewed.

Second, efficacy or effectiveness is what clinical trials set out to demonstrate.

The sophisticated search strategies were developed to ensure that all randomised controlled trials (RCTs) are identified. A direct consequence of the focus on effectiveness, that is, the intended and hoped for benefits of interventions, has been the relative neglect of adverse effects. The Collaboration has taken almost ten years to realise that **negative effects need as much attention as the positive ones, and should be assessed with similar thoroughness**. Until our reviews do that they remain seriously biased.

The evidence about harm done by interventions is much less solid than evidence of effectiveness from good controlled trials. Trials are designed to detect and quantify specified benefits. Most trials to find out whether an intervention does harm are unethical, eg. human toxicology. There are many different kinds of harm, and most of

them are unexpected so that adverse outcomes can often not be specified in trial protocols. Because of this asymmetry between benefits and harms, reports of RCTs contain very little information about adverse events – rarely describing how they were looked for and recorded, and giving little detail.

Much important information about adverse effects of organisational interventions comes from qualitative studies, including surveys and interviews made after the main study has been completed and published.

These problems have serious implications for EPOC reviews, even though adverse effects of organisational interventions are more rarely reported than adverse effects of drugs or surgery. Meta-analyses will hardly ever be possible, only descriptive summaries.

Apart from developing search strategies for finding reports of adverse events, and methods for summarising and combining them, our reviews need to consider what kinds of adverse events/consequences of interventions we should look out for. Very often they will appear much later than the positive effects that studies are planned to detect.

Do you have any methodology questions?

Contact
Laura McAuley at
lmcauley@uottawa.ca

We may feature the answer to your question in our next

How can EPOC reviewers incorporate information on adverse events into their reviews?

As a first step, and the only one that EPOC reviewers can take immediately, is to discuss the problem in the review and to suggest how it might be best pursued. One way to encourage that would be to introduce a standard heading, at least in the Discussion section, say '**Adverse Effects**'.

Andrew Herxheimer
Emeritus Fellow, UK Cochrane Centre

MORE INFO A proposed draft addition to the Cochrane Reviewer's Handbook for recommendations for considering adverse effects and beneficial side effects has been developed. Read this document at <http://www.dsru.org/wwwboard/latestdraft.pdf>