

CEP scale for appraising risk of bias in randomized controlled trials

This scale is based on the modified Jadad scale used by the University of Pennsylvania Health System Center for Evidence-based Practice from 2005 to 2019; the revised 2019 edition eliminates redundant questions and brings the scale more in line with our center's other evidence quality appraisal scales. It is intended to provide efficient, objective, and reproducible assessments that can be incorporated into rapid systematic reviews. The items are designed to be answered as "Yes" or "No" with "No" or "NR" answers indicating a possible risk of bias. The scale does not require calculation of a numeric score, and use of numeric scores is discouraged, but can be used to visually map the characteristics of studies, as demonstrated in the sample table.

Randomization:

1. Was randomization done by a concealed and secure method?
(answer NR if randomization procedure was not described)

Blinding:

2. Were recipients of the intervention blinded to group assignment?
3. Were people providing the intervention blinded to group assignment?
4. Were people assessing effects and outcomes of the intervention blinded to group assignment?

Confounding variables:

5. Are all potential confounding variables consistent across groups
(answer "NR" if patient characteristics are inadequately reported)?
6. Was attrition documented to be at a level that can be expected not to substantially change study findings (typically 10 to 15% or less)?
(answer "NR" if attrition was not reported)
7. Was there intent to treat analysis?
(answer "Y" if there was no need for intent-to-treat analysis)

Conflict of interest

8. Is the trial free from financial conflict of interest?
(answer "NR" if source of funding is not disclosed)

Sample study appraisal table

Domain	Study A	Study B	Study C
1. Secure randomization	Y	Y	N
2. Patient blinded	Y	Y	Y
3. Caregiver blinded	N	N	N
4. Outcome assessor blinded	Y	Y	N
5. Attrition below 10-15%	Y	N	NR
6. Confounding variables equivalent	N	Y	Y
7. Intent to treat	N	Y	N
8. No conflict of interest	Y	Y	NR