Assessing Spin Bias in a sample of Chilean Systematic Reviews (SRs) of interventions published between 2017-2021: few SRs, Low Quality, and Spin Bias presence

Background: Spin bias occurs when results of a study are misinterpreted throughout the report, suggesting contradictory

conclusions. Higher risk of spin bias may lead to inaccurate clinical recommendations.

Methods

Scoping review







Revista Médica de Chile published between 2017-2021

PRISMA

Identification systematic Of reviews intervention

Data extraction AMSTAR-2 PRISMA

Assessment of the presence of 9 most severe types of spin in abstracts by comparing abstracts with full reports in each study

4 types of spin bias were present in 3 of the 6 abstracts

Type of spin bias n =**N=6** Selective reporting or overemphasis on harm outcomes or analysis favoring the beneficial 2 effect of the experimental intervention Conclusion claims the beneficial effect of the experimental treatment despite high risk of bias in 2 primary studies

Results

Elegibility Included Screening N=21 N=1056

2 Reviews declared adherence





Conclusion extrapolates the review's findings from a surrogate marker or a specific outcome to the global improvement of disease

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Conclusion claims the beneficial effect of the experimental treatment despite reporting bias

Conclusions

- Less than 1% of the articles published in Revista Médica de Chile between 2017-2021 were SRs.
 - Most of the interventional SRs published in Revista Médica 2017-2021 Chile critically between have de IOW methodological quality and do not declare adherence to PRISMA guidelines.

- Half of the interventional SRs had at least one type of spin bias on their abstracts.
- The number of studies included did not allow us to explore

associations bias, between reporting quality, spin

Figure 1: Sources of funding among systematic reviews

methodological quality, and COI.

Limitation: The spin bias assessment tool used is not widely validated and only applicable to interventional SRs

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