



Journal Peer Reviewing

Faculty Development Workshop
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Workshop Objectives

1. Overview of the Peer Review Process
2. Why be a Peer Reviewer?
3. Critique the Critique
4. Draft a Review

WSU Faculty Development 4-2-08

The Value of Peer Review

- To identify quality articles with relevance to the journal
- To improve the article before publication

Limitations of Peer Review

- May not reveal biases or conflicts of interest of authors or reviewers
- Does not always identify important work
- May allow publication of articles with serious deficiencies

What is a Peer Reviewed Journal?

(WAME policy statement 10/2007)

- Regularly obtains advice on a majority of manuscripts from reviewers who are not part of the journal's editorial staff.
- To have been peer reviewed, a ms should be reviewed by at least 1 external reviewer.
- Editors will reject some ms that are unlikely to be published without external review

The Internal Peer Review Process

(some variability between journals)

- Editor rejects without peer review if:
 - Similar to recently published article
 - Topic outside the journal's scope.
 - No new information
 - Irremediable flaws in scientific validity
 - Unprofessional presentation

The External Peer Review Process

(highly variable between journals)

- Reviewers are contacted about availability and interest in reviewing
- Manuscript and instructions for critical appraisal are sent to reviewer
- Reviewer reads paper, writes critique for author and recommendation to editor
- Editor reads the reviews and makes a decision.

Who are Peer Reviewers?

- Usually faculty (scientists or clinicians)
- Usually unpaid volunteers
- How many reviewers?
 - Usually editors seek 2-3 peer reviews to provide a balance of perspectives

How Do Editors Find Reviewers?

- Volunteers who sign-up with journal
- References from submitted paper
- Literature searching
- Personal contacts
- Recommendations from colleagues
- Editorial board members

What Motivates Peer Reviewers?

- Desire to advance research & practice
- Commitment to nurture colleagues
- Personal professional development
 - Reading up-to-date literature reviews
 - Find Co-Is or experts in field
- Recognition as expert in field

Why Should You Review?

- Improve critical appraisal skills
- Improve your own manuscripts
- Professional socialization
- Service to your profession

How to Get Going

- Publish your own work
- Participate in critical appraisal journal clubs
- Sign up to be a journal peer reviewer
- Ask colleagues to nominate you or refer papers to you

Personal Benefits

- Add peer reviewing to your CV and Annual Activity Report
- Ask editor for a letter of recommendation for promotion*
- Inquire about joining Editorial Board*
* Editors evaluate/rate reviews!!

Peer Reviewer Ethics (1)

- Reviewers agree to:
 - Produce a thoughtful, objective review
 - Meet deadline
 - Limit comments to areas of expertise
 - Be open to innovative or different approaches than those of their own
 - Be alert to desire to nit-pick

Peer Reviewer Ethics (2)

- Declare conflicts of interest (real or perceived):
 - Financial interests (paid consultancies; stock)
 - Professional relationships or rivalry
 - Personal relationships
 - Antipathy toward study question/approach; commitment to particular paradigm
 - Political or special interest affiliations
 - Religious or deep convictions

Peer Reviewer Ethics (3)

- MS is a confidential document
 - Respect the privacy of the authors' ideas
- Avoid scientific misconduct
 - Misappropriation of intellectual property
- Do not contact author; direct comments and concerns to editors
- Declare if review was a joint effort

The Written Critique

- Consider all aspects of the manuscript
 - IMRAD
 - Title & Abstract
 - Limitations
 - Tables & References
- Assess originality (search literature!)
- Start with brief summary of article

Written Critique (2)

- Honest assessment of strengths and weaknesses
 - Literature up-to-date?
 - Research design adequate?
 - Research properly executed?
 - Data properly analyzed?
 - Remediable defects?

Written Critique (3)

- Suggest ways to make the report more complete, relevant or useful
 - Abstract should reflect the main findings
 - Exaggerated conclusions
 - Too many tables; duplication of text & tables
 - Figures where a table would be better

Written Critique (4)

- Be concise and organized.
 - Number each comment
 - Refer to page numbers and specific paragraphs
- Line editing not as important as science & presentation
 - Small journals don't have copy editors

Reviewers Advise Editors

- Potential importance of paper:
 - Does it provide new information?
 - Would it strengthen the evidence for a new concept/procedure/treatment?
- Confidential Comments

Confidential Comments to Editor

- Ethical concerns
 - Appropriate authorship
 - Funding source & role of sponsor; C of I
 - Did patients provided informed consent?
 - Scientific misconduct
 - Work previously published
 - Redundant publication
 - Salami science
 - Plagiarism

Confidential Comments (2)

- Relevance of paper to journal's readers
- Suggest a decision
 - Acceptance
 - Reconsider after revision
 - Rejection
- Publishing priority (fast track/routine)

Editor Makes the Decision

- Reviews are treated as advisory
 - Conflicting reviews or unreasonable demands
- Paper may be discussed among the editors, or editor may make the decision alone
- Editor usually sends reviewer comments to author, even if paper is rejected
 - May edit the reviewer comments
- Editor rates the review!

Common Reasons for Rejection

- Low interest, originality or importance
- Validity concerns
- Author failed to inspire confidence that a suitably revised manuscript will be resubmitted

Post-publication Peer Review

- Critical appraisal by readers
 - Correspondence/“Letters to the editor”
 - Rapid Responses posted on Website
- Citation of published article by subsequent authors

Interactive Agenda

- Tips for writing a helpful review
- Roberts 'Checklist of Review Criteria'
- Critique the Critique
 - BMJ reviews
 - Enlarged prostate
- Draft a review of the "tongue-tie" ms

Keep in Mind

- In "Comments to Author" offer helpful suggestions
- Comments to Editor can be more negative in tone
- Recommend a decision
- Recommendation should be supported by your comments

Helpful Peer-Review

- Unbiased review
- Organized
- Start with brief summary
 - 1-2 sentences about why study done and findings
- Overall impression
- Importance/relevance of study
- Critique (Robert's outline)
 - Follow logical order
 - Key points to emphasize
- Constructive criticism
 - Major points first
 - Editing suggestions second

Critique the Critique

- 1) 3 critiques of critiques from BMJ Editors
- 2) Compare 2 reviews of enlarged prostate paper

Review A

- Logical order
- Provides overview of study (lengthy?)
- Provides assessment of importance
 - Non-blinded review
- Thorough evaluation of methods
 - Addresses points in Robert's checklist
 - Instruments
 - Population
- Suggestions for Discussion

Review C

- Numbered for easy reading
- Lacks summary
- Lacks importance/relevance
- Several major concerns (mixed with editing suggestions)
- No comment on Discussion or Conclusions

Review C - Major Concerns

- Problem Statement, Conceptual Framework, Research Question (#1)
 - Hypothesis not clearly stated and not in Intro
- Population and Sample (#15)
 - Subject eligibility unclear
- Analysis/Statistics/Reporting of Statistics
 - Reporting of data sufficiently described to permit the study to be replicated (#7,9)
 - Statistical tests are reported appropriately (#13)
- Instrumentation, Data Collection, QC (#8)
 - Instrument Reliability adequate or needed?

Review B

- Good organization
- Missing summary
- Addresses importance
- Results section
 - Numbers matching up (baseline vs. all)
 - Outcome measure
 - Significance/error
- Major points listed

Comparison of BPH Reviews

- Look for conflict of interest
- Biased research questions
- Multiple reviewers needed

Draft a Review

- “Tongue-tie” paper
- Develop draft critique
- Group Discussion

Review Method

1. Read manuscript at least once before starting review
2. Start with Intro to find hypothesis/goal of paper
3. Read Methods for alignment with goal; complete description
4. Results follow from methods; presentation is clear
5. Discussion
 - well articulated conclusion justified by study; limitations
 - in framework of other research
6. Abstract is clear summary of the study
7. Literature review up-to-date and inclusive of relevant studies
8. Ethical concerns
9. Grammar, punctuation, spelling, etc.

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