

HOW TO REVIEW A PAPER TO ACTA REUMATOLOGICA PORTUGUESA

Elsa Vieira de Sousa

Editor-in-Chief

Acta Reumatológica Portuguesa

2015

I have been invited to review a manuscript...



BEFORE WRITING THE REVIEW

At first glance

- Is this topic relevant to our journal?
- Does it address an important subject?
- Is there a clear hypothesis or aim stated?
- What does the study adds to the current knowledge?
- Is there a clear clinical message?

At first glance

- Which category does this manuscript best conform to?
- Is the methodology adequate?
- Is the study original? Has it been previously published?
- Is the study timely?
- Are there any potential biases in reviewing this manuscript?

ABSTRACT

Abstract

- The abstract must appropriately summarize the manuscript.
- Should be understood without reading the manuscript.
- Discrepancies between the abstract and the main body of the manuscript should be depicted.

Abstract

- The abstract must contain the aim/objectives stated in a clear (not vague) and intelligible language.
- For original articles the authors should include:
 - Objectives: the major objective of the study
 - Methods: how the study was performed
 - Results: the study findings
 - Conclusions: report whether the major goal was met.

INTRODUCTION

Introduction

- Do authors provide a rationale for performing the study based on a review of the literature?
- Is the purpose of the study clearly explained?
- If the manuscript is an original article, is the hypothesis well defined?
- Is the introduction succinct?

Introduction

- The purposes of the introduction are:
 - to provide the rationale for the study
 - to explain the study's goals
- The reviewers must address if the manuscript will bring a true new contribution to the medical knowledge:
 - does this manuscript cover an important topic?
 - has the research question been previously answered (was the topic of the manuscript well covered before)?

METHODS

Methods

- Inadequate methodologies can lead to unreliable results.
- Ethical requirements need to be guaranteed
 - Has confidentiality been maintained?
 - Have accepted norms for the ethical treatment of animal or human subjects been respected?
 - Informed consent (if applicable)
 - Does the article copies previously published work? (Plagiarism)
 - Are the results in any way fraudulent?

Methods

- Are the methods reproducible?
 - Could other investigators reproduce the study using the methods as outlined and are they stated clearly?
- Are the methods suitable for the research question?
 - Do authors justify their choices for the study design (e.g. statistical methods, outcome measures, imaging techniques, etc)?
 - Do methods allow the stated hypothesis to be tested?

Methods

- Which type of research is it?
 - Observational/experimental?
 - Single case/case series/case control/cohort?
 - Randomized, controlled and blinded?
 - Meta-analysis?
 - Prospective or retrospective?
 - Cross-sectional or longitudinal?
- Is there summary information about the patient or experimental group(s), including length of follow up?

Methods

- Statistical considerations:
 - Sample size calculation: are there enough patients/experiments to draw clear conclusions?
 - Have the correct tests been used to compare outcomes?
 - Is there a clear description of the applied tests ?

Formal guidelines for publishing clinical trials & systematic reviews

CONSORT for clinical trials

- Flow diagram, exclusions, power calculations, concealed random allocation, patients lost to follow up, etc.

Ann Intern Med 2001;134:663-94

QUORUM for systematic reviews

- Inclusion and exclusion criteria, publication bias, etc.

Lancet 1999;354:1896-900

RESULTS

Results

- Are the results clearly explained?
 - Poorly executed analysis of the data
 - Poorly organized results
- Does the order of presentation of the results parallel the one of the methods?
- Are the results reasonable and expected, or are they unexpected?
- Are there results that were not introduced in the Methods section?

DISCUSSION

Discussion

- Is the study discussed against the background of current knowledge (include discrepancies)?
- Are the authors' conclusions based in the study results?
- Is there a clear clinical or scientific message?
- Was the initial hypothesis verified or falsified? Or if no hypothesis was proposed, was the research question answered?
- Are the results interpreted accurately?

Discussion

- If there are unexpected results, do the authors adequately discuss them?
- Do the authors note limitations of the study? Are uncertainties and biases discussed? Are there additional limitations that should be highlighted?
- Is there either missing or duplicate information?
- Is the discussion concise? Where should it be shortened?

TABLE AND FIGURES

Tables and Figures

- Accurate with a clear structure and presentation?
- Are data consistent with the body of the paper?
- Are figures and graphs appropriate and labelled?
 - Are they understood without referring to the remainder of the manuscript?
- Avoid duplication of data

Tables and Figures

- Do the figures and graphs adequately show the important results?
- Would a different figure better illustrate the findings?
- Do arrows need to be added to depict important or subtle findings?

TITLE

Title

- Does the title convey the content of the manuscript accurately?
- Should not contain acronyms
- As concise as possible

REFERENCES

References

- Does the reference list respects the journal' guidelines?
- Does the reference list contains errors?
- Are there important references that are not mentioned and that should be noted?
- Are there more references than are necessary?