PRISMA-P

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocols (PRISMA-P) is an extension of the PRISMA statement specifically designed for the reporting of systematic review protocols. It aims to ensure transparency and reproducibility in the preparation of systematic reviews and meta-analyses. Here's a summary of its key aspects:

1. Purpose PRISMA-P provides a checklist of items that should be included in a systematic review protocol. This is to improve the clarity, consistency, and completeness of reporting and to minimize bias in the review process.

2. Key Components PRISMA-P includes the following key components:

Title: Clearly state that the document is a protocol for a systematic review or meta-analysis.

Rationale: Justify the need for the systematic review, explaining its relevance and importance in the context of existing literature.

Objectives: Clearly define the primary and secondary objectives of the systematic review.

Eligibility Criteria: Specify inclusion and exclusion criteria for studies, including participant characteristics, interventions, comparators, outcomes, and study designs.

Information Sources: List databases and other sources that will be searched to identify relevant studies.

Search Strategy: Describe the search strategy, including keywords and search terms, and specify the date the search will be conducted.

Study Selection: Detail the process for selecting studies, including screening methods and how disagreements will be resolved.

Data Extraction: Explain the process for data extraction, including what data will be collected and who will perform the extraction.

Risk of Bias Assessment: Specify methods for assessing the risk of bias in individual studies.

Data Synthesis: Describe the planned methods for data synthesis, including statistical techniques for meta-analysis.

Subgroup Analysis: Indicate any planned subgroup analyses and how they will be conducted.

Outcome Measures: Define the primary and secondary outcome measures and their significance.

Funding and Support: Disclose any funding sources or potential conflicts of interest.

3. Importance of PRISMA-P Enhances Transparency: By adhering to the PRISMA-P guidelines, researchers enhance the transparency of their review processes, making it easier for others to replicate their work.

Improves Quality: Following these guidelines can lead to more rigorous and reliable systematic reviews, contributing to evidence-based practice.

Facilitates Peer Review: Clear protocols help reviewers understand the methodology and objectives, leading to more effective peer review.

4. Resources The full PRISMA-P checklist and explanation can be accessed from the PRISMA website. The latest version was published in 2015, and updates or new editions may be available.

Conclusion Utilizing PRISMA-P is crucial for researchers conducting systematic reviews and meta-analyses, as it promotes rigorous methodologies and contributes to high-quality evidence in healthcare and other fields.

Despite clearly established guidelines, recent audits have found the conduct and reporting of systematic reviews and metaanalysis (SRMAs) within neurosurgery to be relatively lackluster in methodological rigor and compliance. Protocols of SRMAs allow for planning and documentation of review methods, guard against arbitrary decision-making during the review process, and enable readers to assess for the presence of selective reporting. To aid transparency, authors should provide sufficient detail in their protocol so that the readers could reproduce the study themselves. Development of our guideline drew heavily from the Preferred Reporting Items for Systematic Reviews and Meta-analyses Protocols (PRISMA-P) initiative.

The objective of Lee and Prevedello article is not to enumerate every detail of this checklist, but to provide guidance to authors preparing their protocol, with examples, for a systematic review in neurosurgery. Particularly, they emphasize on the PICO framework - population (P), interventions (I), comparators (C), outcomes (O) - which is central to constructing a clinical question, defining the scope of the systematic review, defining and prioritizing the primary outcome, to specifying the eligibility criteria, designing the search strategy, and identifying potential sources of heterogeneity. They encourage to make use of this guideline alongside the PRISMA-P 2015 statement, when drafting and appraising systematic review protocols [1)].

1)
Lee KS, Prevedello DM. Systematic reviews and meta-analyses in neurosurgery Part II: a guide to designing the protocol. Neurosurg Rev. 2024 Jul 26;47(1):360. doi: 10.1007/s10143-024-02555-1. PMID: 39060698.