

# Peer Review

The reason why “its everything!”

Jose Maria C. Avila, M.D.  
Editor-in-Chief  
Acta Medica Philippina



**“I DON’T KNOW  
WHAT TO  
BELIEVE...”**

**Making sense of science stories**

**This leaflet is for people who follow debates about science and medicine in the news. It explains how scientists present and judge research and how you can ask questions of the scientific information presented to you.**

Electrical fields can make you sick  
Magnetic bandage can help wounds heal faster  
RED WINE 'CURE FOR NIKE BLITZ?'

Sniffing a lemon can poison in the womb  
Fridges blamed for Crohn's  
CHEMICAL TOXIC HOMES  
CAESAREAN BIRTHS 'BY PREGNANCY'

# Summary Points

- Science has a system for assessing the quality of research before it is published. This system is called peer review.
- Peer review means that other scientific experts in the field check research papers for validity, significance, and originality-and for clarity.

- Editors of scientific journals draw on a large pool of suitable experts to scrutinize papers before deciding whether to publish them.

- Many of the research claims you read in newspapers and magazines, and find on the internet, or hear on television or the radio are not published in peer-reviewed journals.

- Some of this research may turn out to be good but much of it is flawed or incomplete. Many reported findings, such as claims about “wonder cures” and “new dangers” never come to anything.

- Unpublished research is no help to anyone. Scientists cannot repeat it or use it and as a society we cant base decisions about our public safety-or our familys health, for example, on work that has a high chance of being flawed.

- So...no matter how exciting or compelling new scientific or medical research is, you must always ask...
- IS IT PEER REVIEWED? IF NOT, WHY NOT?



- If it is peer reviewed, you can look for more information on what other scientists say about it, the size and approach of the study and whether it is part of a body of evidence pointing towards the same conclusions.

PEER REVIEW IS LIKE A QUALITY MARK FOR  
SCIENCE.

IT TELLS YOU THAT THE RESEARCH HAS BEEN  
CONDUCTED AND PRESENTED TO A  
STANDARD THAT OTHER SCIENTISTS ACCEPT.

# Definition



**WAME**  
world association of medical editors

## Definition of a Peer-Reviewed Journal

Posted October 19, 2007

A peer-reviewed biomedical journal is one that regularly obtains advice on individual manuscripts from reviewers who are not part of the journal's editorial staff. Peer review is intended to improve the accuracy, clarity, and completeness of published manuscripts and to help editors decide which manuscripts to publish. Peer review does not guarantee manuscript quality and does not reliably detect scientific misconduct.



# WAME

world association of medical editors

To be considered peer reviewed, a journal should have obtained external reviews for the majority of manuscripts it publishes, including all original research and review articles. Some editors request peer review for other kinds of articles, such as opinion pieces (commentaries/editorials) and correspondence. To have been peer reviewed, a manuscript should have been reviewed by at least one external reviewer; it is typical to have two reviewers and sometimes more opinions are sought.

# **Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication**

*Updated October 2008*

## **II.C. Peer Review**

Unbiased, independent, critical assessment is an intrinsic part of all scholarly work, including the scientific process. Peer review is the critical assessment of manuscripts submitted to journals by experts who are not part of the editorial staff. Peer review can therefore be viewed as an important extension of the scientific process. Although its actual value has been little studied and is widely debated (4), peer review helps editors decide which manuscripts are suitable for their journals and helps authors and editors to improve the quality of reporting. A peer-reviewed journal submits most of its published research articles for outside review. The number and kinds of manuscripts sent for review, the number of reviewers, the reviewing procedures, and the use made of the reviewers' opinions may vary. In the interests of transparency, each journal should publicly disclose its policies in its Instructions to Authors.

# Manuscript Evaluation

- Editor must establish a process for review.  
Who are going to conduct the review?
- Editor may establish a system for rapid review.
- Editor may accept manuscripts without review.
- Editor may reject manuscripts without review.
- How many people should review the manuscript?

- Editor may ask reviewers to recommend rejection or acceptance of manuscripts.
- Should reviewers know the identity of authors? Or should “masked” review be done?
- Should reviewers be asked to sign their reviews?

# The Peer Review Process

Adapted from a presentation by  
**Richard Henderson, Elsevier Hong Kong**



# Peer-review Process

When a paper arrives at a journal's editorial office a few things can happen:

**A. Editor reviews paper herself/himself**

**B. Editor assigns to Associate Editor**

**C. Editor or AE assigns to Peer Reviewers**

# 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?

# 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:

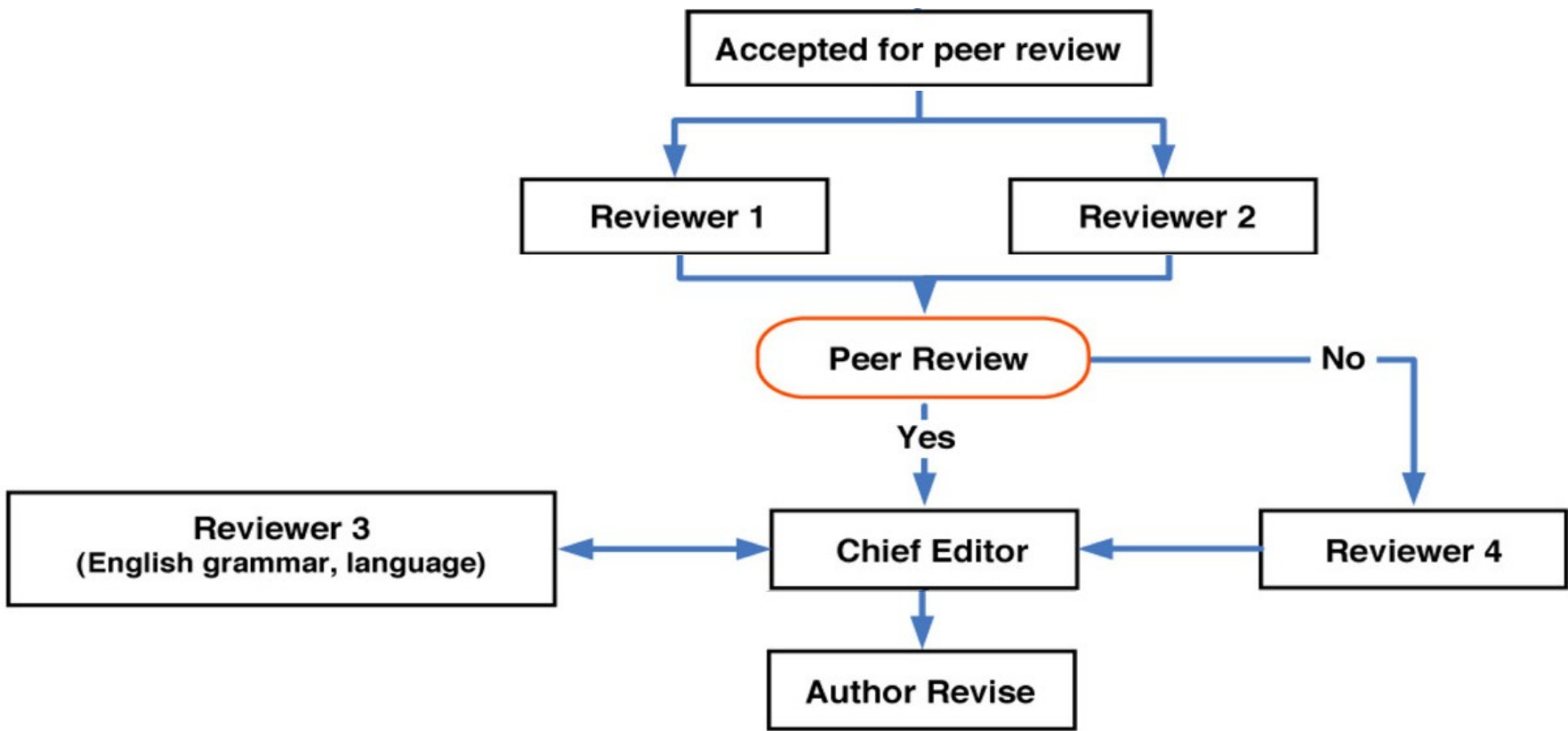
- Abstract & Body of paper
  - Do number of patients, other data match?
  - Conclusions consistent?

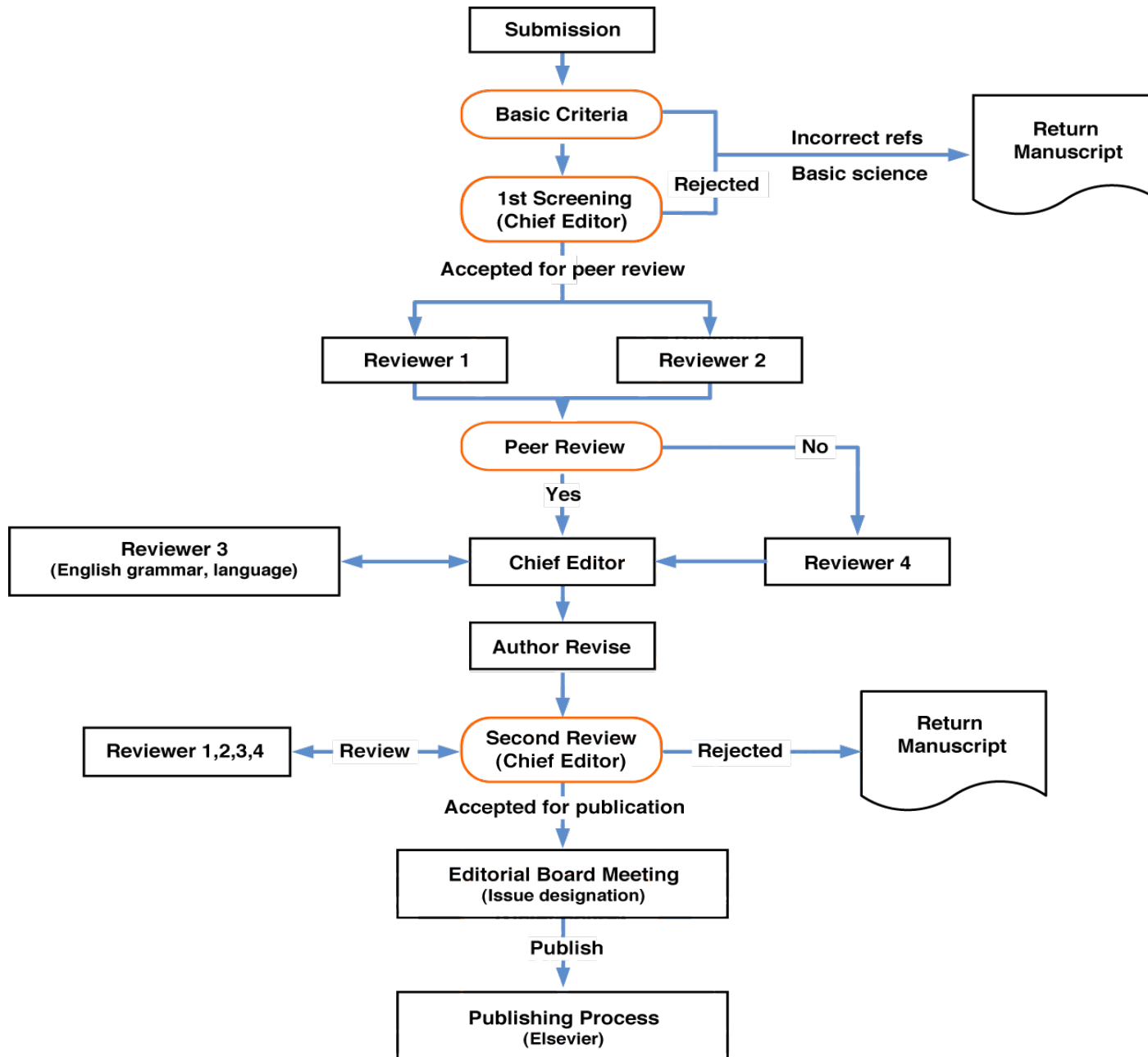


# Peer-review Process

## REJECTION:

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





# The Acta Medica Philippina

## Peer Review Process

- When paper arrives at the Acta office, assistant editors do initial review of the article and see if manuscript satisfies terms as given in the “instructions to authors” particularly:
  - correct format (hard copy, digital)
  - length
  - authorship papers, copyright, etc

- Editorial Board screens articles and helps in prioritizing them for publication and weeds out some that may be inappropriate for the journal
- Peer review process begins = 2 reviewers assigned per article (double blinded) chosen by chief editor usually
- Reviewers given an average of 3 weeks per review

- Reviews go back to chief editor; another reviewer may be assigned to the manuscript depending on the previous reviews (editorial board members may be sought)
- Back to the author for revisions (major/minor)
- Revised manuscript to assistant editors to check authors compliance with recommendations

- Manuscript to copy editors for final editing
- Final paper to chief editor for final evaluation
- Final manuscript to press (for early technical preparation before final galley proof of journal)



# Acta Medica Philippina

The National Health Science Journal

## ACTA MEDICA PHILIPPINA

### INSTRUCTIONS TO REVIEWERS

1. Kindly answer each and every item.
2. Use additional sheets if you need more paper. However, it is recommended to limit your comments to the space provided.
3. We suggest you use sign pen with black or blue ink for your comments. Please sign your name as reviewer.
4. Deadline for your review is \_\_\_\_\_ **2009**.
5. Please call our editorial assistant, Ms. Marjorie M. De Lima at 526-42-60 for inquiries.
6. Please send a hard copy or e-mail this review to [actamedicaphilippina@cm.upm.edu.ph](mailto:actamedicaphilippina@cm.upm.edu.ph) or [actamedicaphilippina@yahoo.com](mailto:actamedicaphilippina@yahoo.com) if you decide to use our electronic form.
7. Your comments will be forwarded to the author for his or her due consideration after editorial review.



**ACTA MEDICA PHILIPPINA  
MANUSCRIPT REVIEW FORM**

**Title of paper:**

**Manuscript No.**

Authors: Blinded

Type of Manuscript:

Date sent to reviewer:

Date due:

1. Describe the "key message" or "conclusion" of the manuscript in not more than three sentences.
  
  
  
  
  
  
  
  
  
  
2. Enumerate the good points of the manuscript.
  
  
  
  
  
  
  
  
  
  
3. Describe flaws that you have identified in the manuscript. Classify them into major and minor problems.

4. Identify ethical issues in the manuscript, if there is any.

5. Identify issues that need to be addressed by the author and the corresponding modifications needed:

A. Title

B. Abstract

C. Keywords

D. Introduction

E. Materials & Methods

F. Results/Case reports

G. Discussion

H. References

I. Tables/Graphs

J. Figures, Illustrations, Photos, Legends

6. Rate the manuscript based on the following criteria:  
(5 – excellent, 4 – very good, 3 – good, 2 – fair, 1- poor)

- |                                  |   |                                  |   |                       |   |                       |   |                       |   |                       |
|----------------------------------|---|----------------------------------|---|-----------------------|---|-----------------------|---|-----------------------|---|-----------------------|
| A. Relevance of topic            | 5 | <input checked="" type="radio"/> | 4 | <input type="radio"/> | 3 | <input type="radio"/> | 2 | <input type="radio"/> | 1 | <input type="radio"/> |
| B. Clarity of objectives         | 5 | <input checked="" type="radio"/> | 4 | <input type="radio"/> | 3 | <input type="radio"/> | 2 | <input type="radio"/> | 1 | <input type="radio"/> |
| C. Abstract quality              | 5 | <input checked="" type="radio"/> | 4 | <input type="radio"/> | 3 | <input type="radio"/> | 2 | <input type="radio"/> | 1 | <input type="radio"/> |
| D. Conclusions & recommendations | 5 | <input checked="" type="radio"/> | 4 | <input type="radio"/> | 3 | <input type="radio"/> | 2 | <input type="radio"/> | 1 | <input type="radio"/> |
| E. English and grammar           | 5 | <input checked="" type="radio"/> | 4 | <input type="radio"/> | 3 | <input type="radio"/> | 2 | <input type="radio"/> | 1 | <input type="radio"/> |

7. Recommendations to the editors:

- A. Accept for publication
- B. Accept for publication with minor revisions
- C. Accept for publication with major revisions
- D. Reject for publication

8. Comments to the author regarding this paper:

9. Would you be willing to review a revision of the manuscript?

A. YES

B. NO

EDITORS COMMENTS TO THE AUTHOR:

10. Comments to the editor regarding this manuscript (confidential):

---

Signature over printed name

# Frustrations of an editor

- Authors do not follow instructions (at least, majority of them don't!)
- There are difficulties with epidemiologic or statistical methods
- Papers are generally too long and too wordy.
- Authors are careless about bibliography and other minor technical details about their paper

- Peer reviewers may take too long to return back papers...waaaay tooo loooong! Some don't even bother.
- Some authors are stubborn and don't take criticism very well.

# My advice to “would-be” or future editors

- Difficult job but rewarding.
- “Professionalize” your job.
- Seek advice. Read up. Don’t go through it blindly. Educate your “boss” about the job.
- Go through the process. Be patient.
- Be good to your peer reviewers. “Reward” them somehow.
- Educate your publishing house. Have a good relationship with them.

[www.actamedicaphilippina.com.ph](http://www.actamedicaphilippina.com.ph)





### Navigation

- [Login](#)
- [Home](#)
- [Editorial Board](#)
- [Editorial Staff](#)
- [Peer-Review Board](#)
- [Instructions to Authors](#)
- [Issues Available](#)
- [Subscriptions](#)

### News

#### [PCHRD launches Acta Medica Philippina as a National Health Science Journal](#)

The Philippine Council for Health Research and Development (PCHRD) celebrated its 27th anniversary at the Pan Pacific Hotel last March 16, 2009, with the theme: Inclusiveness @ PNHRs: Building bridges to, and Engaging, Stakeholders.

[Read more](#)

### Published Issues

- [Volume 43 No. 3](#)
- [Volume 43 No. 2](#)
- [Volume 43 No. 1](#)
- [Volume 42 No. 2](#)
- [Volume 42 No. 1](#)

### Podcast



## Current Issue: Volume 43 No. 3 2009

### MAIN ISSUES, SUPPLEMENTS

#### Original Articles

[Usefulness of Monofilament Testing for Detecting Peripheral Neuropathy I](#)

[Abstract](#) | [Full Text](#)

[A Four -Year Study of the Demographic Distribution and Treatment of Maxillofacial Fractures Admitted at the Philippine General Hospital](#)

[Abstract](#)

[Men-who-have-Sex-with-other-Males \(MSM\) in the Philippines – Identities, Sexualities and Social Mobilities: A Formative Assessment of HIV and AIDS Vulnerabilities](#)

[Abstract](#)

[A Review of Small Group Discussion and Case-based Learning as a Learning Strategy in Pharmacology](#)

[Abstract](#)

[The Effect of Short-Term Preoperative Smoking Cessation on the Incidence of Post-Operative Pulmonary Complications in Patients Undergoing Elective Non-Cardiac Surgery](#)

[Abstract](#)

[Back to top](#)

#### Review Articles

[Asbestos-related Diseases in the Philippines: The Lung Center of the Philippines Asbestos Screening Program](#)

[Abstract](#)

[Public Health Implications of the Inflammatory Concept of Atherosclerosis](#)

[Abstract](#)

[Current Status of Laboratory Testing for HIV in the Philippines](#)

[Abstract](#)

[Back to top](#)

