AACP Annual Meeting

July 14–18 • Kissimmee, Florida

American Association of Colleges of Pharmacy
Discover · Learn · Care: Improve Health
Navigating the Peer Review & Manuscript Process

Guidance from

Journal of the American Pharmacists Association (APhA) &
American Journal of Pharmaceutical Education (AJPE)
Presenters

- Doug Ried
  - Editor – JAPhA
- Joseph T. DiPiro
  - Editor – AJPE
- Jeanine P. Abrons
  - Associate Editor – JAPhA
- Gayle A. Brazeau
  - Associate Editor – AJPE
Objectives

1) Provide specific guidance & considerations in the peer review process.

2) Discuss useful considerations in manuscript preparation including survey research & the IDEAS format.

3) Describe effective strategies for successful manuscript preparation & submission to two key pharmacy journals
Presentation Overview

• Reasons to consider becoming a peer reviewer
  o Importance of encourage / mentoring new reviewers

• Guidance on specific feedback needed in manuscript review / submission
  o Importance of constructive feedback to authors

• Step by step process for both reviews / submissions
  o From invitation to review completion
  o Journal specific feedback
Guidance & Considerations in the Peer Review Process

Being an effective reviewer

L Douglas Ried, PhD
Editor-in-Chief
Journal of the American Pharmacists Association (JAPhA)
Reasons to Become a Peer Reviewer

• Professional responsibility
  – Ensure & enhance quality of the literature in pharmacy education and scientific literature.
  – Partnership

• Enhance your professional reputation
  – Consider invitation & acknowledgement of expertise area

• Enhance your own scholarship
  – Up-to-date information in your field (methods & content)
  – Learn from others’ mistakes

• Mentor junior colleagues, residents & student pharmacists
Important Considerations Before Accepting a Review

• If the manuscript fits your area(s) of expertise
  – Okay to only be able to comment on certain content and methodological areas
    ▪ Indicate to the editors which areas you are unable to comment on

• Conflicts of interest

• Ability to complete review in time frame given
  – Respond to the invitation as soon as possible
Suggestions for the Review Process

• Read manuscript from three perspectives
  1) Understanding of the content & its contributions to the literature
  2) To read the manuscript with a critical, but fair & objective eye
  3) To improve the quality of the manuscript

• The review is a confidential process. No...prior to publication
  – Revealing your role as a reviewer
  – Citing
  – Disclosing results
General Review & Etiquette

• Is the manuscript submitted to the correct journal &/or section of a journal?
• Does it meet the word count & other technical formatting requirements?
• Does the manuscript add to the literature?
• Does the paper’s organization detract from understanding?
General Review & Etiquette

• Provide a brief summary of the article with its purpose to show the author that you understood the work.
Example

• The stated purposes of this article are to describe "the rationale for incorporating the principles of continuous quality assessment, assurance and improvement into a curricular assessment model" and to describe "a systematically developed assessment plan and its application to ongoing assessment activities."
General Review & Etiquette

• Describe problems with the premise, methods, or conclusions.
  – Concerns with the argument, presentation or on information
  – Alternatives that have been overlooked
  – Organize critique carefully & be careful not to jump around from one issue to the next
  – Provide page numbers, line numbers
  – Discuss one point at a time

• Be kind… & be right.
Be Right

“On the last page where the author describes data that should be considered, it implies that this information would be collected for each graduate. To my knowledge NABP does not release an individual's scores. Please clarify.”

- The reviewer’s comment was incorrect.
- Individual students’ scores are available from NABP.
- However, students must first give their permission by signing an informed consent located on the NABP web site.
General Review & Etiquette

• Do not criticize without providing recommendations for improvement.

• Don’t just be negative; look for the pearl

• Differentiate between “fatal flaws” & annoyances, weaknesses, or other areas for improvement.
Example: What do you think?

This is a well written paper that outlines a model of curriculum assessment. But I am not convinced we need another like this. I do not think the author acknowledges work published in AJPE by others about this topic, as there are 6 references and 4 are his own. Two important changes may make this manuscript valuable and of publishable quality: (1) its incorporation into other pharmacy literature and (2) the addition of empirical data. Otherwise, I believe that it is too general. I have provided no comments to the author about specific edits/changes that are required. While there are some typos, the editorial staff would manage those.
Steps & Manuscript Sections

• General instructions & etiquette
• Title
• Abstract
• The Narrative
  – Introduction
  – Objectives
  – Methods
  – Results and/or Discussion
  – Conclusions
  – References
  – Tables / Figures
  – Appendix
• Recommendations to the Editor(s)
Title

• It should be as specific as possible.
• It should reflect the most important aspects of the manuscript.
  – The best way to structure the title is to use the hypothesis/objective, study design and experimental variables

• Example:
  • “A randomized controlled trial investigating the incidence of diabetes among older schizophrenics taking clozapine”
The Abstract

• On-line search databases typically contain only abstracts

• People often read abstract only

• Did the authors describe:
  – Why readers might care about problems & the results?
  – What problem was an attempt made to solve?
  – How the problem was studied?
  – What they found to be the answer?
  – What are the implications of the answer?
The Body of the Narrative: The Introduction

- Introduce the topic
  - Setting the context and the motivation/importance of the research

- Summarize the previous research
  - What is known? What is not known? What are the limitations to the previous work? It is not a treatise, be specific!

- Narrow down to the essence of the problem for your research.
The Body of the Narrative: The Objectives

• Describes in clear terms what is to be achieved with the research.
  – Objectives reflect the literature review & study outcomes

• Are not a formal hypothesis, but a hypothesis could be derived
  – Example:
    • To examine the incidence of diabetes among patients living with schizophrenia prescribed clozapine.
    • $\mu_{\text{clozapine}} \neq \mu_{\text{not clozapine}}$

http://psychology.about.com/od/apastyle/ht/introduction.htm
The Body of the Narrative: The Methods

- Do the authors adequately describe:
  - Study setting & population
    - So that the reader can determine if it represents practice site or patient population
    - Inclusion criteria
    - Exclusion criteria
Study Design

• Experimental, non-experimental, quasi-experimental
  – Does the study design answer the question?

• Potential bias (e.g. sample selection, temporal ordering, ecological fallacy)
  – Random, convenience, purposeful, blocked, block size, blind versus open

• Strength or conduct of the design (1-shot case study, RCT, cross-over)
  – Did the cross-over have an adequate “washout period”?
Picture is Worth a Thousand Words

2010 CONSORT
Research Methods (Continued)

• Data & data collection
  – What:
    • Survey, cost data, gender, diagnosis
  – Where:
    • Type of practice or practice setting
  – When:
    • Specific months, year, prospective/retrospective
  – Why:
    • Original data, claims data, other secondary data, medical record
  – How:
    • Self-reported, trained interviewers, study investigators (e.g., faculty), trained medical record abstractors
The Research Methods: Variables

• The dependent variable
  • Primary versus secondary outcomes

• The independent variable
  • Is the strength of the intervention sufficient?

• Confounding variables
  • Shown to have relationship with independent variable / dependent variable in literature review

• Theoretically / clinically appropriate indicator of the hypothesis?
  • Validity, reliability

• How are the variables “operationalized”?
The Statistical Analysis

- Appropriate statistical tests used?
  - Level of measurement, appropriate test for the variables & the hypothesis?

- Are the specified alpha & beta-error appropriate?

- Does the study have a sufficient sample size? Sufficient Power?
  - Primary versus secondary analyses, matching, subgroup analyses, a priori versus post-hoc

- Compare responders versus non-responders

- Data distribution
The Body of the Narrative: The Results

• Do (does) the author (s)
  – Describe & compare relevant groups?
    • Intervention versus control
    • Compare responders / non-responders
  – Report the result of the analyses that address the objective?
  – Use the data to the fullest extent?
The Body of the Narrative: The Results

- Present the results in a meaningful way?
- Coefficients interpreted in a meaningful fashion? Too much jargon?
- Tables and narrative redundant?
The Body of the Narrative: The Results

- Do researchers provide enough statistical information (e.g. p-value, statistical test value, variability)?
- Did the researchers collect all of the data needed to measure the variables in question?
Body of the Narrative: Discussion & Conclusions

• Does the discussion directly link to the objectives?
  – Example:
    • This study examined the incidence of diabetes among patients living with schizophrenia prescribed clozapine. We found that…

• Does the discussion directly link to the literature review?
  – Example:
    • Previous studies with a weaker study design found that…with our RCT, we found that…Based on what we found we recommend…
Body of the Narrative: Discussion & Conclusions

- Clinical versus statistical significance

- Describe the most important study limitations
  - Does the author describe the limitations? More importantly, does the author describe the consequences of the limitations?

- Generalizability?

- Did the authors “over-interpret” the recommendations or conclusions.
  - balance benefits and harms, causation
  - Nomological validity
Body of the Narrative: Discussion & Conclusions

- Are the conclusions supported by the data presented?
  - Example:
    - We found a high incidence of diabetes among patients prescribed clozapine. Therefore we recommend that psychiatrists use other antipsychotics…

- Does the result support the conclusion?

  That wasn’t a rhetorical question, was it?
Body of the Narrative – The References

- Are the references cited…
  - The most appropriate to support the manuscript?
  - Too old? The most recent?
  - In the correct format?
  - Spelled, numbered correctly, & otherwise accurate?
Effective Tables and Figures for Your Manuscript

To Be Discussed Later in this Presentation
Recommendations to the Editor

• Are *recommendations*
  – Recommendation is likely 1 of 3 or > recommendations
  – Should it be reviewed by a statistician?
  – Should it be accompanied by an editorial

• Don’t be overly lenient or harsh

• Differentiate between “confidential” & non-confidential comments to the editor
Miscellaneous Considerations

• Was the work conducted in human subjects?
• Comments on grammar, style, & spelling
• It is acceptable to conduct a “team” review with a colleague
• Complete the review in the agreed upon time frame
• Keep track of role as an ad hoc reviewer for annual review
Specific Guidance on Process by Journal
Journal of the American Pharmacists Association (JAPhA)
General Review Process

- **Initial Screening By Editors**
  - Screening Components:
    - Quality
    - Value
    - Relevance
    - Scientific Merit
    - Scope

- **Partially Open Peer Review**
  - Review Components:
    - Authors identified
    - Reviewers’ identity masked
    - ~ 3 weeks allowed for review
    - Initial editor decision based on suggestions of reviewers & other factors

- **Notification of Decision**
  - Timeline / Components:
    - Initial decision to notification timeline: 6 to 12 weeks
    - Potential request for additional information

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Considerations in Review of a Manuscript - Scope

• Is the manuscript within the scope of the Journal?
  – Look at the scope and goals for the specific journal.
  – Is it primarily an “educational” article or does it apply to preceptors of students who are practitioners and it describes a practice/scientific question versus educational?
Considerations in Review of a Manuscript: “So What”

• Is it a meaningful contribution to the development & advancement of pharmacy practice or pharmacy education?

• What does the article add to the current literature?
  – Is this apparent based on the current form of the manuscript?
  – Has the article previously appeared in literature?

• How can others use this work in practice or education?
Tips to Improve Efficiency

• Download & Review Reviewer Guidance / Forms in Advance
  • Target review to key areas of interest

• Type comments into word document
  • Copy & paste into review system

• Separate word documents can provide you with a means to document the number of reviews conducted each academic year.
JAPhA Web-Based Manuscript System

Hosted by Scholar One, Inc. [Charlottesville, VA]

Link:
  - http://mc.manuscriptcentral.com/apha
  - Accessed May 2012
Importance of Accurate Information

- System prompts authors / editors at initial login to enter required information in standardized form

- Please update periodically for accuracy
  - Contact info
  - Expertise / Areas of interest
Specific Guidance on Process by Journal

ARTICLE DECISIONS
## Types of Suggested Decisions as a Review - JAPhA

<table>
<thead>
<tr>
<th>Decision</th>
<th>Summary of Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acceptance</strong></td>
<td>• Accepted as is with minor grammatical corrections</td>
</tr>
<tr>
<td><strong>Minor Revision</strong></td>
<td>• Few revisions or minor restructuring</td>
</tr>
<tr>
<td><strong>Major Revision</strong></td>
<td>• Significant revisions</td>
</tr>
<tr>
<td><strong>Reject &amp; Resubmit</strong></td>
<td>• Potential interest in article but not in current format</td>
</tr>
<tr>
<td><strong>Reject</strong></td>
<td>• Rejection</td>
</tr>
</tbody>
</table>
## Considerations in Review of a Manuscript – Manuscript Preparation

<table>
<thead>
<tr>
<th>Specific Criteria</th>
<th>Necessary for Current Typesetting System</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 – or – 12 point type</td>
<td>Doc or rtf file submission</td>
</tr>
<tr>
<td>Times New Roman</td>
<td>No tabbing of or in tables</td>
</tr>
<tr>
<td>Double spaced</td>
<td></td>
</tr>
<tr>
<td>Left justified</td>
<td></td>
</tr>
<tr>
<td>8.5 x 11</td>
<td></td>
</tr>
</tbody>
</table>

JAPhA Editorial Staff
Fundamental Concepts in Reviewing Manuscripts

• For more helpful suggestions, refer to:
  – “Your Role and Responsibilities in the Manuscript Peer Review Process”
    • Gayle A. Brazeau, Joseph T. DiPiro, Jack E. Fincham, Bradley A. Boucher, and Timothy S. Tracy
    • AJPE 72(3), Article 69, 2008
    • Available at: http://ajpe.org/aj7203/aj720369/aj720369.pdf
Which of the following represents components of a strong review?

A. Constructive
B. Comments on all areas of suggested critique
C. Provides specific points for improvement / basis of recommendation
D. All of the above are components of a strong review
Tips for Successful Manuscript Preparation & Submission

AJPE & JAPHA
Think Like a Reviewer
Considerations in Survey Research

• Must include copy of survey instrument
  – Needed during the review process

• Often published in web-only format

• Common needs / considerations for survey research included in separate handout
“BEFORE SUBMISSION… ARTICLES SHOULD BE REVIEWED BY ONE OR MORE COLLEAGUES FOR ACCURACY, CLARITY & COMPLETENESS”

AJPE Guidelines For Authors
“TEXT SHOULD BE SCHOLARLY, READABLE, CLEAR, AND CONCISE.”
Considerations in Submission of a Manuscript

Fit in Submitted Section

- Handout of section fit
  - Think about where the fit is best
  - Do you have the components necessary to provide research / commentary / etc.
  - Use the guidance on:
    - Length format / number of words
    - Number of tables
    - Headings

Peer Reviewers
JAPhA Editorial Staff

AACCP Annual Meeting
Specific Guidance on Process by Journal

AMERICAN JOURNAL OF PHARMACEUTICAL EDUCATION (AJPE)

Gayle A Brazeau, PhD
Associate Editor
Specific Guidance on Process by Journal

ARTICLE DECISIONS
AJPE Instructions for Reviewers

• http://www.ajpe.org/page/reviewer-instructions

• When you are invited to review, you will receive instructions on how to access the manuscript using AJPE’s Editorial Manager site:
  – http://ajpe.edmgr.com

• Please answer the questions related to the manuscript at the site.

• Please provide a rating for the manuscript.

• Please make sure you put the appropriate comments in the correct area (Editor vs. Author).
## Editor Decisions - AJPE

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<tr>
<td><strong>Reject</strong></td>
<td>• Either:</td>
</tr>
<tr>
<td></td>
<td>1) Out of the scope of the journal</td>
</tr>
<tr>
<td></td>
<td>2) Based upon the reviews</td>
</tr>
</tbody>
</table>
AJPE Specific Guidance

• Submit a Manuscript - http://www.ajpe.org/page/submit-manuscript
  – Thank you for your interest in submitting a manuscript to the American Journal of Pharmaceutical Education.
  – The Journal uses Editorial Manager, an online manuscript-tracking program, for the manuscript submission process.
  – Return system users who already have username / password:
    • Go to Editorial Manager & click on the button LOG IN: http://www.editorialmanager.com/ajpe
  – New users:
    • Go to Editorial Manager & click on the button REGISTER: http://www.editorialmanager.com/ajpe
  – Forgotten user name / password / assistance needed:
    • Please contact Karen Shipp, Assistant Editor, at ajpe@cop.sc.edu
Types of Manuscripts - AJPE

- Reviews
- Research Articles
- Instructional Design and Assessment
- Teachers' Topics
- Innovations in Teaching
- Letters to the Editor
- Book & Software Reviews
IDEAS Format

• Described in an updated article by:

• Available at:  
  (Accessed June 2012)
IDEAS Format (Continued)

• Sections
  – Introduction
  – Design
  – Evaluation and Assessment
  – Discussion and Summary

• See handout for further information
EFFECTIVE TABLES, FIGURES, PHOTOGRAPHS AND ILLUSTRATIONS
Suggestions for Figures, Tables, Photographs or Illustrations

• Well organized

• Adds to information presented in the body of the text
  – Does not repeat what is discussed specifically in the text
  – Must contribute to the significance of the work

• Stands alone

• Focuses on key points of the manuscript

See handout for more guidance
General Suggestions

• Critical to have good quality figures, tables, photographs and illustrations
• Follow instructions to authors!
• Reflects quality of your overall work!
• Common aggravations about figures, tables, photographs and illustrations
  – Too many
  – Too long (correlation tables)
  – Too simple
  – Can’t read the figure legends or differentiate treatments
    • Does not stand alone

See handout for more guidance
Which of the following does not represent a focus of article submission?

A. Fit of the Journal
B. Formatting requirements of the Journal
C. Personal preference / previous journal requirements in structure of article
D. Tables / figures contribution
Reviewer Feedback

- What are ways that Journals can encourage strong reviews?
• What are things that you have seen in a good and bad review?
What questions do you have?
Common Issues Leading to Manuscript Decisions

Editor Discussion of Common Reasoning
References

• Rosenbaum P. On the value of being a journal reviewer. Developmental Medicine & Child Nuerology, 2005. 47: 147
• AJPE Reviewer Instructions: http://www.ajpe.org/page/reviewer-instructions (Accessed May 2012)
• JAPhA Manuscript Central: http://mc.manuscriptcentral.com/apha (Accessed May 2012)
References


