

Following PRISMA in a Systematic Review: Obligation or Authority?

Dear Editor,

Properly reporting of systematic reviews can improve evidence-based medicine, evidence-based management, and evidence-informed policymaking in the health care system.^[1-3] Various checklists have been developed to improve the reporting of these studies.^[4-6] One of the most important guide in this field is Preferred Reporting Items for Systematic reviews and Meta-analyses (PRISMA) statement consisting of seven topic sections and 27 items designed by the PRISMA Group.^[7] Although the use of this checklist is not mandatory in systematic review and meta-analysis reports, researchers should adhere to its components if used.

We recently read with interest a systematic review that was published in the International Journal of Preventive Medicine by Hasanpour Dehkordi *et al.* in September 2019.^[8] According to the authors, this article was based on the PRISMA statement. Notwithstanding the interesting results, there are several problems in reporting that can be of interest to authors, readers, reviewers, and journal editors. These problems are outlined below:

- It was not exactly clear whether the study was just a systematic review or involved meta-analysis. The term “meta-analysis” was only used in the abstract and methods section, but there was no trace of meta-analysis and its results in the rest of the paper. Based on the PRISMA, if the researchers have conducted a systematic review and meta-analysis, both the terms should be mentioned in the title
- One of the parts that the PRISMA statement recommends should be mentioned in the abstract is “study appraisal” and “synthesis method”. None of these were included in the abstract of this article
- The number of included articles should be reported in the results. Although, the researchers have mentioned this number in the method, according to the PRISMA it should be stated in the results. Also, according to the PRISMA, the “Flow diagram” should be reported in the results
- Based on the PRISMA, the researcher should mention the search strategy for at least one database, but no search strategy WAS mentioned for any database
- Researchers had stated that they used the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist to evaluate the quality of the articles. This sentence was under the “study selection” section, and it was not based on the PRISMA as the “quality appraisal” is a separate section according to items 12 and 15 of the PRISMA statement

- The data extraction form should be prepared in advance, and also the data extraction items should be mentioned. No “data items” in this study were mentioned in the data extraction section of this study
- The order of writing of the results of this study did not match with the PRISMA items. According to the PRISMA, the results section has several items and was not mentioned in this study
- Finally, there was no “limitation” section in the discussion. Based on the PRISMA, study limitations must be mentioned before the conclusion.

Given the lack of a specific Problem/Patient/Population, Intervention/Indicator, Comparison, Outcome (PICO) for the study it was difficult to comment on the results of the study. We hope that mentioning these problems can help researchers improve the quality of their article.

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Conflicts of interest

There are no conflicts of interest.

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