



Title English-Language Restriction When Conducting Systematic Review-

Based Meta-Analyses: Systematic Review of Published Studies

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Aim

To review the published and unpublished evidence of the impact of language restrictions on systematic review-based meta-analyses (SR/MA), and to review Canadian and international health technology assessment (HTA) agencies' language inclusion practices when conducting these studies.

Conclusions and results

Of the 5 studies that assessed the impact of language of publication on summary treatment effects, none provided empirical evidence that the exclusion of papers written in a language other than English (LOE) leads to biased estimates of the effectiveness of interventions used in conventional medicine. However, the findings do not rule out the potential introduction of language bias when language restrictions are used. When resources and time are available, systematic reviewers of conventional medicine should search for foreign language studies to minimize the risk of producing a biased summary effect estimate.

Recommendations

Not applicable.

Methods

A comprehensive literature search was conducted to identify articles from 1990 onwards that assessed the impact of including or excluding RCTs reported in languages other than English (LOE) on systematic review-based meta-analyses (SR/MA) of conventional medical interventions. The search was not limited by language of publication, methodological design, or publication status. Two reviewers independently assessed articles for inclusion according to predetermined eligibility criteria, and outcome data were independently extracted and tabulated using a standard form. Findings were described qualitatively in planned evidence tables and a structured discussion of collected data. An environmental scan of policies used by HTA agencies was conducted by electronic survey, and the results were reported.

Further research/reviews required

Further evaluation of the importance of language restriction in specific clinical specialties or diseases is needed along with research that measures the impact of other biases related to language restriction including MEDLINE Index bias, database bias, peer-reviewed bias, and non-indexed journal bias.