Fundamental Concepts for Writing a Manuscript

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EDITORIAL TASKS

Liver Transplantation (Associate Editor) - AASLD
Clinical Liver Disease (Associate Editor) - AASLD

Frontline Gastroenterology (Deputy Editor)
Annals of Hepatology (Associate Editor)
Digestive and Liver Disease (Section Editor)
Why?

• Share information / advance knowledge
• Education
• Scientific interest
• Recognition
• Promotion
• Grant support
• Other
Major tips for publication

1. Look for and sell an idea
2. Make the idea a reality
3. Compromise to bring that idea to light
4. Understand the process of publication
5. Write for the whole world → English
6. Indexed journal / high IF
7. Answer what you set out to find out
8. BE PATIENT
Types of Journals

- General Medicine
  - NEJM, JAMA, BMJ
- Internal Medicine
- Surgery
- Pediatrics
- Anesthesia
- OB / GYN
- Orthopedics
- Oncology
- Ophthalmology
- Dermatology
- Radiology

- Speciality Journals
  - Gastroenterology
  - Hepatology

- Very specific
  - Transplantation
  - Hepatitis
  - Endoscopy
  - IBD
  - Pancreas
Sequence

- Title Page
- Abstract
- Introduction
- Methods
- Results
- Discussion
- References
- Tables
- Illustrations (Figures)
- Abbreviations and Symbols

"I can't read a word of this essay of yours. Excellent work."
How to Write and Edit a Paper

1. Organize the data in sequence - KEY
2. Set up figures and tables
3. Write the conclusion – how do you sell?
4. Write the abstract
5. Write the results
6. Write the introduction and methods
7. Write the discussion
Authorship

• Decide authorship beforehand!
• Decide order!
• Who is an author?
• Substantial contributions to:
  • conception or design of the work
  • acquisition, analysis
  • interpretation of data for the work
  • Drafting and/or revising for intellectual content
  • Final approval of the version to be published

• Agreement to be accountable for all aspects of the work
Key points for a good article

Must haves

1- Great data based on an original idea – “a good story”

“Without good data you cannot write a fine article”

“Breakthrough data does not guarantee a fantastic article. You need to be able to write it very well”

2. Make the story easy to follow !!!
Conflicts of interest

• All participants
  • authors
  • peer reviewers
  • Editors & editorial board
  • Disclose all relationships that could be viewed as potential conflicts of interest

• Need to disclose!!
How do I start?

• **TITLE** – Be informative and specific.
  • Use a title with a catch – but be short:
    • *On-Pump vs Off-Pump CABG*

• Do not add inquisitive titles:
  • *Is there a role for interferon in HCC?*

• Rather use
  • *The beneficial effects of interferon in HCC: Results of a randomized controlled trial.*
The Abstract

- Use structured format
- 250 – 200 words
- Background / Aims (Why you did it)
- Methods (How you did it)
- Results (What you found)
- Conclusions (What it means) make sure it coincides with the discussion and findings in main article
How to Write a Strong Paragraph

• One major idea per paragraph
• Start with a topic sentence
• Add supporting sentences or background
• Sum up if appropriate
• Cut to the next paragraph if appropriate
• Half page in length (125 –150 words)
The Introduction

• Why you did the study?
• Four paragraphs maximum
• Brief review, describe knowledge gap
• Describe your overall approach
• Short and simple
• Sometimes - summarize the main finding
Methods

• Others with the data should be able reproduce the results
• State the approval of an IRB
• Identify methods, equipment
  • (give the manufacturer's name)
• Describe procedures in detail
• Use references to published techniques
• Anticipate questions or problems

Report using guidelines for different study designs
  CONSORT for randomized trials
  STROBE for observational studies
  PRISMA for systematic reviews and meta-analyses
Statistics

• It should enable someone with access to the original data to judge its appropriateness for the study and to verify the reported results.

• When possible, quantify findings and present them with appropriate indicators of measurement error or uncertainty (such as confidence intervals).

• Specify the statistical software package(s) and versions used.

• Distinguish prespecified from exploratory analyses, including subgroup analyses
• Tell the story in sequence
• This is what reviewers look at!!!
• Tables and figures should stand alone and need to tell the story
• Simplify - use % change and CI
• Summarize as you go
• Explain rationale if not obvious
Discussion

• State the main finding, what this adds.
• Discuss other findings
• Compare your findings to others
• Provide a mechanism
• Discuss why your findings are novel
• Do not over speculate!!
• Limitations to your study
• Data must support conclusions
• Always end with summary of main conclusions
CLARITY

• Specific
• Concrete
• Assume reader does not understand the topic well.
• Look for help
• Have other read
• Look for an English speaking medical author

Good writers choose each and every word with care and revise for clarity, flow, conciseness, and brevity.
The Essence of Medical Writing

“How can we define an article that is well written? This question can be answered in two words: ‘simple’ and ‘clear’. Unfortunately this is exactly the opposite of how many, even native English users, write medical research.

Common Errors in Medical Writing

- Excessive use of passive voice
- Long, complex sentences
- Overuse of jargon
- Confusing word order
- Grammatical and spelling errors
- Abbreviations
Avoid Overuse of:

• Avoid passive voice –
  • Instead of 'it has been previously shown by our lab ...not good
  • use 'we previously showed ...'. better

• For example, in the sentence:
  • We performed two experiments.

• the verb “performed" is in the active voice, but in the sentence:
  • The experiments were performed by the investigator.

• the verbal phrase “were performed" is passive / avoid
Confusing Word Order

By in-situ hybridisation, striking regional differences were detected by Brown, after LSD, in the rabbit spinal cord.

Striking regional differences were detected by Brown using in-situ hybridisation in the rabbit spinal cord after LSD.

*Brown detected striking regional differences after LSD in the rabbit spinal cord by in-situ hybridisation.*
Confusing and Badly Written

In all patients, bioptic material was taken and was studied in the period from December 1999 to May 2000.

Biopsies were taken and studied in all patients in the period From December 1999 to May 2000.

We biopsied all patients in the study between December 1999 and May 2000.
More...

• Avoid dependant clauses –
  • group of words that contains a subject and verb but does not express a complete thought

• Avoid a run –on sentences
  • It is nearly half past five we cannot reach town before dark. wrong
  • It is nearly half past five. We cannot reach town before dark. better
Finally, we sought to determine whether HFE mutations are more common among patients with chronic hepatitis C and end stage liver disease compared with those with compensated liver disease secondary to chronic hepatitis C. (Gastro 2003)

Finally, we asked whether HFE mutations are more common in end stage vs compensated liver disease in patients with chronic hepatitis C.
There has been growing interest in the chemoprevention of cancer, especially when high-risk individuals and groups can be identified. (Gastro 2003)

*Chemoprevention of cancer in high-risk patients is an area of growing scientific interest.*
Cover letter

- Cover letter – very important
- Include:
  - Say that work is previously unpublished, not simultaneously submitted elsewhere and that all authors have contributed significantly to and approved the manuscript.
  - State 2 or 3 bullet-point phrases that summarize the novelty or significance of the paper
- Suggest appropriate reviewers
It’s written / now what?

- Choose journal.
- Read carefully and be strict about requisites (web)
- They rule!! Remember that
- Look for a style editor and someone senior who is not an author to correct
  - *If it is very poorly written they may reject on that basis.*
Main reasons for rejection

• Lacks novelty
• Lack of clear objectives and hypotheses
• Problems with design (small sample, short follow up ...)
• Results are not presented clearly
• Wrong or deceiving conclusions
• Poor literature review
• Confusing (poorly written)
Summary

• Choose the right journal
• Writing style: simple is good
• Sell your manuscript –
  • Accentuate the positives
  • Clean and polish
  • Follow the 'Instructions to Authors'.
• Avoid common statistical errors
• Have others read and comment
• Hope for the best and good luck
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Where do I send my article?

• Depends on complexity and originality
• Depends on how rare or common
• Send to journal popular among your peers.
• Journal with highest possible impact!
• Hopefully an indexed journal

• Pubmed
• Scopus
• Embase
What is the impact factor?

• Designed in libraries (1960’s) to decide if worthwhile subscribing.
• Defined:

\[
\frac{\text{# of refs (originals/reviews) of a journal in previous 2 yrs}}{\text{# of articles (published by that journal) in those previous 2 yrs}}
\]

• The higher the better
• The majority have an IF between 2- 15
Levels of IF

- $IF < 2$ : regular
- $IF 2-4$ : usually specialty journal – good
- $IF > 4$ : general journals & common areas (cards/ GI / pulmonary). Very good
- $IF > 10$ : excellent (basic science, general, some specialties)
- $IF > 15$ exceptional ()
- $IF > 30$ unique (NEJM o Nature)
TOP 10 IF Journals

1. New England Journal of Medicine (impact factor: 59.558)
2. The Lancet (impact factor: 44.002)
3. Nature Biotechnology (impact factor: 43.113)
8. JAMA - Journal of the American Medical Association (impact factor: 37.684)
9. Chemical Reviews (impact factor: 37.369)
An editor is a person employed on a journal whose business it is to separate the wheat from the chaff, and see that the chaff is printed.

Elbert Hubbard- American writer, publisher
## Overall Acceptance Rates

<table>
<thead>
<tr>
<th>Journal</th>
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</tr>
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<tbody>
<tr>
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<tr>
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</tr>
<tr>
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The lower the IF, the higher the possibility of acceptance.
Type of response

- Accept
- Accept with minor revision
- Reject with possibility to re-submit after changes
- Reject
MOTIUS PRINCIPALS PER REBUTJAR UN ESTUDI

- No aporta rés de nou respecte al que ja es coneix sobre el tema. No té originalitat.
- Manca de hipòtesi i objectius clars
- Problemes de disseny (mostra insuficient, seguiment curt, …)
- Resultats mal presentats o confusos
- Conclusions errònies
- Mala revisió de la literatura
- Article incomprensible (per mala redacció o llenguatge deficient)

"No s’ha d’escriure per dir alguna cosa. S’ha d’escriure perquè es té alguna cosa per dir" (Evans M)
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• Choose the right journal
• Writing style: simple is good
• Sell your manuscript –
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Who reviews?

- Confidential
- Your peers
- You may ask for a reviewer
- You may ask for someone NOT to review
- People in the same area
Major Criteria for Acceptance

- Scientific quality
- Novelty
- Significance (Priority)
- Relevance to readers
Scientific misconduct

- Scientific misconduct includes but is not necessarily limited to data fabrication; data falsification including deceptive manipulation of images; and plagiarism.
Is The Work Novel?

“Your manuscript is both good and original; but the part that is good is not original, and the part that is original is not good”

Samuel Johnson
What is Novel?

- Only one journal gets to publish the first paper
- Largest definitive study
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- Study in US vs. elsewhere
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Editors and Journal Staff

- Editors who make final decisions about manuscripts should recuse themselves from editorial decisions if they have conflicts of interest or relationships that pose potential conflicts related to articles under consideration. Other editorial staff members who participate in editorial decisions must provide editors with a current description of their financial interests or other conflicts (as they might relate to editorial judgments) and recuse themselves from any decisions in which a conflict of interest exists. Editorial staff must not use information gained through working with manuscripts for private gain. Editors should publish regular disclosure statements about potential conflicts of interests related to the commitments of journal staff. Guest editors should follow these same procedures.
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Annals Int Med 5%
Cell, Science, Nature 3-5%
NEJM <5%

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Review from peers: Comments to Authors

- Brief summary of results
- A few kind words (if possible)
- Major problems and their remedy
- If irremediable, why
- Minor problems
Writing Your Review: Comments to Editors

- Brief summary
- Why you like it or not
- What needs fixing to be accepted
- Appropriateness for journal
- Priority check box
Editorial Jargon for Fatal Flaws

• “Incremental” (salami slicing)
• “Descriptive” (no mechanism or hypothesis)
• “Highly Focused” (too specialized)
• “Complex” (incomprehensible)
• “Astonishing” (unbelievable)
• “Exploratory” (too preliminary)
Reviewers’ Rewards

• Improved reputation
• Offers to write reviews, editorials
• Stay abreast or ahead of field
• Improve your own writing and research
Advice to Reviewers

• Learn to say “no”
• State your biases and conflicts
• Don’t be a “patsy”
• Don’t be an “assassin”
• Enlist a co-reviewer
• Negotiate the due date
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Current Hepatology Reports (Section Editor: Management of the Cirrhotic Patient)

Journal of Hepatology- (Editorial Board)
Alimentary Pharmacology and Therapeutics (Editorial Board)
Gastrointestinal Endoscopy (Editorial Board)
European Journal of Gastroenterology and Hepatology (Editorial Board)
F1000 Prime. Liver Biology and Pathobiology Faculty Member (Editorial Board)
Treatment Strategies, Cambridge Research Center – Gastroenterology (Editorial Board)
World Journal of Hepatology (Editorial Board)
World Journal of Gastrointestinal Pathophysiology (Editorial Board)
Journal of Gastroenterology and Hepatology Research (Editorial Board)
Gastroenterology Report (Editorial Board)
The Journal of Clinical and Translational Hepatology (Editorial Board)