

# The need for evidence in how we do Cochrane Reviews

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# Methods

## Evidence Based ~~Health Care~~

methods

- Is not just about the effects of ~~health care~~.
- It also includes evidence and experience on feasibility, values and preferences, and acceptability.
- But, good evidence on which interventions, actions and strategies are beneficial (and by how much), which are harmful and which have little or no effect is vital to well informed decision making.
- Good evidence should have minimised bias.

# Key principles for research into the effects of healthcare interventions different methods

- The effects of different interventions, actions and strategies might not be very different for important outcomes.
- But, if moderate differences are worthwhile
- we need good evidence to identify these differences.
- To get good evidence, research needs to be as reliable as possible.
- It needs to minimise bias and to minimise chance effects.

# Research into research

- How do we, as researchers, know that we are doing more good than harm with the methods we choose for our reviews?
- How can we ensure that we make well informed choices, and give the most appropriate advice, about all aspects of systematic reviews (from prioritisation through to access and implementation)?
- What is our evidence base?
- How might we enhance this, and make sure that we do the right reviews in the best way?
- Do we need research into research?

# What have you done?

- Intervention studies (prospective comparisons)
- Observational intervention studies (retrospective comparisons)
- Observational descriptive studies

# What do we mean by evidence?

- Logic
- Pragmatism
- Existing practice
- Experimental research (randomised trials)
- Observational research
- Systematic reviews

# What's the evidence?

- Cochrane Reviews are written and published in English
- Published protocols
- Structured titles
- Structured abstracts
- Structured reviews
- Independent checking for eligibility
- Checking of references to find studies
- Statistical methods (including analysis of subgroups)
- Summary of Findings tables: 7 items
- At least two external peer reviewers

# Cochrane Methodology Reviews

- Blinded versus unblinded assessments of risk of bias in studies included in a systematic review
- Checking reference lists to find additional studies for systematic reviews
- Editorial peer review for improving the quality of reports of biomedical studies
- Grey literature in meta-analyses of randomized trials of health care interventions
- Handsearching versus electronic searching to identify reports of randomized trials
- How effects on health equity are assessed in systematic reviews of interventions
- Industry sponsorship and research outcome
- Methods for obtaining unpublished data
- Search strategies to identify diagnostic accuracy studies in MEDLINE and EMBASE
- Technical editing of research reports in biomedical journals
- When and how to update systematic reviews