Excluding non-English publications from evidence-syntheses did not change conclusions: a meta-epidemiological study


**Problem**

- Decision makers need evidence syntheses quickly
- Resources are often limited
- Limiting reviews to English-language publications can save resources and time
- Unclear how the exclusion of non-English publications affects the conclusions of evidence syntheses

**Aim:**

To assess whether limiting the inclusion criteria to English-language publications would affect the overall conclusions in a set of Cochrane reviews consisting of diverse interventional medical topics

**Methods**

Dataset: 59 randomly selected Cochrane intervention reviews with no language restrictions

1. We excluded studies if the:
   - Only publication referring to it was non-English
   - Main publication (in case of multiple publications of the same study) was non-English
2. We re-calculated meta-analyses for outcomes of the main summary-of-findings tables
3. If the direction of one effect estimate or the statistical significance changed, authors of the respective reviews were asked how this would change their conclusions
4. To be non-inferior the upper limit of the 95% confidence interval of the proportion of changed conclusions should not cross a margin of 10%

**Results**

Excluding non-English publications:

- Led to excluding 2% of included studies (31/1281)
- Was relevant to 27% (16/59) of the Cochrane reviews because they included non-English publications that were the main or only reference to a primary study
- Did not markedly alter the size or direction of effect estimates or statistical significance

The proportion of changed conclusions in our sample was 0.0% (95% CI 0.0 – 0.6) which indicated non-inferiority of the approach (Fig. 1).

Results can not be generalized to other review types or topics, such as diagnostic tests or public health.

**Figure 1:** Proportion of changed conclusions and 95% confidence interval

Exclusion of non-English publications: a viable option for rapid reviews on medical intervention topics