

Comprehensive Medical Research Guide

Step-by-Step Instructions From Idea to Publication

PHASE 1 – RESEARCH FOUNDATIONS

Module 4:

Publication Ethics

Key Steps Checklist :

- Follow ICMJE and BMC guidelines
- Respect authorship criteria
- Avoid plagiarism, falsification, and duplicate submission
- Report data transparently
- Declare conflicts of interest
- Use plagiarism and reference tools



1. Why Publication Ethics Matter

Publishing is the final step of research, the way your work enters the scientific community. **But** publication is not just about results; it's about trust. If readers cannot trust your integrity, your findings lose value. Misconduct (plagiarism, data manipulation, fake authorship) can damage careers permanently and even lead to legal consequences.

2. Types of Misconduct

Misconduct	Example	Consequence
Plagiarism	Copy-pasting text without citation	Retraction, academic penalty
Data fabrication	Inventing patient numbers	Blacklisting
Data falsification	Changing outcomes to fit hypothesis	Loss of credibility
Duplicate publication	Submitting same study twice	Ban from journals
Gift authorship	Adding someone who did not contribute	Authorship dispute

3. Authorship Rules (ICMJE Criteria)

To be an author, a person must meet all four:

1. Substantial contribution to design/data/analysis
2. Drafted or critically revised the manuscript
3. Approved the final version
4. Agreed to be accountable for the work

👉 If someone only gave money, collected data, or corrected English → they should be acknowledged, not listed as an author.

4. Tools to Avoid Misconduct

- **Plagiarism** checkers: Turnitin, iThenticate
- **Reference** managers: Zotero, EndNote, Mendeley
- Reporting **guidelines**: CONSORT (trials), STROBE (observational), PRISMA (systematic reviews)
- **Pre-registration**: ClinicalTrials.gov, OSF (improves transparency)



5. Conflicts of Interest (COI)

Conflicts don't mean dishonesty but not declaring them does.

Types of COI:

- Financial → receiving grants, consultancy fees
- Professional → being reviewer/editor in same area
- Personal → family member in research group

👉 Always declare COIs honestly; journals appreciate **transparency**.

6. Best Practices in Publication

- Keep raw data and make it available on request
- Cite sources properly
- Use plagiarism tools before submission
- Communicate with co-authors early about contributions
- Submit to only one journal at a time