



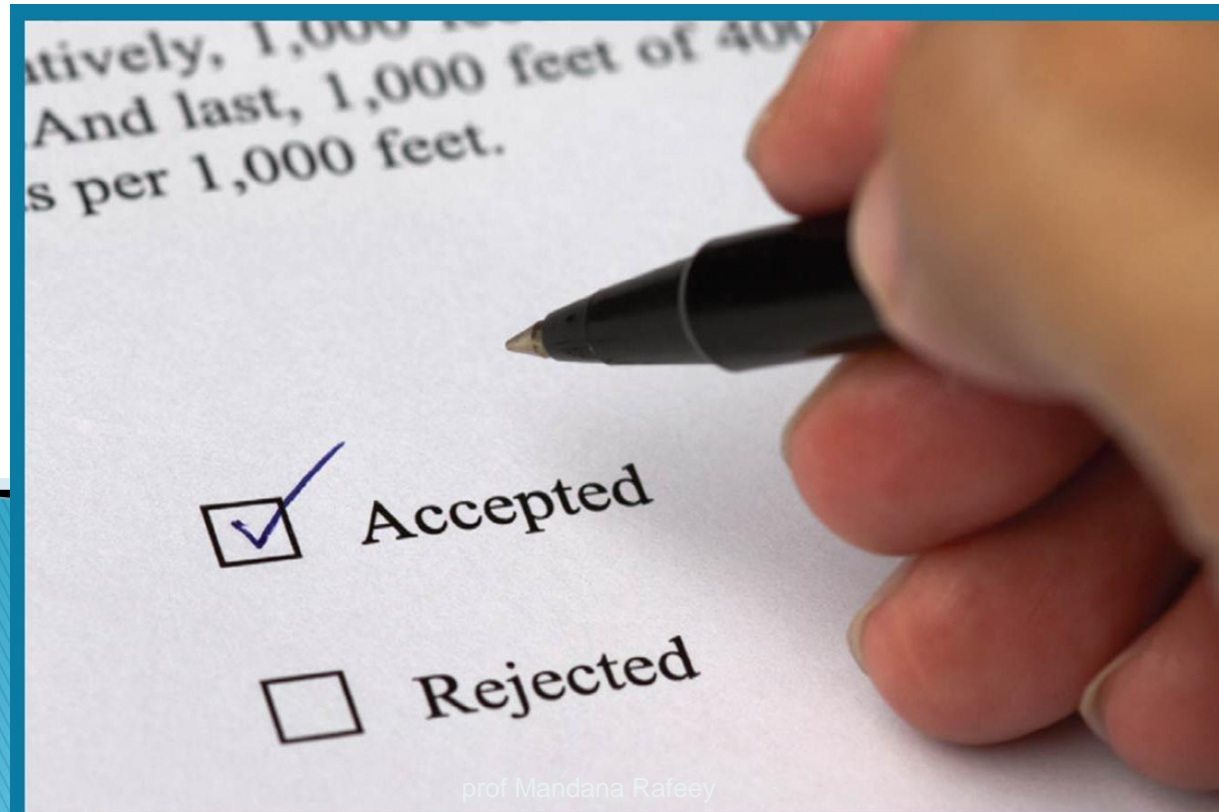
The Peer Review Process

Mandana Rafeey.MD.

Adapted from a presentation by
Richard Henderson, Elsevier Hong Kong

- ▶ Peer review has a long history; it has been a part of scientific communication since the appearance of the first journals in the 1660s.
- ▶ The Royal Philosophical Transactions is accredited as being the first journal to introduce peer review.

Why is peer review a part of the scholarly publishing process?



- ▶ What is the history of peer review and what role does it serve?
- ▶ Why should I consider being a reviewer?
- ▶ How do I carry out a proper and thorough review?

Background on Peer Review

- ▶ Cornerstone of the whole scholarly publication system
- ▶ Maintains integrity in the advancement of science
- ▶ Well-established process over 300 years old

Peer Review has two key functions:

- ▶ Acts as a filter by ensuring only good research is published. Helps to determine validity, significance and originality
- ▶ Improves the quality of the research submitted for publication by giving reviewers the opportunity to suggest improvements

Different Types of Peer Review

- ▶ 1. “Single blind” peer review
- ▶ 2. “Double blind” peer review
- ▶ 3. Open peer review

Who Conducts Reviews?

- ▶ Scientific experts in specific fields and topics
- ▶ • Young, old, and mid-career
- ▶ • Average number of completed reviews is 8 per year*

Why Do Reviewers Review?

Fulfill an academic 'duty'

- Keep up-to-date with latest developments
- Helps with their own research
- Build associations with prestigious journals and editors
- Remain aware of new research
- Develop one's career



Peer-review Process

What to look for

1. Appropriateness for the journal

- Is the topic relevant to the journal?
- Is the topic timely?
- Is the topic significant?
- Is the study unique? If so, How?

- ▶ Is this manuscript of interest to readers of the journal?
- ▶ Is there a clear hypothesis or aim?
- ▶ Are the study and manuscript of good quality?
- ▶ What does the study add/or is there a clear clinical message?

Get a first impression from the abstract

Is there a clear hypothesis / aim?

- ▶ This should be **stated** in the abstract
- ▶ **Justified** in the introduction
- ▶ **Established** before results became known
- ▶ **Investigated** with suitable methods
- ▶ Conclusions **justified clearly** against the results and what is already known about this topic

Peer-review Process

What to look for

2. What type of paper/research is it?

- If research, how is it structured?
 - Randomized, controlled, blinded Meta-analysis?
 - Retrospective?
 - Case series or single case

Editors and Peer-review Process

Editors/Peer Reviewers look for:

Did the author follow the instructions of the journal?

- Correct Number of Authors?
- Conflict of Interest/Disclosure Statement?
- Copyright release signed?
- Informed consent (if applicable)/Ethics considerations

Peer-review Process

Did the author follow the Instructions of the journal?

- Is the article format correct?
 - Structured abstract?
 - Correct article format (Abstract, Introduction, Methods, Results, Discussion, Conclusion, Refs?)
 - Are References in correct format?

Peer-review Process

Peer Reviewers look for:

Are the technical aspects correct?

- Research Structure:
 - Correctly described and performed?
- Statistics:
 - Correct analysis?
 - Accurate interpretation?
 - Clear presentation?

Peer-review Process

Editors/Peer Reviewers look for:

Technical aspects, continued

Tables and Figures:

- Accurate and clear structure, presentation, and presentation?
- Do the numbers add up?
- Are the data consistent with the body of the paper?

Peer-review Process

Editors/Peer Reviewers look for:

Technical aspects, continued

Tables and Figures:

- Abstract & Body of paper
 - Do number of patients, other data match?
 - Conclusions consistent?

Re-read the title & abstract

- ▶ Do these convey the content of the manuscript accurately?

Topical literature & duplicate publication

- ▶ *If you are reviewing for an some journal:* Scopus or other site will help you! (You will be able to click straight through to Scopus from journal review system, EES).
- ▶ *Otherwise* use the resources available to you through your institution's library to find topical literature & can alert you of possible duplicate publication/plagiarism

Get writing

- ▶ You are now ready to write a review of the manuscript
- ▶ Write constructive criticisms for revisions
- ▶ If you have a conflict of interest, please state this and remember that scientific debate can be enhanced by controversies

Sending Report to the Editor

- ▶ Anticipate the deadline
- ▶ Summarize the article at the top of your report
- ▶ Please give detailed and constructive comments (with references, whenever possible) that will both help the editors to make a decision on the article and the authors to improve it.

- ▶ The report should be comprehensive
- ▶ Explain and support your judgments
- ▶ Make a distinction between your own opinions and your comments based on data
- ▶ Be courteous and constructive

Peer-review Process

REJECTION:

Most journals accept 30% or less (NEJM, BMJ accept ~ 10%)



Reviewer makes recommendation to accept / revise / reject to editor / editorial board

Editor makes final decision based on reviewers' comments and informs author



