Research Integrity and Publication Ethics

Sabine Kleinert,
Senior Executive Editor, The Lancet
Vice-Chair of the Committee on Publication Ethics

Oxford, Nov 22, 2010
Definitions of Research/Publication Misconduct

- Fabrication
- Falsification
- Plagiarism
- No ethics approval
- Not admitting missing data
- Ignoring outliers
- No data on side effects
- Gift authorship
- Redundant publication
- Inadequate literature search

FFP
+/- intentional!

Questionable Research Practice (QRP)

serious
Definitions of Research/Publication Misconduct

www.publicationethics.org.uk
How big a problem is it?

Sandra Titus, James A Wells, Lawrence J Rhoades: Repairing research integrity (Nature 2008; 453: 980-2)

Of 2212 researchers, 192 (8.7%) described that they had observed or had direct evidence of research misconduct (FFP) in a total of 265 incidents (64 did not meet the ORI definition).

120 fabrication or falsification, 73 plagiarism, 8 unknown.

Amounts to 3 incidents per 100 researchers per year, or more than 2300 observations of potential misconduct by DHHS-funded researchers per year (ORI deals with only about 24)
Research misconduct – the consequences

Hwang Woo-Suk, South Korea, 2005
Research misconduct – the consequences

- Personal (career, reputation)

- Institution (reputation, spotlight on processes/education)

- Country ("something is rotten in the state of Austria" Nature 2008; China)

- Field of research (public trust)
Alleged research misconduct – the consequences

Guardian.co.uk

Climate scientist at the heart of emails controversy says he did nothing wrong
Dr Phil Jones said he had not deleted emails in response to FoI requests from critics

- Attacks on climate science echo tobacco industry tactics

Alok Jha
guardian.co.uk, Monday 15 November 2010 20:20 GMT

CRU Prof Phil Jones of the University of East Anglia. Photograph: Chris Bourchier/Rex

Feb 2010

Nov 2010
Alleged research misconduct – the consequences

Sir Muir Russell (conclusions of 6-month investigation):

No evidence of misconduct BUT

... there had been “a consistent pattern of failing to display the proper degree of openness”... scientists failed to appreciate the risk their lack of transparency posed to the university and “to the credibility of UK climate science”
“Prevention is better than cure”
Desiderius Erasmus (1466-1536)
Role of all involved in both “prevention” and “cure”

- Researchers/authors
- Institutions/funders
- Editors/publishers
Role - researchers/authors

Prevention - responsibility, honesty, and transparency

- Clear discussion on authorship and roles at beginning of research
- Responsibility by all for conduct and reporting of research
- Open, full, and honest reporting of research methods and findings
- Discussion of limitations
- Open and honest reporting of conflicts of interest/role of funder
Role - researchers/authors

Misconduct – facing the consequences

– Whistleblowing (everyone will have to take responsibility)
– Correction/retraction of published research
  correction: for example, authorship, conflicts of interest
  retraction: fraud, plagiarism, redundant publication
Role - institutions

Prevention

- Named responsible person or office for research integrity at high level
- Institutional data repository (+audit ?)
- Education in responsible conduct of research, including publication, for all (students, postgraduates, faculty)
- Strong and clear processes/guidelines with consequences
- Learning from each case for future
Role - institutions

 Misconduct

- Named responsible person or office for research integrity at high level
- Fair, speedy and ideally independent investigation
- Informing all (+journal editors, funders) of conclusions
- Appropriate sanctions
- Reviewing processes and safeguards (learning from cases)
Misconduct

Help for editors: COPE

Helping journals to get their houses in order

COPE is a forum for publishers and editors of peer-reviewed journals to discuss issues related to the integrity of work submitted to or published in their journals. It supports and encourages editors to report, catalogue and instigate investigations into ethical problems in the publication process...

Membership benefits of COPE

- Fully searchable archive of 10 years of cases and advice

Latest News & Events

GROWING PARTNERSHIPS WITH PUBLISHERS ENABLES COPE TO EXPAND

October 24 2006

www.publicationethics.org.uk
COPE – in the beginning....

started in 1997 as an informal forum for discussing ethical issues relating to research and publication in biomedical journal publishing
The three ‘wise’ COPE fathers
COPE – from the beginnings to now

- about 60 members in 1998
COPE – from the beginnings to now membership

- At the beginning largely UK-based and biomedical membership

- Now all types of ‘scholarly’ journals (from *Acta Archeologica* to *Zygon: Journal of Religion and Science*)

- From 65 countries (Australia to Zimbabwe)
COPE – from the beginnings to now cases

4 meetings a year (Forum) – about 40 editors and other COPE members

- anonymous discussion of suspected misconduct cases (if not able to attend, by phone; in future videoconference)
- advice to editors on how to proceed
- cases (and outcomes if available) on website – searchable by keywords
COPE – from the beginnings to now cases

- 4 meetings a year (Forum) – about 40 editors and other COPE members
cases

- Duplicate/redundant publication 77
- No ethics approval 34
- Authorship issues 31
- No or inadequate informed consent 30
- Falsification or fabrication 28
- Plagiarism 26
- Unethical research 19
- Undeclared conflict of interest 15
- Reviewer misconduct 8
- Editorial misconduct 6
- (miscellaneous 41)
COPE – from the beginnings to now

- Code of Conduct for Editors launched in 2004 (= basic standards that all editors should adhere to)

  - All COPE members should adhere to CoC, COPE will investigate complaints against editors, if Code breeched and journal’s complaint mechanisms have been sought

  - ?does it apply to all types of journals (other than biomedical and scientific?): we are currently reviewing....
Editors are often the first recipients of suspicions about studies that may involve misconduct. If editors suspect misconduct by authors, reviewers, editorial staff, or other editors then they have a duty to take action. This duty extends to both published and unpublished papers.”
COPE – from the beginnings to now
flowcharts from 2006 onwards

- COPE flowcharts on:
  - 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

www.publicationethics.org.uk
COPE’s flowcharts

What to do if you suspect redundant (duplicate) publication

1. Reviewer informs editor about redundant publication
2. Thank reviewer and say you plan to investigate
3. Get full documentary evidence if not already provided
4. Check degree of overlap/redundancy

- Major overlap/redundancy (i.e., based on same data with identical or very similar findings and/or evidence; authors have sought to hide redundancy, e.g., by changing title, author order or not citing previous papers)
  - Contact corresponding author in writing, ideally enclosing signed authority statement or cover letter, stating that submitted work has not been published elsewhere and documentary evidence of duplication

- Minor overlap with some element of redundancy or legitimate reanalysis (e.g., sub-group analysis) follows up/reconciliation aimed at different audience
  - Contact author in neutral terms, expressing disappointment/explaining journal’s position

- No significant overlap
  - Discuss with reviewer
  - Proceed with review

- Minor overlap with some element of redundancy or legitimate reanalysis (e.g., sub-group analysis) follows up/reconciliation aimed at different audience
  - Contact author in neutral terms, expressing disappointment/explaining journal’s position
  - Explain that secondary papers must refer to original
  - Request reusing reference to original and/or remove overlapping material

Note: ICME advises that translations are acceptable but MUST
COPE – from the beginnings to now

- COPE’s Best Practice Guidelines in 2006 (= gold standard to which all editors should aspire)
  currently under review for applicability to all types of journals.....
COPE – from the beginnings to now
other activities

• Ethics Audit (members only) - 2008
• Newsletter (quarterly) – 2008
• New website with blog, sample letters, cases…. etc. in 2008
• Annual seminars (UK)
• Research grants twice a year
• First US Seminar (Washington DC, Nov 2009), to be continued, Washington 2010, West Coast 2011
• Retraction guidelines Dec 2009
• Collaborations with ORI, ESF, CSE, UKRIO…..
COPE – from the beginnings to now
Newsletter
quarterly, on website, open access

An ethical epidemic

In December 2008, as I roamed the airport waiting for my plane from London back to Switzerland after my first COPE meeting, I came across Malcolm Gladwell's best-selling book *The Tipping Point*. I was intrigued by his idea that products, messages, and causes spread like epidemics of contagious disease. That seemed to describe what had happened in the past year at COPE.

With an exponential number of new members, a new website, and a new Operations Director, COPE is spreading in every direction. With its new newsletter, *Ethical Editing*, COPE hopes to offer some perspective on the issues confronting today's journal editors and publishers.
COPE – from the beginnings to now

Website

Publication Ethics Blog

UKRIO retraction guidelines for researchers

The UK Research Integrity Office (UKRIO) has developed guidelines for researchers based on COPE's retraction guidelines (and in collaboration with COPE). They are available at:

http://www.ukrio.org/resources/UKRIO%20IN%20%20Guidance%20for%20research...

Posted by Elizabeth Wager, COPE Chair on October 20th 2010

News & Events

Dates of future COPE meetings

2010

Tuesday 7 December 2010 (deadline for cases 23 November)

All Forum meetings are 2–5pm, in the Council Chamber, Royal College of Pediatrics and Child Health, 51 Theobalds Road, London WC1X 8SH. Cases for discussion must be submitted online here no later than two weeks before each meeting.

Seminars

The 2010 Annual US COPE seminar will be held on 29-30 November 2010. Please register here.

Posted by Linda Gough, COPE Administrator on August 24th 2010

Election of COPE council members

Voting for the 3 vacancies on COPE council is now open and will remain open until Friday 26 November 2010. Please click here to cast your votes.
COPE – from the beginnings to now
social media
COPE – from the beginnings to now governance

- Constitution, elected officers and a council in 2000
- Charity in 2008
- Full-time Operations Manager in 2009, Cope Administrator 3 days per week, part-time Web Administrator in 2010
COPE – from the beginnings to now
governance – ‘the officers’

Liz Wager, Chair

Ginny Barbour
Secretary

Chris Graf, Acting Treasurer

Sabine Kleinert, Vice-Chair

www.publicationethics.org.uk
COPE – the future

- E-learning course for Editors
- Rapid online responses to cases
- Fora in other locations than USA and UK
- Revision of Best Practice Guidelines
- Code of Conduct for Publisher
- Guidance on cooperation between institutions/funders and journals
COPE – in Singapore (2\textsuperscript{nd} World Research Integrity Conference)

Responsible research publication

- International standards for authors
- International standards for editors

www.publicationethics.org.uk
COPE – in Singapore
International standards for editors

Summary

• Editors are accountable and should take responsibility for everything they publish
• Editors should make fair and unbiased decisions independent from commercial consideration and ensure a fair and appropriate peer review process
• Editors should adopt editorial policies that encourage maximum transparency and complete, honest reporting
• Editors should guard the integrity of the published record by issuing corrections and rejections when needed and pursuing suspected or alleged research and publication misconduct
• Editors should pursue reviewer and editorial misconduct
• Editors should critically assess the ethical conduct of studies in humans and animals
• Peer reviewers and authors should be told what is expected of them
• Editors should have appropriate policies in place for handling editorial conflicts of interest

www.publicationethics.org.uk
COPE – in Singapore
International standards for authors

Summary

- The research being reported should have been conducted in an **ethical and responsible** manner and should comply with all relevant legislation.
- Researchers should present their **results clearly, honestly**, and without fabrication, falsification or inappropriate data manipulation.
- Researchers should strive to describe their **methods clearly and unambiguously** so that their findings can be confirmed by others.
- Researchers should **adhere to publication requirements** that submitted work is original, is not plagiarised, and has not been published elsewhere.
- Authors should take **collective responsibility** for submitted and published work.
- The authorship of research publications should **accurately reflect individuals’ contributions** to the work and its reporting.
- **Funding sources** and relevant **conflicts of interest** should be disclosed.
Common difficulties for editors

- Time consuming!
- No reply from authors
- No reply from head of institutions
- Inadequate investigation by institution
- No institution
- Managing/analysing raw data
- What to do, if alleged misconduct is unproven
- What to do with authors in future?
How to prevent research/publication misconduct – editors

- Only indirect influence
- Reporting standards (CONSORT, STROBE...etc.)
- Promote honesty and transparency
  - Protocols, ethics approval, trial registration
  - contributor statements/guarantor
  - conflict of interest/role of sponsor
- Editorials/commentaries
How to prevent misconduct - journals/editors

?? Screening (vs. trust)
• for plagiarism (CrossCheck, or other software)

• Figure manipulation

Unsolved issues

• Collaborative research (disciplines/institutions/countries) – who is responsible?
• Does minor misconduct lead to major misconduct
• Is pressure to publish having an influence?
• Are commercially funded studies/CoI issues more or less likely to lead to misconduct?
• Which preventive actions work?
• Best model for national bodies (ORI, the Scandinavian model, UKRIO = advisory only)
• Are international bodies needed to deal with research integrity?