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

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Cochrane Methods Rapid Reviews

Cochrane Austria

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.

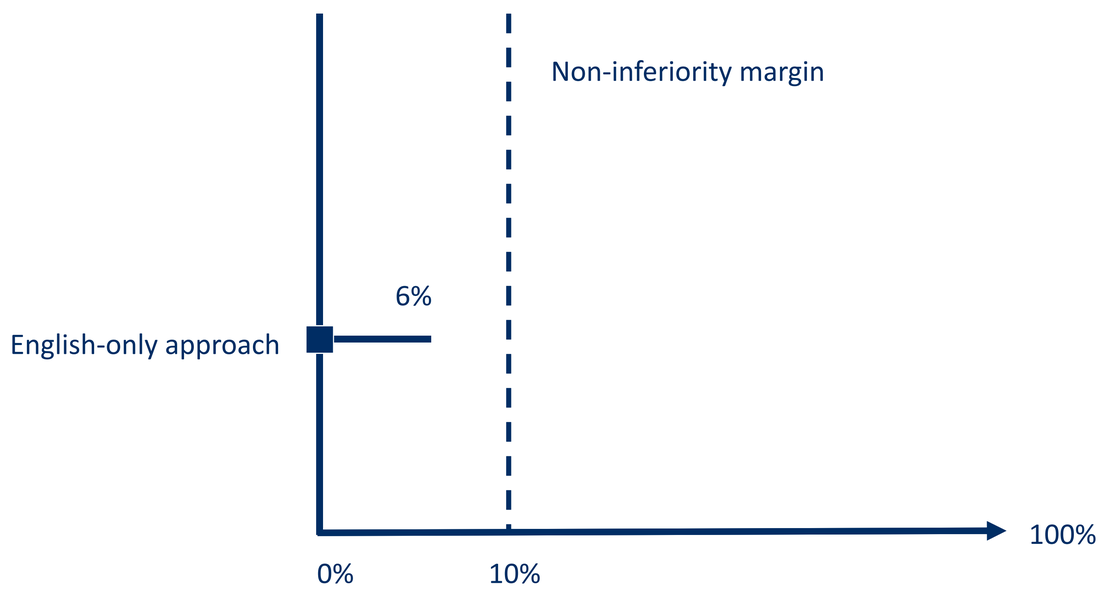

Figure 1: Proportion of changed conclusions and 95% confidence interval

Exclusion of non-English publications:

a **viable option** for **rapid reviews** on medical intervention topics