

INTRODUCTION

In 2017 alone, \$12.7 billion was spent on clinical trial research, according to NIH. The basis for conducting these trials is often questionable, absent, or based in industry interest¹. This research waste can be avoided by using systematic reviews (SR's), which provide summaries of existing research and can be used to formulate effective research questions that have not been answered. In this study, we analyzed the scientific bases of randomized controlled trials (RCT's) in Oromaxillofacial Surgery (OMFS) journals to determine if SR's formed the basis of the research question.

OBJECTIVES

- Analyze randomly controlled clinical trials in OMFS journals for presence of SRs.
- Determine if SRs were used as basis of the trial.
- Characterize the source of funding, type of intervention, and type of trial conducted.
- Determine if variables were associated with the presence of SRs

METHODS

This study analyzed RCT's in OMFS journals using the following criteria:

- Top 10-ranked journals by h5 index as of October 10, 2018.
- Published January 1, 2015 - December 31, 2017

Two researchers independently screened each study to extract the following data:

- Location of SR cited.
- Number of SRs cited.
- Type of trial.
- Type of intervention.
- Source of funding.
- Number of participants.

RESULTS

SR Citations vs. SR Justification for Study

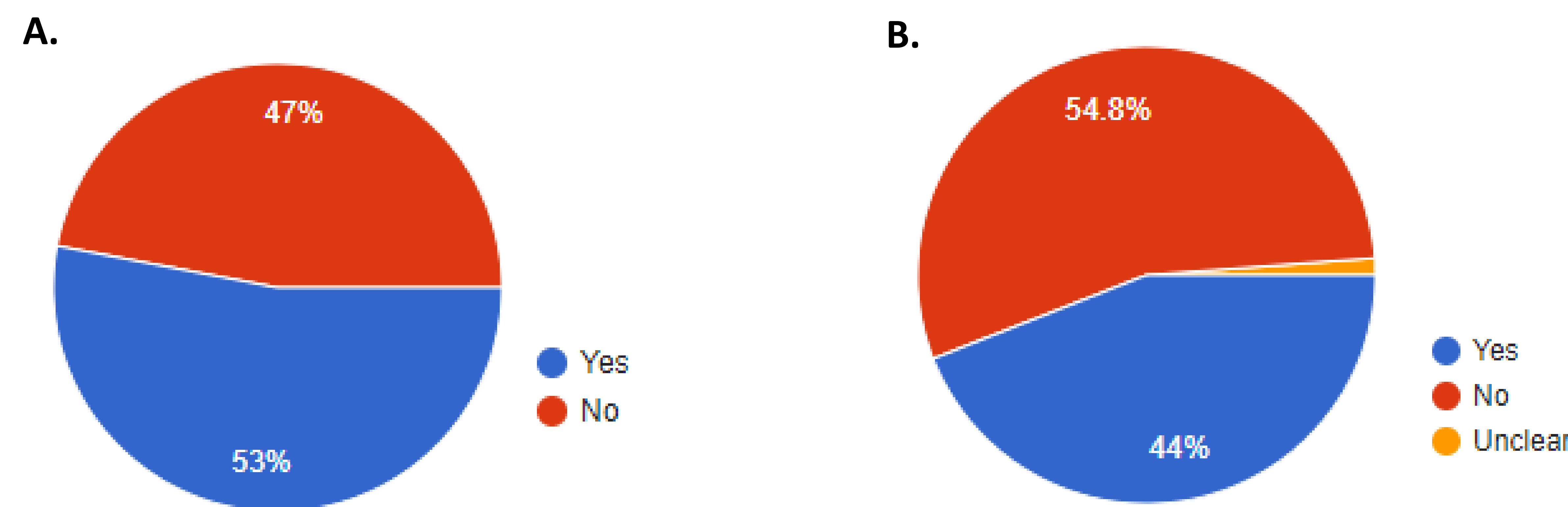


Figure 1: A) Nearly half of the RCTs cited at least one SR in the introduction of the paper as can be seen above. B) But they were not always used to form the basis of the study. Less than half of the papers that cited the SR used the SR review as justification of the trial. 95% C.I.: 0.531+- 0.041 (0.490-0.572).

RCT Funding vs SR Justification for Study

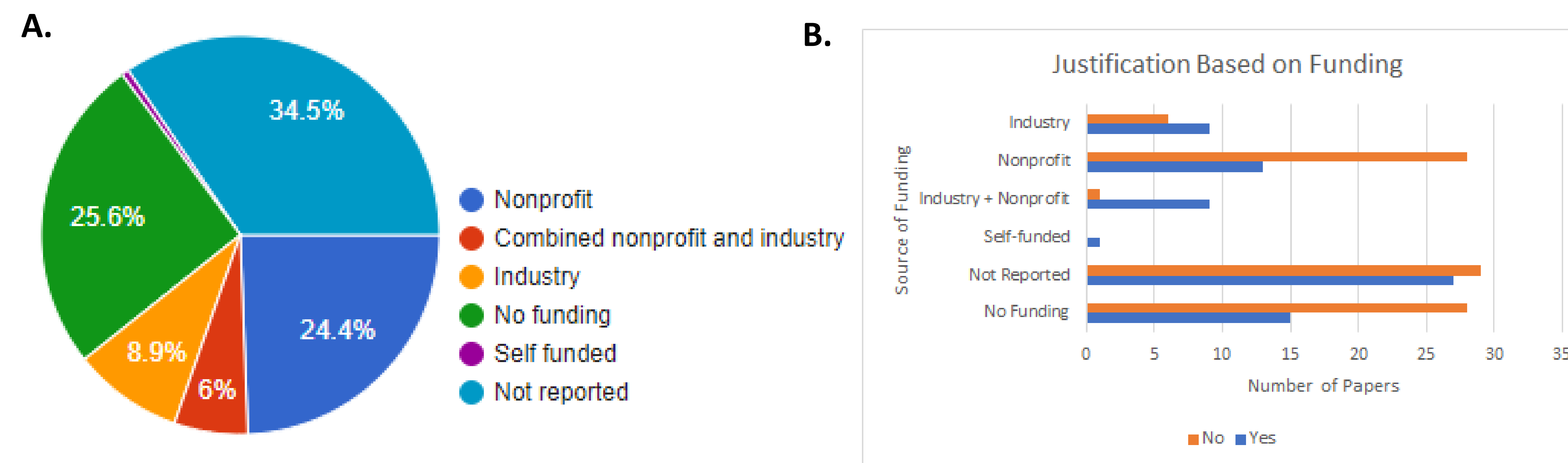


Figure 2: A) The plurality of RCTs, 34.5%, did not report their funding with the next highest not receiving funding at 25.6%. The lowest reported values were self funded and combined nonprofit and industry. B) Interestingly, the funding source with the highest occurrence of RCTs using SRs as justification were from combined Industry and Nonprofit. Nonprofit and no funding had the lowest occurrence of papers being justified by SRs.

CONCLUSION

Roughly half of the RCTs analyzed in this study cited an SR but less than half of those cited them as justification. Although there might have been justifications for the studies, they chose not to use the SRs. In some cases other RCTs were used as justification. As for how justification relates to funding, the highest use of SRs as justification were from trials funded by both a nonprofit and industry. This could be due to higher standards set forth by industry as they were the next highest for using SRs as justification. The lowest amount of justification was done in the nonprofit and no funding sectors.

REFERENCES

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