Article review

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| Title |  |  |
|  | Title | 1 Identify the article as a systematic review, meta-analysis, or both |
| Summary |  |  |
|  | Structured summary | 2 Write a structured summary including, as applicable, background; objectives; data sources; study eligibility criteria, participants, treatments, study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; and systematic review registration number |
| Introduction |  |  |
|  | Rationale | 3 Explain the rationale for the review in the context of what is already known |
|  | Objectives | 4 Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS) |
| Methods |  |  |
|  | Protocol and registration | 5 Indicate if a review protocol exists, if and where it can be accessed (such as a web address), and, if available, provide registration information including the registration number |
|  | Eligibility criteria | 6 Specify study characteristics (such as PICOS, length of follow-up) and report characteristics (such as years considered, language, publication status) used as criteria for eligibility, giving rationale |
|  | Sources of Information | 7 Describe all information sources in the survey (such as databases with dates of coverage, contact with study authors to identify additional studies) and date last searched |
|  | Survey | 8 Present the full electronic search strategy for at least one major database, including any limits used, such that it could be repeated |
|  | Study selection | 9 State the process for selecting studies (that is, for screening, for determining eligibility, for inclusion in the systematic review, and, if applicable, for inclusion in the meta-analysis) |
|  | Data collection process | 10 Describe the method of data extraction from reports (such as piloted forms, independently by two reviewers) and any processes for obtaining and confirming data from investigators |
|  | Data items | 11 List and define all variables for which data were sought (such as PICOS, funding sources) and any assumptions and simplifications made |
|  | Risk of bias in individual studies | 12 Describe methods used for assessing risk of bias in individual studies (including specification of whether this was done at the study or outcome level, or both), and how this information is to be used in any data synthesis |
|  | Summary measures | 13 State the principal summary measures (such as risk ratio, difference in means) |
|  | Synthesis of outcomes | 14 For each meta-analysis, explain methods of data use, and combination methods of study outcomes, and if done consistency measurements should be indicated (ie P test) |
|  | Risk of bias across studies | 15 Specify any assessment of risk of bias that may affect the cumulative evidence (such as publication bias, selective reporting within studies). |
|  | Additional analyses | 16 Describe methods of additional analyses (such as sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. |
| Results |  |  |
|  | Study selection | 17 Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. |
|  | Study characteristics | 18 For each study, present characteristics for which data were extracted (such as study size, PICOS, follow-up period) and provide the citation. |
|  | Risk of bias within studies | 19 Present data on risk of bias of each study and, if available, any outcome-level assessment (see item 12) |
|  | Results of individual studies | 20 For all outcomes considered (benefits and harms), present, for each study, simple summary data for each intervention group and effect estimates and confidence intervals, ideally with a forest plot (a type of graph used in meta-analyses which demonstrates relat, ve success rates of treatment outcomes of multiple scientific studies analyzing the same topic) |
|  | Syntheses of resxults | 21 Present the results of each meta-analyses including confidence intervals and measures of consistency |
|  | Risk of bias across studies | 22 Present results of any assessment of risk of bias across studies (see item 15). |
|  | Additional analyses | 23 Give results of additional analyses, if done such as sensitivity or subgroup analyses, meta-regression (see item 16) |
| Discussion |  |  |
|  | Summary of evidence | 24 Summarize the main findings, including the strength of evidence for each main outcome; consider their relevance to key groups (such as healthcare providers, users, and policy makers) |
|  | Limitations | 25 Discuss limitations at study and outcome level (such as risk of bias), and at review level such as incomplete retrieval of identified research, reporting bias |
|  | Conclusions | 26 Provide a general interpretation of the results in the context of other evidence, and implications for future research |
| Funding |  |  |
|  | Funding | 27 Indicate sources of funding or other support (such as supply of data) for the systematic review, and the role of funders for the systematic review |