



## PRISMA 2009 Checklist

Section/topic	#	Checklist item
<b>TITLE</b>		
Title	1	Identify the report as a systematic review, meta-analysis, or both.
<b>ABSTRACT</b>		
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; participants, and interventions; study appraisal and synthesis methods; results; limitations; implications of key findings; systematic review registration number.
<b>INTRODUCTION</b>		
Rationale	3	Describe 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, outcomes, and study design (PICOS).
<b>METHODS</b>		
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and registration information including registration number.
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., language, publication status) used as criteria for eligibility, giving rationale.
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to request additional studies) in the search and date last searched.
Search	8	Present full electronic search strategy for at least one database, including any limits used, which were repeated.
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, included in the meta-analysis).
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) to ensure that the data obtained are accurate and complete; describe how the data collection process was similar to that of the studies being included.
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and describe the methods of handling data and combinations of variables for synthesis (e.g., risk ratio, difference in means).
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specific methods for assessing risk of bias of individual studies and reporting bias), and how this information is to be used in any data synthesis.
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., $I^2$ ) for each meta-analysis.

Section/topic	#	Checklist item
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, reporting within studies).
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), which were pre-specified.
<b>RESULTS</b>		

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 (e.g., study size, design, location, dates, etc.), and provide the citations.
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessments.
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary measures for each outcome (e.g., risk ratio, odds ratio, hazard ratio, etc.) for the intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.
Synthesis of results	21	Present results of each meta-analysis done, 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 analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-analyses).
<b>DISCUSSION</b>		
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome, important subgroups and key groups (e.g., healthcare providers, users, and policy makers).
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., heterogeneity, identified research, reporting bias).
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for practice.
<b>FUNDING</b>		
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of information, etc.).

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

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