| **Section and 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 4 | Above title |
| **ABSTRACT** | | |  |  |
| Abstract | 2 | See the PRISMA 2020 for Abstracts checklist. | Page 1 | Below author |
| **INTRODUCTION** | | |  |  |
| Rationale | 3 | Describe the rationale for the review in the context of existing knowledge. | Page 1 / Lines 22-74 | S. 1/ Paragraphs 1-4 |
| Objectives | 4 | Provide an explicit statement of the objective(s) or question(s) the review addresses. | Pages 1-2 / Lines 75-119 | S. 1 / Paragraphs 5-7 |
| **METHODS** | | |  |  |
| Eligibility criteria | 5 | Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses. | Pages 5-8 / Lines 167-254 | S. 2.4 / Paragraphs 1-7 |
| 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. | Pages 4-5 / Lines 140-165 | S. 2.1 / All Paragraphs |
| Search strategy | 7 | Present the full search strategies for all databases, registers and websites, including any filters and limits used. | Pages 4-5 / Lines 154-165 | S. 2.3. / Paragraphs 1-2 |
| 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. | Pages 7-8 / Lines 223-254 | S. 2.4 / Paragraph 5 |
| 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 8 / Lines 256-264 | S. 2.5 / Paragraphs 1-2 |
| 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 8-9 / Lines 267 - 295 | S. 3 / Paragraph 1 |
| 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. | Pages 9 / Lines 282-295 | S. 3 / Paragraphs 3-4 |
| 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 7-8 / Lines 223-254 | S. 2.4 / Paragraphs 5-6 |
| 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 21-23 / Lines 679-701 | S. 3.5 / Paragraph 1 and Table 4 |
| 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 4-7 / Lines 154-228 | S. 2.2, 2.3 and 2.4 / Paragraphs 1-3 |
| 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 / Lines 256 -267 | S. 2.5 / Paragraphs 1-2 |
| 13c | Describe any methods used to tabulate or visually display results of individual studies and syntheses. | Pages 10-11 / Lines 664-677 | S. 3.4 / Figures 7-9 |
| 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 12 / Lines 315-330 | S. 3.1.1 / Paragraphs 1-2 |
| 13e | Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression). | Page 11 / Lines 327-330 | S. 3.1.1 / Paragraphs 2 |
| 13f | Describe any sensitivity analyses conducted to assess robustness of the synthesized results. | Pages 11-14 / Lines 315 - 446 | S. 3.1.1-3 / Paragraphs 1-5 |
| Reporting bias assessment | 14 | Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases). | Pages 6-8 / Lines 186 - 254 | S. 2.4 / Paragraphs 2-5 |
| Certainty assessment | 15 | Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome. | Pages 7-8 / Lines 223-254 | S. 2.4 / Paragraphs 5-6 |
| **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. | Pages 5-6 / Lines 167-192 | S. 2.4 / Figures 1-2 Paragraphs 1-3 |
| 16b | Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded. | Pages 6-7 / Lines 193-222 | S. 2.4 / Paragraph 4 |
| Study characteristics | 17 | Cite each included study and present its characteristics. | Pages 7-8 / Lines 679-701 | S. 3.5 / Table 4 Paragraphs 1-2 |
| Risk of bias in studies | 18 | Present assessments of risk of bias for each included study. | Pages 7-8 / Lines 223-254 | S. 2.4 / Paragraph 5 |
| 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 21-22 / Lines 679-720 | S. 3.5 / Table 4, Figure 10, Paragraphs 1-4 |
| Results of syntheses | 20a | For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies. | Pages 7-8 / Lines 223-254 | S. 2.4 / Paragraph 5 |
| 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 21-22 / Lines 679-720 | S. 3.5 / Table 4, Figure 10, Paragraphs 1-4 |
| 20c | Present results of all investigations of possible causes of heterogeneity among study results. | Pages 14-17 / Lines 447-547 | S. 3.2 / All paragraphs |
| 20d | Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results. | Pages 17-18 / Lines 549-610 | S. 3.3 / All Paragraphs |
| Reporting biases | 21 | Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed. | Pages 5-6 / Lines 167-192 | S. 2.4 / Figures 1-2 Paragraphs 1-3 |
| Certainty of evidence | 22 | Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed. | Pages 18-19 / Lines 702-720 | S. 3.5 / Figure 10, Paragraphs 4-5 |
| **DISCUSSION** | | |  |  |
| Discussion | 23a | Provide a general interpretation of the results in the context of other evidence. | Page 24 / Lines 722-738 | S. 4 / Paragraphs 1-2 |
| 23b | Discuss any limitations of the evidence included in the review. | Pages 28-29 / Lines 973-1018 | S. 4.1 / Paragraphs 26-33 |
| 23c | Discuss any limitations of the review processes used. | Page 28 / Lines1567-1575 | S. 5/ Paragraph 1 |
| 23d | Discuss implications of the results for practice, policy, and future research. | Pages 28-46 / Lines 1223-1621 | S. 4.3 and 5 / All Paragraphs |
| **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. | Page 46 / Lines 1626-1630 | Acknowledgement |
| 24b | Indicate where the review protocol can be accessed, or state that a protocol was not prepared. | Page 47 / Lines 1639-1641 | Availability of Data and Ethics Approval |
| 24c | Describe and explain any amendments to information provided at registration or in the protocol. | Pages 46-47 / Lines 1631-1638 | Author Contributions |
| 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 46 / Lines 1629-1630 | Funding Statement |
| Competing interests | 26 | Declare any competing interests of review authors. | Page 47 / Line 1641 | Conflicts of interest |
| 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. | Page 47 / Line 1639 | Availability of Data and Materials |

\*As the checklist was provided upon initial submission, the page number/line number reported may be changed due to copyediting and may not be referable in the published version. In this case, the section/paragraph may be used as an alternative reference.