Editorial

This issue of *JPRM* contains "Guidance to best tools and practices for systematic reviews". This paper is being published simultaneously in multiple journals. It aims to provide a reference point for review authors, peer reviewers, and editors to improve their understanding of the rationale behind current methodological expectations of a systematic review, with or without meta-analysis. Systematic reviews are important across biomedicine but very often they are subpar and not trustworthy; this has been documented across diverse medical subspecialties including pediatric rehabilitation. An example is a recent study that found low or very low confidence in almost all recent systematic reviews reporting on interventions for children with cerebral palsy [1].

As editors and peer reviewers of various journals, we find the ongoing poor compliance of authors and journal editors with review expectations discouraging. We sought to identify practical solutions but discovered that, while guidelines for sound conduct and reporting of systematic reviews are available from many sources, they do not appear to be routinely and/or widely applied. The more we searched for comprehensive guidance in a single place, the more we realized we might have to create it.

In our Guidance, multiple tables and figures summarize key concepts and wherever possible link to additional resources. The extensive references allow interested readers to locate and parse the original work on which our guidance is based. The Concise Guide is a quick reference to the multiple tools currently recommended for development, reporting, and critical appraisal of a systematic review. We emphasize the difference between a reporting guideline (PRISMA 2020) [2] and a methodology which will guide the requirements for specific types of reviews. We provide recommendations for specific tools for risk of bias evaluation for specific types of literature. We emphasize that tools that evaluate systematic reviews such as AMSTAR 2 [3] and ROBIS [4] are also not methodologies, but instead inform authors on ways their final work might be reviewed or judged by others.

One of the six sections of the Guidance focuses on assessment of the overall certainty of evidence of a body of literature. This is a relatively new requirement of systematic reviews per PRISMA 2020; it involves a number of core concepts and processes for which we recommend the GRADE approach [5]. Authors and peer reviewers may take advantage of extensive references on GRADE along with their online resources and workshops. In the GRADE framework, the overall certainty of the evidence rating is the culmination of a systematic review. We caution authors, however, that systematic reviews should not superficially provide facile recommendations for or against interventions, but instead summarize the evidence available to answer the research questions posed.

This Guidance is intended to improve common systematic review problems, but we also hope it provides the motivation for more advanced, serious methodological training in evidence syntheses. We should all be committed to the goal of producing trustworthy systematic reviews given that practice guidelines designed to improve patient care increasingly depend on them and their overall impact on healthcare and medical decision-making can be major.

References

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