# PRISMA 2020 Checklist

| Section/topic | Item No | Checklist item                                                                 | Reported on Page Number/Line Number | Reported on Section/Paragraph |
|---------------|---------|--------------------------------------------------------------------------------|------------------------------------|------------------------------|
| **TITLE**     |         |                                                                                |                                    |                              |
| Title         | 1       | Identify the report as a systematic review.                                   | Page 1/Line 1-3                    | Title                        |
| **ABSTRACT**  |         |                                                                                |                                    |                              |
| Abstract      | 2       | See the PRISMA 2020 for Abstracts checklist (Table 2).                         | Page 3-4/Line 32-60                | Abstract/Paragraph 1          |
| **INTRODUCTION** |        |                                                                                |                                    |                              |
| Rationale     | 3       | Describe the rationale for the review in the context of existing knowledge.    | Page 4-5/Line 65-85                | Introduction/Paragraph 1      |
| Objectives    | 4       | Provide an explicit statement of the objective(s) or question(s) the review addresses. | Page 4-5/Line 86-89                | Introduction/Paragraph 3      |
| **METHODS**   |         |                                                                                |                                    |                              |
| Eligibility criteria | 5 | Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses. | Page 5-6/Line 93-110                | Methods/Paragraph 1-2         |
| 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 6/Line 94-95                  | Methods/Paragraph 1           |
| Search strategy | 7 | Present the full search strategies for all databases, registers and websites, including any filters and limits used. | N/A N/A                            | N/A                          |
| 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 6-7/Line 112-115              | Methods/Paragraph 3           |
| 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. | Page 7/Line 117-121                | Methods/Paragraph 4           |
| 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. | Page 8/Line 141-149                | Methods/Paragraph 7           |
| Data items    | 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 8/Line 149-153                | Methods/Paragraph 7           |
| 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. | Page 8/Line 141-150 | Methods/Paragraph 7 |
|-----------------------------|----|---------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|
| 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. | Page 8/Line 143-146 | Methods/Paragraph 7 |
| Synthesis methods | 13a | Describe the processes used to decide which studies were eligible for each synthesis. | Page 8/Line 101-104 | Methods/Paragraph 2 |
| | 13b | Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions. | Page 8/Line 141-149 | Methods/Paragraph 7 |
| | 13c | Describe any methods used to tabulate or visually display results of individual studies and syntheses. | Page 8/Line 146-150 | Methods/Paragraph 7 |
| | 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. | Page 8/Line 149-153 | Methods/Paragraph 7 |
| | 13e | Describe any methods used to explore possible causes of heterogeneity among study results. | Page 8/Line 150-152 | Methods/Paragraph 7 |
| | 13f | Describe any sensitivity analyses conducted to assess robustness of the synthesized results. | Page 8/Line 146-147 | Methods/Paragraph 7 |
| Reporting bias assessment | 14 | Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases). | Page 8/Line 146-153 | Methods/Paragraph 7 |
| Certainty assessment | 15 | Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome. | Page 8/Line 144-146 | Methods/Paragraph 7 |

**RESULTS**

| 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 9/Line 156-162 | Results/Paragraph 1 |
| Study characteristics | 16b | Cite studies that met many but not all inclusion criteria (‘near-misses’) and explain why they were excluded. | Page 9/Line 158-162 | Results/Paragraph 1 |
| Risk of bias in studies | 17 | Cite each included study and present its characteristics. | Page 9-10/Line 163-177 | Results/Paragraph 2 |
| Results of individual studies | 18 | Present assessments of risk of bias for each included study. | Page 10/Line 179-180 | Results/Paragraph 3 |
| | 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. | Page 12-13/Line 234-243 | Results/Paragraph 10 |
| Results of syntheses | 20a | For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies. | Page 10-13/Line 181-243 | Results/Paragraph 4-10 |
|----------------------|-----|-----------------------------------------------------------------------------------------------|--------------------------|------------------------|
|                      | 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. | Page 10-13/Line 181-243 | Results/Paragraph 4-10 |
|                      | 20c | Present results of all investigations of possible causes of heterogeneity among study results. | Page 10-13/Line 181-243 | Results/Paragraph 4-10 |
|                      | 20d | Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results. | Page 10-13/Line 181-232 | Results/Paragraph 4-10 |
| Reporting biases     | 21  | Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed. | Page 10-13/Line 181-243 | Results/Paragraph 4-10 |
| Certainty of evidence| 22  | Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed. | Page 10-13/Line 181-243 | Results/Paragraph 4-10 |
| DISCUSSION           | 23a | Provide a general interpretation of the results in the context of other evidence.               | Page 13-18/Line 245-350 | Discussion/Paragraph 1-5 |
|                      | 23b | Discuss any limitations of the evidence included in the review.                               | Page 18-19/Line 351-375 | Discussion/Paragraph 6 |
|                      | 23c | Discuss any limitations of the review processes used.                                          | Page 19/Line 373-376    | Discussion/Paragraph 6 |
|                      | 23d | Discuss implications of the results for practice, policy, and future research.                | Page 19/Line 376-382    | Discussion/Paragraph 6 |
| OTHER INFORMATION    | 24a | Provide registration information for the review, including register name and registration number, or state that the review was not registered. | N/A                     | N/A                    |
|                      | 24b | Indicate where the review protocol can be accessed, or state that a protocol was not prepared. | N/A                     | N/A                    |
|                      | 24c | Describe and explain any amendments to information provided at registration or in the protocol. | N/A                     | 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 20/Line 391-392    | Funding/Paragraph 1 |
| Competing interests  | 26  | Declare any competing interests of review authors.                                              | Page 20/Line 388-389    | Conflicts of Interest/Paragraph 1 |
| 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. | N/A                     | N/A                    |
| Section/topic | Item No | Checklist item | Reported on Page Number/Line Number | Reported on Section/Paragraph |
|---------------|---------|----------------|-------------------------------------|-----------------------------|
| **TITLE**     |         |                |                                     |                             |
| Title         | 1       | Identify the report as a systematic review. | Page 1/Line 1-3              | Title                       |
| **BACKGROUND**|         |                |                                     |                             |
| Objectives    | 2       | Provide an explicit statement of the main objective(s) or question(s) the review addresses. | Page 3/Line 33-40           | Abstract/Paragraph 1        |
| **METHODS**   |         |                |                                     |                             |
| Eligibility criteria | 3        | Specify the inclusion and exclusion criteria for the review. | Page 3/Line 42-44           | Abstract/Paragraph 2        |
| Information sources | 4        | Specify the information sources (e.g. databases, registers) used to identify studies and the date when each was last searched. | Page 3/Line 41-42           | Abstract/Paragraph 2        |
| Risk of bias  | 5       | Specify the methods used to assess risk of bias in the included studies. | Page 3/Line 44-47           | Abstract/Paragraph 2        |
| Synthesis of results | 6        | Specify the methods used to present and synthesize results. | Page 3/Line 44-45           | Abstract/Paragraph 2        |
| **RESULTS**   |         |                |                                     |                             |
| Included studies | 7        | Give the total number of included studies and participants and summarise relevant characteristics of studies. | Page 3/Line 48              | Abstract/Paragraph 3        |
| Synthesis of results | 8        | Present results for main outcomes, preferably indicating the number of included studies and participants for each. If meta-analysis was done, report the summary estimate and confidence/credible interval. If comparing groups, indicate the direction of the effect (i.e. which group is favoured). | Page 3-4/Line 48-56         | Abstract/Paragraph 3        |
| **DISCUSSION**|         |                |                                     |                             |
| Limitations of evidence | 9        | Provide a brief summary of the limitations of the evidence included in the review (e.g. study risk of bias, inconsistency and imprecision). | N/A                         | N/A                         |
| Interpretation | 10       | Provide a general interpretation of the results and important implications. | Page 4/Line 57-59           | Abstract/Paragraph 4        |
| **OTHER**     |         |                |                                     |                             |
| Funding       | 11      | Specify the primary source of funding for the review. | Page 20/Line 391-392        | Funding/Paragraph 1         |
| Registration  | 12      | Provide the register name and registration number. | N/A                         | N/A                         |
