

Modified AMSTAR scale for appraisal of systematic reviews

This scale was adapted from the original AMSTAR instrument by the University of Pennsylvania Health System Center for Evidence-based Practice. It was modified to enable more efficient, objective, and reproducible assessments that can be incorporated into rapid systematic reviews. The items are designed to be answered as “Yes” or “No”. The scale does not require calculation of a numeric score, but can be used to visually map the characteristics of systematic reviews, as demonstrated in the sample table.

Literature search:

1. Search terms described?
2. Databases searched described and two or more databases searched?

Study selection:

3. Inclusion/exclusion criteria described?
4. Number of included/excluded studies along with reasons of exclusion described?
5. Studies screened by two independent reviewers for inclusion?

Data synthesis and evaluation of evidence base:

6. Data extracted by two independent reviewers?
7. Individual study quality assessed?
8. Heterogeneity between study results assessed qualitatively and/or quantitatively?
9. Publication bias assessed qualitatively and/or quantitatively?
10. Characteristics of included studies reported in evidence table?
11. Funding source(s) disclosed and no obvious conflict of interest?

Reference: Shea BJ, Grimshaw JM, Wells GA, Boers M, Andersson N, Hamel C, et al. Development of AMSTAR: a measurement tool to assess the methodological quality of systematic reviews. BMC Medical Research Methodology. 2007;7:10.

Sample systematic review appraisal table

Domain	Review A	Review B	Review C
1. Search terms	Y	Y	N
2. Databases	Y	Y	NR
3. Inclusion criteria	N	N	Y
4. Included/excluded studies	Y	Y	Y
5. Independent screening	N	Y	N
6. Independent data extraction	Y	N	NR
7. Study quality	N	Y	Y
8. Heterogeneity	Y	NR	Y
9. Publication bias	N	NR	N
10. Evidence tables	N	Y	Y
11. Funding source	Y	N	NR