How do scientific journals deal with scientific fraud? The role of COPE

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Why we should be concerned

- Influences research and clinical practice (e.g. vaccine scare following Wakefield *et al.* 1998 *Lancet* paper implying link between MMR vaccine and autism; pain treatment of millions of patients based on fraudulent work by anaesthesiologist Scott Reuben)

- Patients put at risk by flawed research
  - Steen (2011, *J Med. Ethics*) – 9,189 patients treated in 180 retracted primary studies (110 due to error, 70 due to fraud) published 2000-10
  - 70,501 patients treated in 851 secondary studies citing a retracted paper

- Retracted work goes on being cited

- Waste of resources, human and financial

- Damages public trust in research/science
Jan Hendrik Schön
Germany
Physics
Falsified and fabricated data in numerous publications
16 affected articles in *Science* and *Nature* 2000/01 alone
Investigation report Sept 2002
Doctorate revoked, Schön appealed

Woo Suk Hwang
South Korea
Stem cell cloning
Data fabrication and violation of bioethics laws
Involved 2 major *Science* papers 2004 and 2005
Investigation report Jan 2006
Charged with fraud and embezzlement

Jon Sudbø
Norway
Oral cancer
Data fabrication – 900 fictitious subjects - and manipulation
Published in *The Lancet* Oct 2005
Commission report June 2006
Licence to practice & doctorate revoked
Concerns

Is the incidence of research and publication misconduct increasing?

Are we seeing just the tip of the iceberg?

Does the cumulative effect of ‘minor’ misbehaviours and ethical transgressions present a greater threat than high-profile serious misconduct cases?
Publications & retractions 1977-2012

http://pmretract.heroku.com/
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Reasons for more misconduct and unethical behaviour?

- Lack of knowledge about research and publication ethics
- Larger, multi-disciplinary and more global collaborations
- Increasing pressure on researchers to publish
- Financial inducements compromising integrity
“Promoting integrity in research publication”
COPE currently has more than 7000 members and is international in its reach and membership

• All academic disciplines are covered

• 18 Council members from 7 countries and a range of disciplines (biomedicine, feminist media studies, geophysics, life sciences, literary studies, maths, psychiatric nursing)
Promoting integrity in research publication

COPE is a forum for editors and publishers of peer-reviewed journals to discuss all aspects of publication ethics. It also advises editors on how to handle cases of research and publication misconduct. Read more About COPE...

Flowcharts
Our flowcharts are designed to help editors follow COPE's Code of Conduct and implement its advice when faced with cases of suspected misconduct.

Guidelines
Access COPE's official guidance, including the Retraction Guidelines.

COPE Research Grant
COPE offers a grant of up to £5000 to a COPE member for a research project into publication ethics. The next deadline for applications is 1st June 2011.

Code of Conduct
COPE aims to define best practice in the ethics of scholarly publishing and to assist editors, editorial board members, owners of journals and publishers to achieve this.

NEWS & OPINION

News / COPE Forum agenda for 6 June 2011 meeting
31/5/2011 3.09pm

News / Spanish version of flowcharts now available
25/5/2011 4.58pm

News / COPE Research Grant - deadline looming
23/5/2011 3.41pm
COPE in action: guidance documents

COPE has produced guidelines:

- Code of Conduct and Best Practice Guide for Journal Editors
- Code of Conduct for Journal Publishers
- Guidelines for Retracting Articles
- Guidelines for the Board of Directors of Learned Society Journals
- Guidance for Editors on Research, Audit and Service Evaluations
- Sample letters for handling common problems
- A series of flowcharts (also available translated into Italian, Spanish, Chinese, Croatian, Japanese, Persian (Farsi) and Turkish – more planned)

All available at http://www.publicationethics.org
What to do if you suspect an ethical problem with a submitted manuscript

1. Reviewer raises ethical concern about manuscript.
2. Thank reviewer and lay out your plan to investigate.
3. Author supplies relevant details.
   - e.g. lack of ethical approval/concern re patient consent or protection/animal experimentation.
4. Author's answer/missing response.
   - Satisfactory response.
   - Unsatisfactory response/no response.
5. Apologise and continue review process.
6. Inform author that review process is suspended until case is resolved.
7. Forward concerns to author's employer or person responsible for research governance at institution.
8. Issue resolved satisfactorily.
   - Contact institution at 3-6 monthly intervals, seeking conclusion of investigation.
   - Inform reviewer about outcome of case.
9. No/unsatisfactory response.
   - Consider submitting case to COPE if raises novel ethical issues.
The flowcharts cover

- Redundant (duplicate) publication
- Plagiarism
- Fabricated data
- Changes in authorship
- Ghost, guest or gift authorship
- Conflicts of interest
- General suspected ethical concerns
- Reviewer misconduct
- How COPE deals with complaints
COPE in action: advice and guidance to members

COPE offers advice and guidance to its members, primarily through its quarterly **Forum meetings**:

- held in London but members worldwide can take part via telephone-conference
- allow members to benefit from the views and experiences of other members
- case summaries on the website (database of > 400 cases, searchable by year and keywords, some now recorded)
COPE: other services

- Ethics Audit (members only)
- Annual seminars (European, North American, and – new for 2011 - Asia-Pacific) – free for members
- Research Grants (members only)
- eLearning course (members only) - launching September 2011, with 4 of the planned 11 modules: An Introduction to Publication Ethics, Plagiarism, Fabrication, and Falsification
- Quarterly Newsletter ‘Ethical Editing’
Thank you!

Comments/queries for COPE:
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