ESF-ORI First World Conference on Research Integrity: Fostering Responsible Research

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Track 3 – Publication
Session 3 – Small Journals

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Why are scientific journals, small or large, important in fostering research integrity?

Central role in the discovery of research misconduct:

“Most of the allegations and findings center upon publication issues, because scientific publication documents the actions of the researcher.”

Small journals - definition

• Usually academic and scholarly journals, where the editorial position is not a full-time position.

• Published in small scientific communities – the so-called scientific periphery, characterized by:
  – smallness of the research community,
  – lack of financial support,
  – language barrier.

Small journals - definition

Peripheral position to the mainstream science:

• US National Library of Medicine receives more than 16,000 journals and indexes only 4,000 in MEDLINE.
• 90% of relevant information is published in 10% of the journals.
• Science Citation Index indexes less than 2% of journals from developing countries.
• Developing countries encompass ~24% of the world's scientists but receive only ~ 5% of global research spending.
Small journals – vicious circle of inadequacy

Author pool → No. and quality of manuscripts → LOW

Reviewer’s pool → Review process → INADEQUATE

Finances → Technical resources → LOW

Language → English → IMPERFECT

Product → Journal → LOW QUALITY

Poor visibility
Small journals – vicious circle of publication corruption

Authors and academic community:
- Poor research
- Low criteria
- Powerful positions
- Nepotism

Editors:
- Volunteer position
- No training
- Low criteria
- Lack of professional staff

Visibility of misconduct:
- Lack of competent readers
- No bibliographical indexing
- No web visibility

Peer review:
- Lack of competent researchers
- Inadequate statistical review
- Questionable ethics
- Pressures from authors

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Vicious circle creates an environment of “research corruption”:

In a vicious circle, which supports weak science and inadequate researchers, small journals can often have a negative influence on local scientific community – its criteria, teaching, communication, and scientific output.
The problems of small academic communities is not FFP but high prevalence of irresponsible research practices:

- Self plagiarism
- Redundant publications
- Salami publications
- Selection of data
- Changing outcome measures
- Improper statistics
- Gift authors
- Guest authors
- Ghost authors
- Order of authors

Plagiarism
Falsification
Fabrication
Small journals and “research corruption”:

• Weak publishing criteria result in low quality publications, but they are still recognized and valued as acceptable scientific research and counted for research and academic advancement.

Such publication practices foster research corruption and not research integrity.
Small journals and “research corruption”:

- By publishing mostly in local journals, the researchers fail to perceive the incentives for improvement and for testing their research in the global community.
- Finally, they become a powerful obstacle for introducing international criteria in research, because they promote weak criteria.
Small journals and “research corruption”:

• Once poor publications in local journals become the key criterion of (local) scientific and academic recognition, these journals become important to authors, journal editors, publishers, and owners.

• They build up a closed system of private interests, academic and political influence, nepotism, and no responsibility for the public interest.
Editors of small journals and research integrity issues:

In small journals, the weaknesses and external threats to the job outweigh their strengths and opportunities provided by the global editorial community.
SWOT analysis of editorial activities in research integrity issues:

- **STRENGTHS**
  - *internal* resources and capabilities

- **WEAKNESSES**
  - factors *external* to the organization or group

- **OPPORTUNITIES**

- **THREATS**

STRENGTHS of editors in promoting research integrity:

- Authority in the scientific community
- Editorial independence
- Expertise in research integrity issues
- Responsibility for the integrity of published records
- Power to formulate and implement editorial policies
OPPORTUNITIES for editors to promote research integrity:

• Editors well positioned to detect scientific misconduct
• Availability of new technologies for detecting misconduct
• Editorial policies developed by editorial organizations
• Policies developed by national ethics/integrity bodies
• Greater transparency of publications and literature corrections on the web
STRENGTHS: Editorial policies

www.councilscienceeditors.org

EUROPEAN ASSOCIATION OF SCIENCE EDITORS

www.ease.org.uk

ICMJE

International Committee of Medical Journal Editors

www.icmje.org

World Association of Medical Editors

www.wame.org

Committee on Publication Ethics

www.publicationethics.org.uk
CSE's White Paper on Promoting Integrity in Scientific Journal Publications

EASE Science Editors' Handbook – Ethical issues

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

WAME Policy Statement on the Responsibilities of Medical Editors

COPE Guidelines on Good Publication and the Code of Conduct
WEAKNESSES of editors in promoting research integrity:

- No mandate for legal actions
- Few means of action: expression of concern and retraction
- Reluctance to get involved in delicate issues
- Possible damage to journal’s reputation
- Lack of education and staff to implement adequate procedures
WEAKNESSES: experiences of editors


THREATS to editors promoting research integrity:

• Lack of legal regulation and culture of research integrity in the scientific community
• Corruption of the scientific community and governments
• No training available
• Lack of support from stakeholders in scientific publishing (publishers, associations, scientists, academic and scientific community)
• Pressures on editors and journal (publishers, financial conflict of interest)
What should editors of small journals do to promote research integrity in their scientific communities?

Learn
Be informed
Teach


What should editors of small journals do to promote research integrity in their scientific communities?

If journals and their editors are placed well to detect scientific misconduct, they are also well placed to prevent misconduct.

Quality management principles:

Structure:
Guidelines  
RI editor  
Editorial organizations

Process:
Research in journal  
Education in community

Outcome:
Less research misconduct  
? How to measure?
Public health approach to work with authors:

“The community presents a natural work setting for an editor, not the laboratories or surgeries. The editor is a community worker and a teacher.”
Editors as educators:

Since, both in importance and in time, health precedes disease, so we ought to consider first how health may be preserved, and then how one may best cure disease.

Galen, AD 130–200

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