Supplemental for https://doi.org/10.1123/JPAH.2022-0123

Supplementary Material S2. Modified version of the Downs & Black quality assessment tool.

This checklist aimed to evaluate the selected studies in terms of the quality of the data extracted and their analysis. In the present version of the checklist, we modified items and scoring to better fit the type of studies included in our systematic review. We withdrew several questions because they were designed for clinical studies only. We added two questions regarding the relevance of control groups. We added a question about the reporting of the effect size, which was not present in the initial checklist. As a result, the highest possible score for the modified checklist was 25. Final score ranges were given corresponding quality levels: excellent (20-25), good (15-19), fair (10-14), and poor (≤10).		
Questions	**Explanations**	**Ratings**
1. Is the hypothesis/aim/objective of the study clearly described?		1 = yes 0 = no
2. Are the outcomes of interest to be measured clearly described in the Introduction or Methods section?	If the outcomes of interest are first mentioned in the Results section, the question should be answered no.	1 = yes 0 = no
3. Are the characteristics of the participants included in the study clearly described?	If the study does not describe the population, the question should be answered no. If the study provides only minimal characteristics of the population (number of participants, age or age-range), the question should be answered partially. If the study provides a detailed description of the population (e.g. gender, income, etc.), the question should be answered yes.	2 = yes 1 = partially 0 = no
4. Are the interventions of interest clearly described?		1 = yes 0 = no
5. Are the distributions of principal confounders in each group of subjects to be compared clearly described?	If a list of principal confounders is provided, the question should be answered yes.	1 = yes 0 = no
6. Are the main findings of the study clearly described?		1 = yes 0 = no
7. Does the study provide estimates of the random variability in the data for the main outcomes?	In non-normally distributed data, the median and inter-quartile range of results should be reported. In normally distributed data, the mean, standard error, standard deviation, or confidence intervals should be reported. If the distribution of the data is not described, it must be assumed that the estimates used were appropriate and the question should be answered yes.	1 = yes 0 = no
8. Have the characteristics of participants lost to follow-up been described?	This should be answered yes where there were no losses to follow-up or where losses to follow up were so small that findings would be unaffected by their inclusion. This should be answered no if a study does not report the number of patients lost to follow-up.	1 = yes 0 = no 0 = unable to determine or not applicable
9. Have actual probability values been reported (e.g. 0.035 rather than < 0.05) for the main outcomes except where the probability value is less than 0.001?		1 = yes 0 = no

10. Have size effects been reported and discussed?	The study should provide and discuss size effects in addition to statistical effects.	1 = yes 0 = no
External Validity		
11. Were the subjects participating in the study representative of the entire population from which they were recruited?	The study must identify the source population and describe, if required, how the study participants were selected. Participants would be representative if they comprised the entire source population, an unselected sample of consecutive participants, or a random sample.	1 = yes 0 = no 0 = unable to determine or not applicable
12. Summary of withdrawals and follow-ups	The study clarifies sample selection and criteria for withdrawal of some observations (authors should provide evidence for the representativeness of the final sample).	1 = yes 0 = no
Internal validity - bias		
13. If any of the results of the study were based on "data dredging", was this made clear?	Any analyses that had not been planned at the outset of the study should be clearly indicated. If no retrospective unplanned subgroup analyses were reported, then answer yes. If subgroup analyses are justified, the question should be answered yes.	1 = yes 0 = no 0 = unable to determine
14. Do the analyses adjust for different lengths of follow-up of participants, or is the time period between the intervention and outcome the same for all participants?	Where follow-up was the same for all study participants the answer should be yes. If different lengths of follow-up were adjusted for by, for example, survival analysis, the answer should be yes. Studies where differences in follow-up are ignored should be answered no.	1 = yes 0 = no 0 = unable to determine
15. Were the statistical tests used to assess the main outcomes appropriate?	If no statistical test was used, the question should be answered no. If appropriate statistical tests were used, the question should be answered partially. If appropriate statistical tests were used and the robustness of the results was tested, the answer should be answered yes.	2 = yes 1 = partially 0 = no
16. Was compliance with the intervention/s reliable?	It there is information about adherence/interest of the population in the intervention, the answer should be answered yes.	1 = yes 0 = no 0 = unable to determine
17. Were the main outcome measures used accurate?	If the main outcomes are objectively measured, or measured using validated questionnaires, or the validity of the measurements was tested, the question should be answered yes. If the main outcomes are measured using non-validated questions within a survey, the question should be answered partially. If there are not enough details on the measurement of the main outcomes, the question should be answered no.	2 = yes 1 = partially 0 = no
Internal validity - confounding (selection bias)		
18. Does the study include a control group?	The study should be answered yes if it includes a control group allowing comparison of the outcomes for both control and treated groups.	1 = yes 0 = no 0 = unable to determine

19. Is the control group similar to the treated group before the intervention?	The study should provide basic statistics explaining the selection of control groups and whether the control group was similar to the treated groups.	1 = yes 0 = no 0 = unable to determine
20. Was there adequate adjustment for confounding in the analyses from which the main findings were drawn?	If confounding factors are included in the analyses, the question should be answered yes.	1 = yes 0 = no 0 = unable to determine
21. Were losses of participants to follow-up taken into account?	If the numbers of participants lost to follow-up are not reported, the question should be answered as unable to determine. If the proportion lost to follow-up was too small to affect the main findings, the question should be answered yes.	1 = yes 0 = no 0 = unable to determine
Power		
22. Did the study have sufficient power to detect an important effect?	Sample sizes have been calculated to detect a difference.	1 = yes 0 = no