PRISMA 2009 Checklist

Section/topic	Item No	Checklist item	Reported on Page Number/Line Number	Reported on Section/Paragraph
TITLE				
Title	1	Identify the report as a systematic review, meta-analysis, or both.	Page1/Line2-5	Title
ABSTRACT				
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	Page2/Line31-52	ABSTRACT/Paragraph1-4
INTRODUCTION				
Rationale	3	Describe the rationale for the review in the context of what is already known.	Page3/Line55-84	Introduction/Paragraph1-3
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	Page3/Line84-85	Introduction/Paragraph3
METHODS				
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	Page4/Line90-129	Materials and methods
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	Page5/Line99-108	Inclusion and Exclusion Criteria/Paragraph1
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	Page5/Line92-97	Literature search/Paragraph1
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	Page5/Line92-97	Literature search/Paragraph1
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	Page7/Line133-145	Study selection/Paragraph1
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	Page6/Line111-112	Data extraction/Paragraph1
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	Page6/Line112-116	Data extraction/Paragraph1

Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	Page6/Line128-129	Statistical analysis/Paragraph1
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	Page6/Line119-121	Statistical analysis/Paragraph1
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.	Page6/Line121-127	Statistical analysis/Paragraph1
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	Page6/Line119-121	Statistical analysis/Paragraph1
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	Page6/Line125-127	Statistical analysis/Paragraph1
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.	Page7/Line134-146	Study selection/Paragraph1
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	Page7/Line148-150	Characteristics of the selected
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).	Page7/Line148-150	Publication bias/Paragraph1
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	Page7/Line152-180	Meta-analysis/Paragraph1-2
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	Page9/Line189-1895	Sensitivity analysis/Paragraph1
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	Page6/Line119-121	Statistical analysis/Paragraph1
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	Page9/Line174-180	Meta-analysis/Paragraph2
DISCUSSION				
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	Page10/Line198-289	Discussion/Paragraph1-7
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	Page12/Line289-296	Discussion/Paragraph8
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	Page14/Line299-301	Conclusion/Paragraph1

FUNDING				
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	Page14/Line303-307	Acknowledgment/Paragraph1

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*As the checklist was provided upon initial submission, the page number/line number reported may be changed due to copyediting and may not be referable in the published version. In this case, the section/paragraph may be used as an alternative reference.