



# Why are systematic reviews that fail to meet PRISMA reporting requirements still being published?

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## BACKGROUND

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were developed to improve transparency in systematic review (SR) reporting.<sup>1</sup> A clearly reported, replicable SR enables the reader to be confident of its results and conclusions. As information specialists, our focus is with adherence to the PRISMA reporting requirements of SR search methods, namely:

**#7 Information sources:** Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched<sup>1</sup>

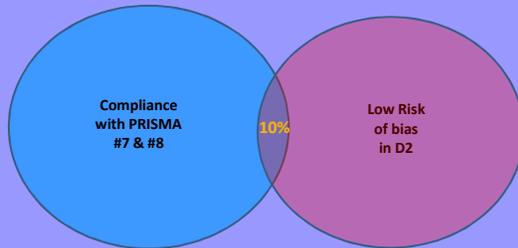
**#8 Search:** Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated<sup>1</sup>

Using KSR Evidence<sup>2</sup>, a database of SRs which includes a subset of SRs critically evaluated using the ROBIS (Risk of Bias) tool<sup>3</sup>, we took a random sample (n=505) to investigate compliance with sections #7 and #8 of PRISMA.

## RESULTS

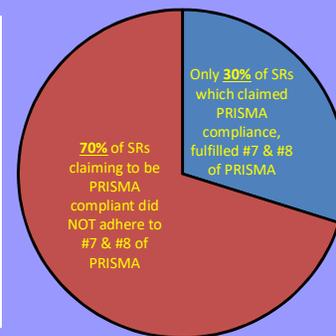
Do systematic reviews that comply with PRISMA #7 and #8 have a low risk of bias in Domain 2 (D2) (Identification and Selection of Studies) using the ROBIS tool?

We wanted to see if there was a correlation between a low risk of bias in D2 of the ROBIS tool and compliance with PRISMA #7 & #8. It did not follow that if an SR was well-reported, it would also search a wide range of resources using a sensitive and comprehensive search strategy. We found that only **10%** of reviews were of a high enough standard to have both a low risk of bias in D2 and to comply with PRISMA #7 & #8.



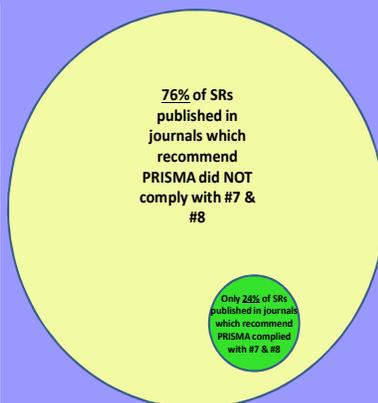
How many systematic reviews which claim to follow PRISMA are describing information sources and presenting search strategies according to the requirements of PRISMA?

238 SRs claimed to be reporting search methods in line with the requirements of PRISMA. However, we found that only 71 of these 238 SRs described information sources adequately and *also* presented a replicable search strategy.

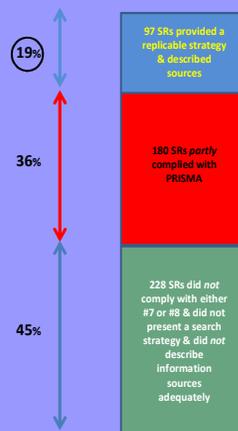


How many systematic reviews which fail to meet PRISMA #7 and #8 are published in journals recommending PRISMA compliance?

238 SRs in our sample were published in journals which recommend that SRs be reported in accordance to PRISMA. 97 of these SRs complied with #7 and described information sources clearly. 84 SRs complied with #8 and presented a reproducible search strategy. However, only 57 SRs fully complied with both #7 and #8 of PRISMA.



How many systematic reviews complied with #7 & #8 of PRISMA



199 SRs in our sample described information sources adequately with details such as database, host, date span of database and date searched (#7). 174 of all the SRs which we looked at provided a search strategy which it was possible to replicate (#8). Altogether only **19%** complied with both #7 & #8 and **45%** complied with neither #7 or #8.

## CONCLUSIONS

81% of SRs in our sample did not comply with PRISMA #7 and #8. 238 SRs claimed to be conducting SRs in accordance to PRISMA but only 71/238 (30%) of these were compliant in #7 and #8. 238 SRs were published in journals which require PRISMA but only 57 (24%) of these were compliant. To ensure compliance with PRISMA #7 and #8, information specialists should conduct the searches and write the methods. Information specialists should be part of journals' review process for SRs.

## REFERENCES

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