# PRISMA 2020 Main Checklist

| Topic | No. | Item | Location where item is reported |
|---|---|---|---|
| **TITLE** | | | |
| **Title** | 1 | Identify the report as a systematic review. | Page 1, lines 2-3 |
| **ABSTRACT** | | | |
| **Abstract** | 2 | See the PRISMA 2020 for Abstracts checklist. | Page 1, lines 11-28<br>Page 17, lines 632-640 |
| **INTRODUCTION** | | | |
| **Rationale** | 3 | Describe the rationale for the review in the context of existing knowledge. | Pages 1-3, lines 33-133 |
| **Objectives** | 4 | Provide an explicit statement of the objective(s) or question(s) the review addresses. | Page 3, lines 93-117 |
| **METHODS** | | | |
| **Eligibility criteria** | 5 | Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses. | Page 4, lines 142-166<br>Table 2 |
| **Information sources** | 6 | Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted. | Page 4, lines 142-145 |
| **Search strategy** | 7 | Present the full search strategies for all databases, registers and websites, including any filters and limits used. | Page 4, lines 142-158<br>Table 1 |
| **Selection process** | 8 | Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process. | Page 4, lines 154-161<br>Figure 1 |
| **Data collection process** | 9 | Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process. | Pages 4-5, lines 161-201<br>Table 1<br>Figure 1 |
| **Data items** | 10a | List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect. | Pages 5-6, lines 202-231<br>Pages 19-21, line 676<br>Table B1<br>Pages 23-28, line 682<br>Table D1 |

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| | 10b | List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information. | Page 22, lines 679-680<br>Figure C1 |
| **Study risk of bias assessment** | 11 | Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process. | Pages 3-5, lines 135-201<br>Table 1<br>Figure 1 |
| **Effect measures** | 12 | Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results. | Pages 5-6, lines 202-220 |
| **Synthesis methods** | 13a | Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item 5)). | Pages 3-5, lines 135-201<br>Figure 1 |
| | 13b | Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions. | Pages 3-5, lines 135-201<br>Figure 1 |
| | 13c | Describe any methods used to tabulate or visually display results of individual studies and syntheses. | Pages 5-6, lines 202-225<br>Table 3<br>Page 9, lines 245-250<br>Page 11, lines, 291-302 |
| | 13d | Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used. | Pages 5-7, lines 191-219<br>Table 3<br>Page 8, lines 262-268<br>Pages 10-11, lines 296-324 |
| | 13e | Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression). | Page 8, lines 262-268 |
| | 13f | Describe any sensitivity analyses conducted to assess robustness of the synthesized results. | n.a. |
| **Reporting bias assessment** | 14 | Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases). | n.a. |
| **Certainty assessment** | 15 | Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome. | Page 4, lines 142-158 |
| **RESULTS** | | | |

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| **Study selection** | 16a | Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram. | Page 4, lines 142-166<br>Figure 1 |
| | 16b | Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded. | Table 2<br>Page 4, lines 154-166<br>Figure 1 |
| **Study characteristics** | 17 | Cite each included study and present its characteristics. | Pages 19-21, line 676<br>Appendix B, Table B1 |
| **Risk of bias in studies** | 18 | Present assessments of risk of bias for each included study. | Pages 23-28, line 682<br>Appendix D, Table D1 |
| **Results of individual studies** | 19 | For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots. | Pages 6-16, lines 232-563 |
| **Results of syntheses** | 20a | For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies. | Pages 16-17, lines 565-631 |
| | 20b | Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect. | Pages 6-16, lines 232-563 |
| | 20c | Present results of all investigations of possible causes of heterogeneity among study results. | Pages 23-28, line 682<br>Appendix D, Table D1 |
| | 20d | Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results. | n.a. |
| **Reporting biases** | 21 | Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed. | Pages 23-28, line 682<br>Appendix D, Table D1 |
| **Certainty of evidence** | 22 | Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed. | Pages 16-17, lines 565-631<br>Pages 19-21, line 676<br>Appendix B, Table B1 |
| **DISCUSSION** | | | |
| **Discussion** | 23a | Provide a general interpretation of the results in the context of other evidence. | Pages 16-18, lines 565-657 |
| | 23b | Discuss any limitations of the evidence included in the review. | Page 17, lines 632-640 |
| | 23c | Discuss any limitations of the review processes used. | Page 17, lines 632-640 |

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| | 23d | Discuss implications of the results for practice, policy, and future research. | Pages 16-17, lines 565-631<br>Pages 17-18, lines 641-657 |
| **OTHER INFORMATION** | | | |
| **Registration and protocol** | 24a | Provide registration information for the review, including register name and registration number, or state that the review was not registered. | n.a. |
| | 24b | Indicate where the review protocol can be accessed, or state that a protocol was not prepared. | Pages 3-5, lines 135-201<br>Table 1<br>Table 2<br>Figure 1 |
| | 24c | Describe and explain any amendments to information provided at registration or in the protocol. | n.a. |
| **Support** | 25 | Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review. | Page 18, lines 664-665 |
| **Competing interests** | 26 | Declare any competing interests of review authors. | n.a. |
| **Availability of data, code and other materials** | 27 | Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review. | Pages 19-21, lines 676<br>Appendix A<br>Appendix B<br>Appendix C<br>Appendix D<br>Supplementary material (PRISMA 2020 Main Checklist) |

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