An Introduction to
Peer Review

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Executive Editor, IJKD
Executive Editor, Urology Journal
What is Peer Review?

Asking experts “How important and how good is this paper, and how can it be improved?”

AMA Manual of Style 10th ed. p. 304

Evaluation by experts of the quality and pertinence of research of other experts in the same field

MEDLINE, MeSH

A negotiation between the author and journal about the scope of knowledge claims that will ultimately appear in print

What is Peer Review?

In Persian

 dağı ى همّاتا
فرهنگستان علوم پزشکی

History

18th century  Introduced in Royal Societies
World War II  Became Common practice
1980s  underwent appraisal
What is Peer Review?

Subjective, prejudicial, crude, offensive, and secretive

Kassirer and Campion. JAMA 1994

Censorship!
Why Peer Review?

• To vote for or against publishing a paper
• To select the best papers for the sake of patients!
• To set a Quality Assurance system
Why Peer Review?

• To vote for or against publishing a paper
• To select the best papers for the sake of doctors and patients!
• To set a Quality Assurance system
• To help an editor who is not expert in everything
• To help authors improve their work
Communication Network of Scholars

Editor -> Reviewer -> Author

Scientific Literature

Journals
Why Peer Review?

- To vote for or against publishing a paper
- To set a Quality Assurance system
- For the sake of doctors and patients!
- To help an editor who is not expert in everything
- To help authors improve their work!
- To Slow down science!
- To pretend that a journal is scientific!
- To escape responsibility of rejections!
- To revenge!
What is Peer Review?

Asking *experts* [peers] “How *important* and how *good* is this paper, and how can it be *improved*?”

AMA Manual of Style 10th ed. p. 304
Benefits for Reviewers?

- Updating knowledge
- Reading papers before public release
- Practicing critical appraisal (EBM)
- Learning how to do research
- Learning how to write a paper
- Paying of your debt as a potential author!
- Enjoying the honor to work with a famous journal (IJKD)!
Peer Review: Effective?!

NO!!

Frishauf. The end of peer review and traditional publishing as we know it. Medscape J Med. 2008
Smith. Peer review: report or revolution: time to open up the black box of peer review. BMJ. 1997
LaPorte et al. Death of biomedical journals. BMJ. 1995
...


What is Peer Review?

“A non-validated charade whose processes generate results little better than does chance”

Peer Review: Effective?!

• YES!
  …

Second opinions > revision opportunity > editing > … Results must be better!

Until further notice, peer review is the best available!
Peer Review: Effective?!

NO!!

“It is ironic that, in an era known for the great speed and availability of information – where we could choose to blog our results rather than submit them to journals – publishing papers seems slower and more painful than ever before.”

The promise of peer review
Siegel, Editor-in-Chief, Disease Models & Mechanisms
Alternatives to Peer Review

Comments after publication
Readers should choose (EBM)
Meta-analysis & Systematic Review
Cochrane Reviews
Citations

Until further notice …
Who is a Good Reviewer?

• **Age?**
  < 40 years

• **Knowledge?**
  Epidemiology and Statistics

  Evans et al. J Gen Intern Med. 1993

**Conclusion:**

Experience and insight into subject are not enough!

**Experts vs Peers**
How to Improve Reviews?

• Ideal:
  – Scholars are fully trained before graduation

• How to train reviewers?
  – Workshops (?)
  – Manuals (?)

• Other measures?
  – Checklists
  – Practice and experience (?)
  – Feedback from journals
  – Recognition of best reviewers
  – Make reviewers take the journal seriously!
Peer Review Step 1

You have got an email …

*Do not Rush!*

- Do you have time?
- Do you have the knowledge/experience?
- Any conflict of interest?
- Don’t you enjoy reviewing?

*Hesitation? … Say no! but say it!*

*Limbo is worse than Inferno for an editor!*
Peer Review Step 2

You reply, “Yes I can…”

• Estimate the time you need
  Median time needed: 2.4 h *Yankauer. JAMA. 1990*

• Schedule the task
  Mostly done by 24 days *Van Rooyen et al. JAMA. 1998*

• Deadline passed?
  Please, please contact the editor …
Peer Review Step 3

Your are now going to …

Read the paper…
  Take notes on its margin…
  Read again some days later…
  Write your comments…
  Check your comments with a checklist…
  Now decide on your overall suggestion…
  Send your comments.

*There is no standard or systematic process. Find your own way!*
Dear Dr Editor, IJKD

We would like to invite you to review a manuscript submitted to the Iranian Journal of Kidney Diseases, entitled "Revised-Dyadic Adjustment Scale: a Reliableie tool for Patients under Hemodialysis." The submission's abstract is inserted below, and I hope that you will kindly consider undertaking this peer review for us.

Please log into the journal web site by 2009-08-05 to indicate whether you will undertake the review or not, as well as access the submission and to record your review and recommendation. The web site is http://www.ijkd.org

The review itself is due 2009-08-19. It would be appreciated if you would send your comments by this date. However, if you need more time, please inform us by replying this email.

To access the online review system and the full text of the manuscript please go to: http://www.ijkd.org/index.php/ijkd/reviewer/submission/389?key=E8wTE75E

You can go directly to your peer review page by clicking on the above address (no password needed).

Alternatively, you can go to the journal website and log in. Then you should choose your role by clicking on reviewer. If you are new to the journal website, you must have received an email containing your username and password, and if you had been registered before, you can use your own username and password. If you do not have your username and password for the journal's web site, you can use this link to reset your password, which will then be emailed to you along with your username.

http://www.ijkd.org/index.php/ijkd/login/resetPassword/admin?confirm=e72780

A guide to review process is available at http://ijkd.org/files/ReviewSteps.pdf and also below this email.

A checklist of key points for peer review is available at: http://www.ijkd.org/files/ReviewChecklist.pdf

Thank you for considering this request.

Mohsen Nafar, MD
Active Submissions

ACTIVE ARCHIVE

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#68 Review

**Submission To Be Reviewed**

**Title:** Revised-Dyadic Adjustment Scale: a Reliable tool for Patients under Hemodialysis

**Journal Section:** ORIGINAL | Dialysis

**Abstract:**

**Background:** Although Dyadic Adjustment Scale (R-DAS) has been widely used as an indicator of the quality of marital relation, no report is available on the reliability of this measure in patients with end stage renal disease (ESRD). The present study tests R-DAS internal consistancy in Iranian ESRD patients under chronic hemodialysis (HD).

**Methods:** The previously translated Persian version of the R-DAS was used in this study. The questionnaire was administered to 135 patients with ESRD being treated with HD. Statistical analysis was carried out using Chronbach’s alpha to test the internal consistancy of the R-DAS scale.

**Results:** The Cronbach’s alpha was found to be 0.898, 0.883, 0.779, 0.827, and 0.836 for the total score, dyadic consensus, affective expression, dyadic satisfaction and dyadic cohesion, respectively. All scores of Cronbach’s alpha
Review Schedule

- Editor's Request: 2009-07-29
- Your Response: —
- Review Submitted: —
- Review Due: 2009-08-19

Review Steps

1. Notify the submission's editor as to whether you will undertake the review.
   - Response: Will do the review  Unable to do the review

2. If you are going to do the review, consult Reviewer Guidelines below.

3. Click on file names to download and review (on screen or by printing) the files associated with this submission:
   - Submission Manuscript: 68-74-3-HY.PDF 2009-05-02
   - Supplementary File(s): None

4. Click on box to enter (or paste) your review of this submission.

5. In addition, you can upload files for the editor and/or author to consult:
   - Uploaded files: None

6. Select a recommendation and submit the review to complete the process. You must enter a review or upload a file before selecting a recommendation.
   - Recommendation: Choose One

Reviewer Guidelines

The reviewers' contribution to the processing of the manuscripts is highly appreciated. Reviewers will receive a letter of certifying their peer review activities on a regular basis on upon request.
Reviewer Guidelines

The reviewers' contribution to the processing of the manuscripts is highly appreciated. Reviewers will receive a letter of certifying their peer review activities on a regular basis on upon request.

The editor would appreciate if you do the review task in the time due; however, if more time is required or if you are not able to review the manuscript, informing the editor will be extensively helpful.

Please click here to see a checklist of some key points in a good paper, which will be helpful while you are reviewing the manuscript. The online review system would be easy if you follow the steps below (PDF):

Access to the online review system

You can have access to the review page and the manuscript via 2 ways:

1. You can click on the link in the email you received to go directly to the web site.

2. Alternatively, you can log in to the journal's website (www.jkd.org) and select your role as "reviewer" to see the manuscript(s) waiting for your peer review. Please click on the title of the manuscript.

If you do not have your username and password information, please ask this via email to info@jkd.org. If you have forgotten your password, click on "forgot your password?" and submit your email address to receive the information.

Accepting/Declining Review Task

1. You can see the title and abstract of the manuscript and the scheduled deadline for review.

2. In step 1, under the title "Review Steps" you should choose either of the email icons beside "will do the review" or "unable to do the review."

3. A prepared email appears. You can modify it if you wish and click on "send" at the bottom. If you skip the email, your decision will be sent to the system, but no email will be sent to the editor.

4. If you need more time to review, please mention it in the email.

Starting Review

1. In step 3 of the Review Steps, you can download the manuscript file(s). Please download them, read them and prepare your comments. In this step, you may log out and come back when your comments are ready to be submitted.
General Tips

What is “important”?  
• Judging the importance is subjective.  
• Importance of subject or results is not enough!  
• Importance of subject or results is not necessary (?)!

What is “good”?  
• A sound methodology is necessary but not enough!  
• Ethics!  
• A good presentation …?
General Tips

What is “novel”?  
• First in the World?  
• First in Iran?

Case Study:  
• Reviewer 1: it is not a new entity!  
• Reviewer 2: it is a novel case/finding/…!  
  Why?  
  ... A reviewer is always right!
General Tips

3 Main Components of Your Review

• Comments to Author
• Comments to Editor
• Overall Suggestion
General Tips

How to write to author?

• Write a summary of what you read.
• Indicates the strengths of the manuscript.
• Classify your comments (major vs minor, specific vs general, and according to the order of manuscript’s sections)
• Locate where your comments points to in manuscript.
General Tips

How to write to author?

• Try to be objective.
• Explain your comments in detail.
• Provide references for any thing that is not your own idea.
• Be decisive and frank but take a neutral tone.
• Use latest and most valid articles, systematic reviews, Cochrane library, UptoDate (?), … .
• Do not refer to text books (?).
General Tips

How to write to author?

• Do not try to directly convince the rejection.
• Put yourself in author’s shoes: what would you respond?
• Do not judge the knowledge or ability of author.
• Use “you” instead of “authors.”
• Assume that the author knows you.
• You are a “reviewer” not “referee.”
General Tips

How to write to editor?
• Write the strengths first.
• Repeat your major concerns.
• Rationalize your suggestion if it is “accept as is” or “reject.”
• Set your suggestion with your comments to author.
• Remember that your comments are a second opinion and not a vote.
• Provide enough evidence if you suspect misconduct.
General Tips

How to select overall suggestion?

• Consider the policy of journal.
• Try to be consistent in your decision discipline.
• Consider the chance of improvement after revision.
• Be strict if there is an uncorrectable flaw that questions validity of results.
General Tips

What to do with a very poor manuscript?

• Still you have to be constructive!
• Tell the author what to do when repeating the study, analyses, …
• Only major concerns, no minor comments.
• Convince the editor why rejection is the only way.
General Tips

Finally, if you are a novice reviewer …

• Still you have to be constructive!
• No review is not expected to cover all aspects!
• Focus on your expertise based on which the editor chose you.
• Find a good similar study!
• Follow guidelines on reporting studies: 
  CONSORT, STARD, STROBE, ASSERT
• There are lots of books, guidelines, papers, …
Comments on IMRAD

Which sections are the most important?

• Results and Conclusions?
  OR
• Methods and Discussion?
Comments on IMRAD

Title
- Read it once, forget about it, and read it at the end.
- Format: not questioning, not affirmative.
- Covering all main features of study
- No extra words
- No claim beyond the study
- In line with aim, methods, results, …
Comments on IMRAD

Title

Example:
We compare BP in two groups with low and high Na intake

*Which title is correct:*

- Effect of Na intake on BP
- Relationship of Na intake and BP
- Prevalence of high BP in patients with high Na intake
- BP in low and high Na intake patients
Comments on IMRAD

Abstract
• Read it once, forget about it, and read it at the end.
• Not too long
• Clear methods
• Main results
• Conclusions only based on the results reported in abstract
• An independent text
Comments on IMRAD

Introduction

• Skim the Introduction, read the aim carefully, and comment on this section after reading it at the end of your review.
• Starting from a little before the main subject
• Convincing the reader that the study was needed
• No omission of studies pre and againts the hypothesis
Comments on IMRAD

Introduction

• Introduction is not a gist of a text book!
• Aim addresses exactly what is mentioned as the gap in knowledge.
• “No studies on Iranian patients”? 
• “Few studies have addressed this issue”? 
• “No similar studies are available”? 

Comments on IMRAD

Methods

• Methods is the first section that is read carefully.
• Retrospective or prospective?
• Intervention: Detailed description? In accordance with aim?
Comments on IMRAD

Methods

• Analysis: What was done with data? Tests?
• Follow-up: unique protocol for all? Scheduled? Tests?
• Can one repeat your study by reading your methods section?
• Appropriate reference citation in methods?

• Difference between practice and research?
Comments on IMRAD

Results

• Incomplete report of data?
• Hidden data?
• All mentioned in Methods are reported here?
• All reported data were mentioned in Methods?
• Reported in line with aims?
• Mixed with Methods or Discussion?
• Units?
• Tables/Figures?
Comments on IMRAD

Results

Example:
We compared BP in patients with Drug X and those on placebo.

*Which is proper in results:*

- BP was different between groups 1 and 2 (p < .001).
- Group 2 had a higher BP than group 2 after the intervention.
- Drug X caused an increase in BP of group 1.
- Unfortunately, our treatment was not effective in high-BP patients.
Comments on IMRAD

Discussion

• Discussion is the most difficult part!
• A summary of main findings (?)
• Good interpretation of findings
• Studies pro and con?
• No important similar study ignored
• No over-interpretation
• Proper generalization
• Honest discussion on limitations
Comments on IMRAD

Discussion

Example:
We compared young and old people in terms of LVH.

*Which is proper in results:*

- LVH is a result of aging.
- Old people have LVH because of HTN.
- Age is a risk factor of LVH!
- We may face more cases of LVH in the elderly, which might be due to the HTN frequency, etc.
Comments on IMRAD

Conclusion

• Beyond the study aims?
• Repeating the results?
• Strength of statements?

• We failed to find a difference …. vs There was no difference …
Comments on IMRAD

References

• Updated?
• The most recent and the most valid?
• Self-citation?
• Proper distribution of citations?
• Relevant?
Ethics

- Ethics in Research
- Ethics in Peer Review
- Ethics in Publication
Ethics

Ethics of Peer Review

• Conflict of interest
  personal/institutional, real/perceived
• Asking for help in review
• Confidentiality
• Contacting author
• Originality of your comments
• Subliminal use of what we read in a submitted paper
• Manuscript copy
Ethics

Conflict of interest

• Friends or enemies
• You have a similar project or submission
• You are the best in that subject
• Judging the origin of paper (third World)
• You work for a company …
• You have your own opinion on a controversy
  … any thing you guess that may influence your comments…
Ethics

Role of Reviewer in Publication Ethics

• What is FFP?
• What if you suspect of FFP?
• Who should take action?
• Who is a whistle blower?