

Writing for Publication

An Overview of the Journal
Publishing Process

Topics and Presenters



Disclosures

- All speakers are affiliated with the International Journal of MS Care!

Course Goals

At the end of this session, the participant will be able to:

- Identify the major steps and processes in preparing a manuscript for publication
- Reflect on key ethical issues that need to be considered when submitting a manuscript for publication
- Understand the steps and processes involved in the peer-review and post-acceptance stages

Manuscript Preparation

Francois Bethoux, MD

Preliminary Steps

- Topic / message / audience
- Type of manuscript
- Target journal(s)
- Author(s)
- Timeline
- Gather all materials needed
 - Ethics approval
 - Data

Types of Manuscripts

- Literature review / meta-analysis
- Case report / case series
- Original research study (quantitative or qualitative)
- Consensus statement
- Editorial or opinion paper
- Letter to the editor
- Book review

Reporting Guidelines

Type of manuscript	Guideline
Clinical trial	CONSORT
Case report	CARE
Observational study	STROBE
Review / meta-analysis	PRISMA
Qualitative research	SRQR
Study protocol	SPIRIT

Levels of Evidence

- 1a: Systematic reviews (with homogeneity) of randomized controlled trials
- 1b: Individual randomized controlled trials (with narrow confidence interval)
- 1c: All or none randomized controlled trials
- 2a: Systematic reviews (with homogeneity) of cohort studies
- 2b: Individual cohort study or low-quality randomized controlled trials (e.g. <80% follow-up)
- 2c: "Outcomes" research; ecological studies
- 3a: Systematic review (with homogeneity) of case-control studies
- 3b: Individual case-control study
- 4: Case-series (and poor-quality cohort and case-control studies)
- 5: Expert opinion without explicit critical appraisal, or based on physiology, bench research, or "first principles"

<http://www.cebm.net/oxford-centre-evidence-based-medicine-levels-evidence-march-2009/>

Levels of Evidence

Level I: Generalizable studies

Level II: Conceptual studies

Level III: Descriptive studies

Level IV: Single case studies

Daly J, Willis K, Small R, Green J, Welch N, Kealy M, Hughes E. (2007). A hierarchy of evidence for assessing qualitative health research. *Journal of Clinical Epidemiology*, 60(1), 43-49.

Authors: Who's on First?

- First author, second author, last author/senior author, corresponding author
- Agree on author order early in the process to avoid later disputes
- Check journal policies on who constitutes an author vs. an acknowledged contributor
- Conflict of interest

Selecting a Target Journal

- Is your topic within the journal's scope, mission, and audience?
- Does the journal publish the type of manuscript you plan to write?
- Subscription access vs. free access vs. open access
- Metrics: indexation, citation indices, rejection rate, turnaround for review and publication

Searching the Literature

- Important at multiple stages of the writing process for:
 - Selecting a topic
 - Keeping up with new developments throughout the research and writing process
 - Comparing your findings to available evidence
 - Performing a formal literature review

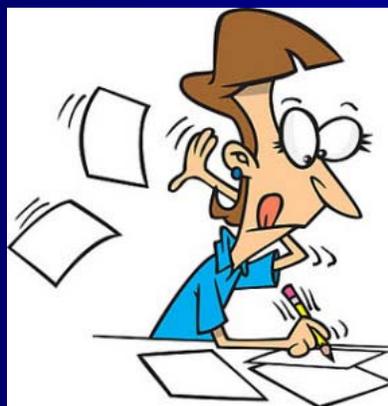
Bibliographic Databases

- Free databases, e.g., PubMed
<http://www.ncbi.nlm.nih.gov/pubmed>
- Subscription databases, e.g., Ovid, Scopus, EMBASE, CINAHL, ISI Web of Knowledge, Cochrane library
- If formal literature review, the search strategy needs to be well defined, and included in the paper.

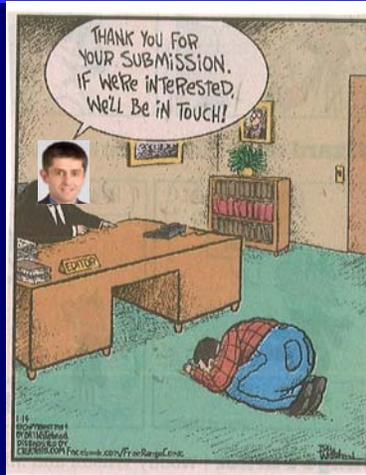
Citation Management

- Various software programs are available for managing references:
 - EndNote
 - RefWorks
 - Reference Manager
 - Mendeley
- Consult colleagues or librarians for recommendations

Is writing a manuscript for a scholarly journal like writing a novel?



Or does it feel like this?



Literature Review

- A critical review of the literature on a particular topic
- Often (not always) commissioned from a recognized authority in the field
- Ideally is conceived to answer an important question, not simply "all you ever wanted to know about XXX"

Case Report / Case Series

- May describe an especially interesting case that represents a little-known clinical problem or a new therapeutic approach
- May be a retrospective chart review
- Can help formulate hypotheses for future research
- Be aware of methodological limitations when interpreting data and information.

Original Research Study

- Methodology:
 - Prospective vs. retrospective
 - Controlled vs. uncontrolled
 - Randomization, blinding
 - Control condition (no treatment, “standard of care”, specific intervention)
 - Qualitative study
 - Epidemiologic study

Research Paper Structure

- Introduction: What is the research question or problem?
- Materials and Methods: How was the answer sought?
- Results: What were the findings?
- Discussion/Conclusion: What do the findings mean? What is the answer?

What to Write First?

- Tables/Illustrations
- Results
- Discussion
- Materials and Methods
- Introduction
- Abstract
- Title

Tables and Illustrations

- Check specific journal for format
- Limit their number (IJMSC prefers no more than 4 to 6); if more needed, journal may suggest online-only publication
- Use to convey data efficiently; should supplement (not duplicate) the text and should not confuse/overwhelm

Results

- Clearly present the study findings
- Refer to tables and figures as needed
- Include results of statistical analysis
- Do not comment on the data; that is saved for the Discussion

Discussion

- Explain what your findings mean:
 - Why are the results interesting or unique?
 - Is the evidence valid? Is it supported or contradicted by the findings of others?
- Discuss any methodological problems or limitations of the study

Materials and Methods

- Describe the study design and protocol
- Explain how subjects were selected; include statement of informed consent
- Specify the methods of statistical analysis used
- Acknowledge IRB or other ethical body approval of the study

Introduction

- Why did you do this research? What was the question or problem?
- Provide a *brief* overview of the topic
 - Historical perspective/review the relevant literature
 - Don't show off your wide knowledge
- Close with a concise statement of the main purpose of the study

Abstract

- Increasingly important to whether your paper gets read
- Summarize the paper's main points
- Check target journal for required length limit and format (structured vs. unstructured)
- Do not include anything that is not in the paper itself!

Title

- Write it last; the paper may be different from what you had expected!
- Should be concise, specific, and informative; include all key elements
- Avoid question or statement format
- A subtitle may be used if necessary to add detail, but the main title must be able to stand alone

Tips for Beginners

- Start small
- Request help from colleagues
- Seek out mentoring opportunities, including through professional organizations (e.g., IOMSN, IOMSRT, CMSC, NMSS)
- Participate in a research study; even a small role could lead to authorship

More Ideas

- Use the many resources available.
- When in doubt, reach out to the editorial office.
- Once you have some experience publishing, consider volunteering to be a peer reviewer or help an experienced one: evaluating other papers will improve your writing!

Summary

- Write a story, while following the rules
- Convince the reviewers and the readers of the importance of your topic and findings
- Do not overstate the implications of your results
- Follow the instructions for authors!

Manuscript Submission and the Peer Review Process

Maria Stadtler, CCRP

Manuscript Submission

- Manuscripts are submitted online (for IJMSC, <http://ijmsc.msubmit.net> or <http://ijmsc.org>)
- Check recommended Web browser for each journal
- Upon receipt, the paper is quality-checked and may be sent back to author for corrections

9 Ways to Avoid Having Your Paper “Unsubmitted”

1. Review instructions for authors

Examples:

2. Check format and word limit (for IJMSC, submit in Word format \leq 5,000 words)
3. Include title page with full name, institutional affiliation for all authors; include phone/fax number, e-mail address of corresponding author
4. Structured abstract: Background, Methods, Results, Conclusions

9 Ways to Avoid Having Your Paper “Unsubmitted”

5. In the Methods section, include the name of IRB or ethics committee which approved the study
6. Include disclosure section listing conflicts of interest for all authors—if no conflicts exist, state same
7. Ensure references in proper format, i.e. AMA or APA. Consult most recent version of publication manual

9 Ways to Avoid Having Your Paper “Unsubmitted”

8. List figure legends on a separate page but keep the figures (images) numbered

9. Ensure figures and tables are in proper format

When in doubt re: scope or formatting requirements, contact the editorial office prior to submission

What Editors Want You to Know

- Every journal is different
- If you don't have access to print issues, review issues on Web site
- Many journals use plagiarism check at time of submission
- Obtain permission to use previously published material, i.e. tables or figures
- If English is not your first language, look into language assistance service

Initial Editorial Review

- Once the paper passes quality-check, it is sent to the Editor for review
- The Editor performs the initial review and may decide to:
 - Assign external peer reviewers (at least two) with expertise in the topic area
 - Reject the paper outright at the editorial level without sending for peer review, e.g. content not within scope, does not meet priority level

External Peer Review

- Submission portal will request suggestions of reviewers. This aids the Editor in assigning an adequate number of reviewers
- Many journals use single-blind review process: reviewer identities are not revealed to authors, but author identities are available to reviewers.

External Peer Review

- Typical timeframe to provide review is 2 to 3 weeks
- Reviewers should always disclose conflicts of interest; decline invitation if necessary
- Common reasons for delay in peer review process:
 - Vacation/out of office
 - Grant deadlines
 - Other competing deadlines

External Peer Review

- After reviewing the paper, the reviewer may recommend:
 - Acceptance (rare for original version)
 - Minor revision--further review not necessary
 - Major revision--further review necessary
 - Rejection

Editorial Decision

- After peer reviewers' comments are received, the Editor considers the comments and may decide to:
 - Make a decision based on reviewers' recommendations; or
 - Assign additional reviewers
- The Editor is the final arbiter of any conflicting reviewer recommendations

Author Response

- The author makes the recommended revisions and/or rebuts specific reviewer comments; resubmits revised version and response to reviewer comments
- The peer review and revision process continues until the Editor makes the final decision
- Once a paper is accepted, it is entered on the manuscript log for scheduling

Summary of Submission and Peer Review Process



The Editorial Production Process After Manuscript Acceptance

Annette Theuring, MA

Accepted! Now What?

- At IJMSC, a completed Authorship Form must be returned by each author
- Includes Copyright Transfer Agreement, Authorship Statement, and Conflict of Interest Disclosure Statement
- The paper will not be published without a signed form from each author.

Copyright

- Copyright policy varies from journal to journal; be sure you understand the agreement
- At IJMSC, copyright is transferred to CMSC, and permission from the publisher is needed to reprint the article (in whole or in part) elsewhere
- Some journals require only a "license to publish"

“Online First” Publication

- Implemented last year at IJMSC
- Reduces time from acceptance to publication
- Journals may post preprints at various stages of production (unedited or edited manuscript, first or final page proof)
- IJMSC posts lightly edited, formatted version of manuscript within 4 weeks of acceptance

The Editing Process

- At IJMSC, all papers are carefully edited for clarity, style, and format
- After a paper has been scheduled for an issue, the Managing Editor sends the edited manuscript to the corresponding author for approval
- Page proof is not sent to authors except on request

Think your final accepted manuscript is perfect?

During the entire medical treatment, medication is the most common treatment method. All of the drug or non-drug treatments carry potential known and unknown risks. Many patients have experienced side effects that can be expected, but there are also a lot of patients who have suffered unexpected adverse drug reactions and consequent manifestations such as paralysis or death. The motto: "First do no harm" has always been the principle that the medical staff should follow. The drug use is a complex process and involves a number of different health care professionals, and thus it is necessary for the professionals to establish a good communication model and to build up the team work. The common errors during the drug use process include the errors in the prescription, errors in the drug dispensing, wrong drug delivery, and monitoring errors, which result in approximately 14% of the total mortality rate [1]. The drug dispensing errors are one of the common errors. According to the statistics of a British hospital, 178 cases of drug dispensing errors occurred among the 1,000,000 prescriptions that were processed (the incidence rate was 0.018%). The incidence rate was 0.04% when the double check was not carried out, and the incidence rate decreased to 0.01% when the drug dispensing was double checked [2]. Therefore, it is important to create a secure operating environment and secure procedures for the drug dispensing to prevent the drug dispensing errors.

This study was to decrease the incidence of the drug dispensing errors by improving the systems and the operating process. Theoretically, the pharmacists not only need to follow the principle of "three times of making and five times of verification" when they dispense the drugs but also need to improve the alertness to the high-risk drugs and drugs with similar names and appearance/packaging, multiple doses, and multiple formulations. However, the busy drug dispensing operation and the large number of the drugs make it difficult to keep the drug dispensing correct when the time and the drug information is very limited. The operating volume

Think again!

During the entire medical treatment, medication is the most common treatment method. All of the drug or non-drug treatments carry potential known and unknown risks. Many patients have experienced side effects that can be expected but there are also a lot of patients who have suffered unexpected adverse drug reactions, in some cases leading to weakness, consequences such as paralysis or death. The motto: "First do no harm" has always been the principle that the medical staff should follow. The drug use is a complex process and involves a number of different health care professionals, and thus it is necessary for the professionals to establish a good communication model and to build up the team work. The common errors during the drug use process include the errors in the prescription, errors in the drug dispensing, wrong drug delivery, and monitoring errors, which result in approximately 14% of the total patient mortality rate [1]. The drug dispensing errors are one of the most common errors. According to the statistics of a British hospital, 178 cases of drug dispensing errors occurred among the 1,000,000 processed prescriptions, that were processed (the incidence rate was 0.018%). The incidence rate increased to 0.04% when the pharmacist did not double-check the medication, and the incidence rate decreased to 0.01% when the drug dispensing was double-checked [2]. Therefore, it is important to create a secure operating environment and secure procedures for the drug dispensing to prevent the drug dispensing errors.

This current study was undertaken to explore the effectiveness of interventions in the drug dispensing system in decreasing the incidence of the drug dispensing errors by improving the systems and the operating process. Theoretically, the pharmacists should follow not only

Editing Considerations

- Editor will include queries in the edited version: possible errors, inconsistencies, unclear wording, etc.
- Tables/figures: Are they all necessary? If excessive, should some be published as supplementary online-only material?
- Issue make-up needs may influence editorial decisions

Permissions

- Editor will check whether permission has been obtained to republish any previously published material
- Obtaining permissions (including any required fees) is author's responsibility
- Permission must be obtained from copyright owner, which is usually the original publisher, not the author

Design and Composition

- After author returns edited manuscript with final changes, cleaned-up final version is sent to designer/compositor
- Figures may be re-drawn or re-created to improve aesthetics; author may be asked to approve final version
- Many journals send page proof to author for approval, instead of edited manuscript

Ethical and Responsible Publishing

Marcia Finlayson, PhD

Objectives

- Introduce four major organizations that help authors, editors, and publishers manage publication ethics
 - ICMJE, COPE, WAME, CSE
- Summarize key issues that authors must consider to ensure ethical and responsible publishing

ICMJE

International Committee of Medical Journal Editors

- Working group of editors
 - Develop and distribute recommendations to support the conduct, reporting, editing, and publication of medical research
- Goal
 - Support best practices and help stakeholders develop and distribute accurate and unbiased journal articles

COPE

Committee on Publication Ethics

- Established in 1997 by medical journal editors in the UK
 - Now international; all academic fields
- Provides advice to and a discussion forum for stakeholders
 - Broad focus: Publication ethics
 - Specific expertise: Handling misconduct

WAME

World Association of Medical Editors

- Global organization
 - Editors of peer-reviewed medical journals
- Goals
 - Foster cooperation and communication; improve editorial standards; promote professionalism in medical editing
 - Encourage research on the principles and practice of medical editing

CSE

Council of Science Editors

- "... is a dynamic community of editorial professionals dedicated to the responsible and effective communication of science."
- Professional society
 - Educational programs, resources, guidelines, annual meeting

Although these organizations primarily target editors and publishers, authors can benefit from the available resources

Ethical & Responsible Publishing: Major Considerations

- Wide range of topics
- Our focus:
 - Conflicts of interest
 - Authorship
 - Duplicate submission and prior publication
 - Plagiarism, copyright, and reuse of materials
 - Protection of research or case subjects

Issue #1: Conflicts of Interest

- Always specific to a particular manuscript
 - Takes into account all phases of the work
 - Applies to authors, reviewer, publisher, editor
- When one's private interests diverge from one's publishing responsibilities such that others might question one's behavior, judgment
- Divergence of interests doesn't imply wrongdoing
- ***Key to managing:*** Policies and instructions; disclosure and transparency (sniff test)

Issue #2: Authorship

See: <http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>

- Authorship: for those who deserve credit and can take public responsibility for the work
- All authors should meet **ALL** four criteria:
 - Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
 - Drafting the work or revising it critically for important intellectual content; AND
 - Final approval of the version to be published; AND
 - Agreement to be accountable for all aspects of the accuracy or integrity of any part of the work if questioned.

Additional points from ICMJE

- Everyone who meets 4 criteria should be listed
 - Those who do not: Acknowledged
 - Those who initially meet only criterion #1 should be offered opportunity to meet other criteria
- All authors should be able to explain the contributions of other co-authors

Ghost, Guest & Honorary Authorships

See: Bavdekar, 2012; http://www.councilscienceeditors.org/wp-content/uploads/entire_whitepaper.pdf

- Ghost: When the actual author is not named or acknowledged
- Guest: When non-contributors are listed to bestow credibility
- Honorary: Based on loose affiliation or position
- Ghost and Guest: Often linked to industry-related work; hides potential bias
- Solutions: Education, policy, and protection for whistle-blowers

Issue #3: Duplicate Submission and Prior Publication

See: <http://www.icmje.org/recommendations/browse/publishing-and-editorial-issues/overlapping-publications.html>

- Duplicate submission:
 - Send the same paper to 2 or more journals; same or different languages
 - Issues:
 - Editors and reviewers unknowingly replicate review and editing process
 - If published in both: copyright issues
- Special circumstances:
 - Consensus statements; guidelines

Issue #3: Duplicate Submission and Prior Publication

See: <http://www.icmje.org/recommendations/browse/publishing-and-editorial-issues/overlapping-publications.html>

- Prior publication:
 - When one paper substantially overlaps with a previous one without reference to it
 - Issues: international copyright laws, use of resources, distortion of available evidence (i.e., double-counting; overweighting of results)
- Authors must disclose in cover letter; provide copies of original papers
 - Should disclose previously published abstracts

Issue #4: Plagiarism

See: <http://www.wame.org/about/recommendations-on-publication-ethics-policie#Plagiarism>

- When words or ideas of others are used without appropriate citation or acknowledgment
 - Misleads reader; Form of misconduct
- Reuse of sections of your own previous work without citation
 - Self-plagiarism
 - Issue: Violates copyright of publisher
 - No consensus: Misconduct?

Copyright, permissions, reuse of material

- Issues related to plagiarism:
 - Reuse of material from other published works (including from your own papers)
 - Graphics, figures, tables, etc.
 - Need to request permission to reuse
 - May involve a fee
 - As author, reuse request and fee is your responsibility: Need to cite reuse

Issue #5: Protection of Research or Case Subjects

- Must have ethics approval for all research – but is it research?
 - Belmont Report presents differences between research and practice
- Key: If your intent is to develop or contribute to generalizable knowledge, it is research and should have ethics review and approval

Contact Us!

- Francois Bethoux: bethouf@ccf.org or IJMSC@mscare.org
- Maria Stadtler: stadtlm@ccf.org or IJMSC@mscare.org
- Annette Theuring: atheuring@comcast.net
- Marcia Finlayson: marcia.finlayson@queensu.ca