



Preparations for Peer Reviews

Hamid Sharifi, PhD

Epidemiologist
Kerman University of Medical Sciences, Kerman, Iran

What we will cover today

- Tell us your peer review <u>story</u> (You)
- Peer review process
- Purpose of peer review
- How to <u>do</u> the peer review
- How to <u>respond</u> to a peer review

Tell us your story

- If any of your works has been reviewed,
 - How good or bad it was?
 - Was it useful?
 - Problems you faced in responding to the critiques?
 - Turned out well or failed?
- If you have done a peer review,
 - Tell us briefly how you did?
 - Whether you like it or not?

Peer Review Process







Reviewer

Perspective of the author

- —I gave this a lot of time and thought!
- I know the design, methods, analysis, interpretation, significance better than a reviewer seeing it one time
- My words are precious
- –I want to be accepted for publication with as little change as possible
- -The reviewers are mean and stupid



8/21/2024 Hamid Sharifi

Perspective of the reviewer

- I am an expert, impartial, objective, constructive, knowledgeable, and not mean and stupid
- It is my decision if this paper has merit (not so!)
- The authors need to see my point of view
- They need to respond with perhaps lots of changes
- My feelings will be hurt if I am not listened to

Perspective of the editor

- I have final say if the manuscript is accepted
- I have final say if the changes are sufficient
- I don't want to publish mistakes, fraud, plagiarism
- Seeking validation from peer reviewers: I already saw merit in the paper
- Seeking "cover" from peer reviewers: I already had doubts about this paper

- Peer reviewers only advise me as editor

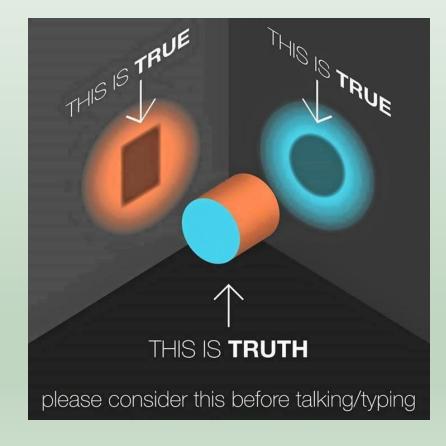
8/21/2024 Hamid Sharifi

Facts check

- Editor usually sides with reviewers against publication (faith in the system, needs to keep happy peer reviewers)
- Might decide in favor when reviews are discrepant
- Sometimes decide against both negative reviewers and accept
- Seem to sometimes decide against favorable reviews (not in scope of journal)

Whatever the role we are into, as a scientist we must be honest, fair, and skeptical







Simple Definition of PEER REVIEW

 a process by which a scholarly work (such as a paper or a research proposal) is checked by a group of experts in the same field to make sure it meets the necessary standards before it is published or accepted

Expectations for peer review

- Select best papers for publication
- Improve the quality of papers published
- <u>Detect</u> errors, fraud, plagiarism
- Enhance <u>credibility of the journal</u>
- Contribute truth to the world

Key elements of a good peer review

- Identifies major <u>strengths and</u> <u>weaknesses</u> of study design and methodology
- Gives constructive feedback to authors
- Professional tone
- Contributes to editor's <u>decision-making</u>

Decision making / review

One-stage review

2 to 3 peer reviews advise editor on his/her decision

Two-stage review

 Revised manuscript goes back to reviewers who say whether their concerns were addressed

Mulitiple-stage review

- Seeks consensus? Time consuming, burdensome
- Editor has the final decision

Journal peer review

- Top-down approach (High quality journals, Specialist journals)
- Bottom-up approach (electronic journals-publish more papers; pay journals)

System	Advantages	Disadvantages
Top-down/ "creaming off"	Prestigious journal Detailed review	High chance of rejection Slow decision-making
Bottom-up/ "weeding out"	High chance of acceptance Rapid decision-making	Less prestigious journal Cost (processing charges/ page charges/reprints)

What to expect from different peer review systems

Туре	Speed of decision	Feedback
In-house	Rapid if rejected at this stage (days or weeks)	Reason for rejection (sometimes short review)
External review	Slow (weeks or months)	Detailed review
Additional review	Even slower	Detailed, multiple reviews

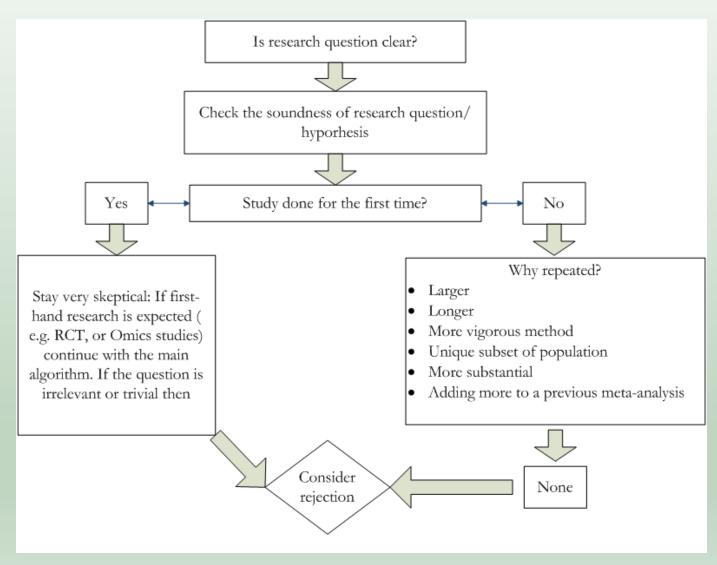
Masked and Open Review

- Masked review: minimize personal biases and make the review process more objective
- It is expensive and time consuming.

Invited to a review Immediately Politely decline Commit decide A. Understand the Unclear Clear hypothesis/goals hypothesis/ hypothesis/ (must be in the last paragraph of goals goals introduction) B. Considerable Consider rejection No contribution in w/o resubmission science? C. Overall Quality of Poor Yes Evidence? D. Fine language/ D.Poor language/ Fine style style Ask for rewriting and resubmission E. In-depth assessment of quality of evidence Optimal Sub-optimal Accept w/o minor 8/21/2021/ons Major Revisions Hamid Shariffevisions

Decision Algorithm

Is hypothesis sound / clear research question?



Considerable Contribution in Science

- A novel study
- A study with larger sample
- A study with longer duration of follow-up
- A study with more vigorous method
- A study that is more substantial
- A study that is a review of reviews
- A study with a unique population

Considerable Contribution in Science

A novel study is a study that

- has not been performed in the past but is deeply rooted in scientific methods
- has performed in the past but contains a novel feature

A study with more vigorous method

- Strength of evidence
- Overall, studies with control groups have higher values
- Mixed methods contribute more in making strong evidence

Quality of Generated Evidence

Method

- Variables?
- What comparisons were made?
- Clarity of analysis assumptions and their suitability

Results

- Statistical power vs. Clinical power
- Choosing the right results aligned with research question/hypothesis
- Pick up right measures
- P-value or 95%CI?

European Journal of Epidemiology April 2016, Volume 31, <u>Issue 4, pp 337–350</u>

How to do a peer review

The Feedback Sandwich



Positive Feedback

Constructive Feedback

Positive Feedback



Give positive feedback

Provide constructive criticism

Give positive feedback



BEING INVITED TO REVIEW

Is the manuscript within my field of expertise?

Am I happy with the journal's peer review process? Do I have time to do this review?

Can I meet the deadline?

Do I have any conflicts of interest?

- If you decide to not accept the process
- ✓ Tell the editor immediately
- ✓ If you could introduce an alternative reviewer

Methods of Peer Review: Reviewer perspective

- 1. Read the paper (and set it aside for a day or so)
- 2. Summary and broad impression
 - Paraphrase their methods
 - Paraphrase their conclusions
- 3. Start with finding the good, strengths
- 4. Carefully articulate major concerns (and how they can be addressed)
- 5. List minor corrections, other advice
- 6. End on an overall impression, phrase as positively as warrants

Summarize methods, conclusions, and give a broad impression

- Show the editor that you understood it ("got it")
- Paraphrase the study design (RCT, observational, cross-sectional)
- Paraphrase their conclusions: Give their "message"
- You are priming the authors to appreciate your expertise and be open to your critique
- Signal the editor you understood its value overall

Summarize methods, conclusions, and give a broad impression

- Significance of the attempt, the findings, and conclusions
 - How it addresses an unanswered question
 - How it may improve health
 - How its fits the scope of the journal
- "Sandwich" feedback: good, criticism, way forward
- Civility! Be kind.

Example: Summarize methods, conclusions, and give a broad impression

Reviewer #1:

This study aimed to estimate the numbers of female sex workers (FSW) in the two largest cities in Myanmar. I believe this is an important topic, and its results will be very useful for public health interventions targeting this population. Thus, I review this paper with a great appreciation of the authors' effort for this difficult task.

However, major revision is needed for this paper.

Carefully articulate major concerns

1. Types of major concerns

- Methodological, study design (the focus of a review)
- Ethical (rare but serious, e.g., plagiarism)
- Analysis (few reviewers comfortable statistically)
- Interpretation (does or does not match the data)
- Not novel (Ok and needed, but dampens enthusiasm)
- 2. Always be constructive: Offer what the authors can do to address concerns
- 3. Fall back if nothing can be done: "Author need to acknowledge this limitation"

Example: Articulate major concerns

- 1. A major concern is the use of epidemiological complex survey methods in this estimation. First, is there any evidence/reference supporting the applicability and validity of complex survey methods in this estimation method?
- 2. Second, when multi-stage complex survey is used, weighting process is required in analyses. In this paper, the authors do not calculate and take into account weights for strata and PSU.

List minor corrections, other advice

Types of minor concerns

- Typos: especially in numbers
- English grammar: Be specific and polite (Do not say "have a native English speaker review this")
- Style

Other advice

 Additional key references (Not for self-promotion or journal promotion!)

Example: Minor corrections, other advice

- 10. Page 6, line 9, what does it mean by "to align with the specified time period and survey eligibility criteria of age and residence"?
- 11. Page 6, line 36, does "township" mean "city" or other levels of geographic division for administrative purposes (e.g., county, district)?
- 13. The paper should be carefully reviewed and edited for its language. When describing the study in "Methods", the authors should use a consistent tense (e.g. past tense). There are also missing verbs (e.g., page 4, line 42), unparalleled structures (e.g., page 5, line 13), and several run-on sentences.

Bad and vexing peer reviews!

- Uncareful reading: Did not see that the points were made
- Too much: The reviewer becomes the investigator (inexperience?)
- Not specific: unclear what to address, or change

Bad and vexing peer reviews!

- Not constructive
 - Offer no way forward
 - —Or there is nothing you can do about it now: "The study you should have done was..."
- Inconsistent between reviewers (editor decides)
- They have an agenda (sabotage?)
- Plainly wrong (reasoned case to editor)

How to respond to a peer review

The Author's Response Letter: communicating the changes to the editors

- Be happy!
- Be polite, contrite, civil
- Isolate every comment and address each one
- Explain in cover letter how you changed manuscript
- Can cut and past text you changed into the letter
- Format, template, expectation

Paragraph 1:

"Dear editor: (name is better)

Dear Prof. Phurb Dorji:

We are happy that *Bhutan Health Journal* will consider publication of our paper pending satisfactory revisions as suggested by the reviewers."

Paragraph 2:

"We have given careful consideration to all the reviewers' comments and have done our best to address them all. The following is a point-by-point explanation of how we have address the concerns and revised our manuscript accordingly."

"Reviewer #1.

1. The authors should address the question of whether HIV seroconversion is associated with amphetamine use or drug use in general.

Answer: Following the reviewer's suggestion, we constructed a variable for "any drug use". Persons with any drug use had elevated risk for unprotected sex (RR=2.3, 95% CI 1.2-4.4) compared to non-drug users. For persons who used amphetamine (with our without other drugs) the association with HIV seroconversion was further elevated (RR 3.0, 95% CI 1.4-6.5). These new results suggest that amphetamine use is more strongly associated with HIV seroconversion than drug use in general. We have added these results to page 13"

Addressing Minor Concerns:

Reviewer #2.

"10. Finally, on a minor point, the authors speak of 'amphetamine use during sex." The phrase 'sex during amphetamine use' might be better."

Answer: The point is well taken. We have changed the phrasing to 'sex during amphetamine use'."

Final paragraph: End on a happy note!

"We thank the reviewers for their thoughtful comments. With these revisions, we feel the paper has been substantially improved. We hope it will receive favorable consideration for publication in *Bhutan Health Journal*."

Stages of Change

- Changes for minor concerns
- Changes for major concerns
- No change at all? Pick your battles wisely
- Closure, moving on, changes for resubmitting to another journal

- Author should concede all easy, non-essential points – even if you disagree
 - Grammar, style, format
 - References to include
 - Acknowledge alternative points of view
- Author should provide requested detail, data
- Authors should acknowledge limitation (that you can't change)
- Author should highlight responsiveness: Each and every point addressed

Example: Concede all easy, non-essential points – even if you disagree

Reviewer #1. I also have some minor points the authors need to attend to:

1. Intro: some of the descriptions need references.

Answer: We revised the introduction with updated references about the HIV epidemic in Iran.

2. p4, Results: for CIs you need to add % in parenthesis **Answer:** Done.

3. In table 1: remove the t test in the first row.

Answer: Removed

Example: Inclusion of more detail (when you have it)

Reviewer #2: I only have a minor comment: please explain the refusal rates of FSW and gatekeeps of the FSW venues and discuss how will the refusals impact on your results.

Answer: We now include the rates of refusal by FSW and by gatekeepers in the Results section.

Changes in paper

Results added recruitment data: "The sample included FSW recruited at 98 of 353 venues in Yangon and 68 of 129 venues in Mandalay, after 27 venues in Yangon (21.6%) and 11 in Mandalay (13.9%) failed to recruit FSW. The most common reasons for venue recruitment failure were gatekeepers or FSW saying they were "too busy", denying having or being FSW, and not wishing to participate."

Example: Each and every point

Reviewer #2: I only have a minor comment: please explain the refusal rates of FSW and gatekeeps of the FSW venues and discuss how will the refusals impact on your results.

Answer: We also comment on the impact of refusal in the Discussion section.

Changes in paper: Acknowledge limitation

Discussion acknowledged limitation: "Our population size methods are subject to refusal rates and other factors that may limit participation of FSW in the cities. We believe the likely direction of the bias, while not known, is towards underestimation as persons who refuse participation in a survey may also refuse services or disclosing FSW status at services."

Can be most exasperating!

- Human nature to disagree with criticism
- These are often what the reviewer feels are "fatal flaws" and no response may change that
- A lot of work: more reading, re-anlaysis, re-writing, throwing away your beloved words
- Often something you can't really do anything about
- But, the author must address each major concern very clearly

No change at all?

- Write a rebuttal letter then throw it away!
- Pick your battles wisely
- Have a colleague read it first
- Polite, contrite and well reasoned
 - Editors have to favor the peer reviewers and the usual process
 - May be quicker to resubmit elsewhere

No change at all?

Appeals to editor

- Should be exceptional
- Be sure you are correct: have a colleague review your letter
- I think it is rare to reverse an editor's decision (there may be reasons other than what peer reviewers said – they provide cover)
- Don't appeal when editor says "Not in the scope of our journal"
- The process may be long: quicker to resubmit elsewhere?

Peer Review: Theory and Practice

Theoretical, ideal:

- -Select best papers for publication
- Improve the quality of papers published
- Detect errors, fraud, plagiarism
- Enhance credibility of the journal
- Contribute truth to the world

Peer Review: Ideal and Reality

- Practice, Reality: Defects in peer review process
 - Time delays in disseminating new knowledge
 - Costly
 - Inconsistent, subjective, unreliable, "lottery"
 - Bias (less prestigious institutions, poor regions, negative results)
 - Abuse (theft of ideas, sabotage)
 - Only a little evidence of improved quality of publications