CRITICAL APPRAISAL CHECKLIST FOR A SYSTEMATIC REVIEW.

Study Design: Systematic Review, with or without Meta-analysis

Adapted from:

Critical Appraisal Skills Programme (CASP), Public Health Resource Unit, Institute of Health Science, Oxford.

Oxman AD, Cook DJ, Guyatt GH. Users' guides to the medical literature. VI. How to use an overview. *JAMA* 1994; 272:1367-1371.

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DOES THIS REVIEW ADDRESS A CLEAR QUESTION?

	Yes	Can't tell	No
1. Did the review address a clearly focussed issue? Was there enough information on: • The population studied • The intervention given • The outcomes considered			
2. Did the authors look for the appropriate sort of papers? The 'best sort of studies' would • Address the review's question • Have an appropriate study design			

ARE THE RESULTS OF THIS REVIEW VALID?

	Yes	Can't tell	No
3. Do you think the important, relevant studies were included? Look for • Which bibliographic databases were used • Follow up from reference lists • Personal contact with experts • Search for unpublished as well as published studies • Search for non-English language studies			
4. Did the review's authors do enough to assess the quality of the included studies? The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies results.			
5. If the results of the review have been combined, was it reasonable to do so? Consider whether • The results were similar from study to study • The results of all the included studies are clearly displayed • The results of the different studies are similar • The reasons for any variations are discussed			

WHAT ARE THE RESULTS?

6. What is the overall result of the review? Consider • If you are clear about the reviews 'bottom line' results • What these are (numerically if appropriate) • How were the results expressed (NNT, odds ratio, etc)	
7. How precise are the results? Are the results presented with confidence intervals?	

WILL THE RESULTS HELP LOCALLY?

8. Can the results be applied to the local population? Consider whether • The patients covered by the review could be sufficiently different from your population to cause concern • Your local setting is likely to differ much from that of the review	**Yes**	**Can't tell**	**No**
9. Were all important outcomes considered?			
10. Are the benefits worth the harms and costs? Even if this is not addressed by the review, what do you think?			

JARGON BUSTER.

Systematic review	A review in which evidence on a topic or research question has been systematically identified, appraised and summarised according to predetermined criteria. Systematic reviews may incorporate meta-analysis, but don't have to.
Meta-analysis	A statistical technique. Summarises the results of several studies into a single estimate, giving more weight to larger studies.
Publication bias	When only studies with positive results are published, not the neutral or negative studies. If only published studies are included in a systematic review, it may overestimate the effect of the treatment or intervention.
Number Needed to Treat (NNT)	The number of patients who needed to be treated to prevent the occurrence of one adverse event (e.g. complication, death) or promote the occurrence of one beneficial event (e.g. cessation of smoking).
Odds	A ratio. It is the odds (or chance) of an event occurring.
Odds ratio	The ratio of two odds. Used as measure of a treatment's effectiveness. If OR = 1.0, then the effect of the experimental treatment is no different from that of the control treatment. If the OR is >1.0 (or <1.0), then the experimental treatment effect is greater than (or less than) the control treatment. **N.B.** The effect being measured may be good (e.g. stopping smoking) or bad (death).

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