QUICKSTAR

A tool to synoptically assess the methodological quality (risk of bias) of systematic reviews

This appraisal tool can be used to obtain a quick overview of the methodological quality and usability of a systematic review. The tool can be applied on systematic reviews investigating various questions including effects of interventions, accuracy of diagnostic test, and individuals’ experiences (qualitative approach). For a more comprehensive assessment of the risk of bias in a systematic review, SBU recommends the tool ROBIS.

How to use Quickstar

Review the systematic review by following the six steps described on the next page. If the answer to a review step is no or unclear, there is no need to go to the following step. To the right of the review step, you can see the risk of bias related to the step. However, even systematic reviews with high risk of bias can be useful after considering the deficits. The usability of a review that does not fulfill a review step in Quickstar is highlighted in the bright blue boxes (underneath the heading usability).

The six steps described on the next page are based on the questions found in the tool AMSTAR 1 [1, 2]. The AMSTAR question(s) that builds up each step are listed in the parentheses.
1. The research question is well-defined (including inclusion- and exclusion criteria such as PICO). The full literature search strategy is well-conducted and documented, allowing for others to repeat it. (AMSTAR question 1 + 3)

   **Steps**
   
   **Risk of bias**
   
   **Usability**
   
   | NO/UNCLEAR | YES | High | The review has major shortcomings and should not be used. |

2. Included studies were identified by at least two reviewers who read the abstracts and full-text articles independently. The included studies are listed. (AMSTAR question 2 + 5)

   **Steps**
   
   **Risk of bias**
   
   **Usability**
   
   | NO/UNCLEAR | YES | The literature search strategy can be used but, the following steps need to be addressed: Study selection. Documentation of included studies. Risk of bias assessment of included studies. Data synthesis and assessment of the body of evidence. |

3. The review authors used a satisfactory technique for assessing the risk of bias in the included studies. The risk of bias of included studies, and study characteristics with study results are well described. (AMSTAR question 6 + 7)

   **Steps**
   
   **Risk of bias**
   
   **Usability**
   
   | NO/UNCLEAR | YES | The relevant studies are identified, but the following steps need to be addressed: Risk of bias assessment of included studies. Documentation of characteristics of included studies. Data synthesis and assessment of the body of evidence. |

4. Data from the studies have been adequately pooled in meta-analysis or meta-synthesis, when applicable, or otherwise described narratively. The risk of bias in included studies was considered when pooling data. (AMSTAR question 8 + 9)

   **Steps**
   
   **Risk of bias**
   
   **Usability**
   
   | NO/UNCLEAR | YES | The relevant studies are identified, described and their risk of bias has been assessed but, the following steps need to be addressed: Data synthesis and assessment of the body of evidence. |

5. The body of evidence has been determined, alternatively the risk of bias in included studies has been considered when forming the conclusions. Reasonable consideration to indirectness, consistency, precision and publication bias has been addressed. (AMSTAR question 8 + 10)

   **Steps**
   
   **Risk of bias**
   
   **Usability**
   
   | NO/UNCLEAR | YES | The relevant studies are identified, described and their risk of bias has been assessed but, the following step need to be addressed: Assessment of the body of evidence. |

6. Excluded studies are documented\(^1\), as well as the author’s conflict of interest and how such possible interests were handled. The review protocol is available\(^2\). The authors have stated whether all publication types were included in the literature search strategy. The authors have described the procedure to achieve consensus in case of conflicting assessment. (AMSTAR question 1 + 2 + 4 + 5 + 11)

   **Steps**
   
   **Risk of bias**
   
   **Usability**
   
   | YES | Low | The review can be used |

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\(^1\) The excluded studies ought to be listed in the review or in an appendix, or at least in a text that summarizes the reason for exclusions. However, this information may be missing due to limitations regarding the number of words that are allowed in some journals. SBU therefore finds that systematic reviews that do not fulfill this criterion have moderate risk of bias and usability.

\(^2\) It is important that a protocol, which also aligns with the later published review, was set before conducting the systematic review. However, systematic reviews that were published some time ago seldom provide protocols, due to the traditions back then. Therefore, SBU finds that systematic reviews that do not fulfill this criterion have moderate usability.
References
