PRISMA Checklist

Section/topic	#	Checklist item	Reported on page #	
		TITLE		
Title	1	Identify the report as a systematic review, meta- analysis, or both.	1	
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.	2	
INTRODUCTION				
Rationale	3	Describe the rationale for the review in the context of what is already known.	3	
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	3	
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.	4	
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.	5	
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.	4	
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	4, Supplement	
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).	4-5	
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.	5-6	
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	5-7	
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	6	

	synthesis	
	Synanesis.	
13	State the principal summary measures (e.g., risk ratio, difference in means).	5-6
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.	5-7
15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	7
16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	7
	RESULTS	
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.	8, Fig.1
18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	8, Table1
19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	10, Table1
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.	Table1, Fig.2, Fig3
21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	10-11
22	Present results of any assessment of risk of bias across studies (see Item 15).	11
23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	10-11
-	DISCUSSION	
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).	12-15
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).	15-16
26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	16
	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.	None, not applicable
	14 15 16 17 18 19 20 21 22 23 24 25 26	ratio, difference in means). 14 Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., l²) for each meta-analysis. 15 Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). 16 Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. RESULTS 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. 18 For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. 19 Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). 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. 21 Present results of each meta-analysis done, including confidence intervals and measures of consistency. 22 Present results of any assessment of risk of bias across studies (see Item 15). 23 Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). DISCUSSION

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