Financial Conflict of Interest in Peer-Reviewed Publishing

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ICMJE:
Conflict of interest exists when an author (or an author’s institution), reviewer, or editor has financial or personal relationships that inappropriately influence (bias) his or her actions.
WAME:
Conflict of interest (COI) exists when there is a divergence between an individual’s private interests (competing interests) and his or her responsibilities to scientific and publishing activities such that a reasonable observer might wonder if the individual’s behavior and judgment was motivated by considerations of his or her competing interests.
Institute of Medicine:
A set of circumstances that creates a risk that professional judgment or actions regarding a primary interest will be unduly influenced by a secondary interest.
Definitions

Rothman:
Conflict of interest refers to any situation in which an individual with responsibility to others (which includes professional responsibilities) might be influenced, consciously or unconsciously, by financial or personal factors that involve self-interest.

Definitions

- A COI is a state of affairs, not a behavior
- COIs do not indicate improper behavior, wrongdoing, or scientific misconduct
- COIs are ubiquitous and cannot be eliminated altogether
- Certain COIs may be unconscious
Types of COIs

- Financial relationships are the most recognizable COIs and the most likely to undermine the credibility of the journal, the authors, and of science itself.
Types of COIs

- Multiple other types of COIs exist, but are more difficult to recognize or define.
- This includes:
  - Personal relationships
  - Academic competition
  - Publication pressure
  - Prestige and reputation
  - Political, religious, and ideological leanings
Effects of Financial COIs

A systematic review of original studies on financial COIs in biomedical research found a significant association between industry sponsorship and pro-industry conclusions and found that industry-sponsored studies were significantly more likely to reach conclusions that were favorable to the sponsor than were nonindustry-sponsored studies.

Effects of Financial COIs

Analysis of voting patterns at FDA drug advisory committee meetings revealed a weak, but significant, association between certain financial COIs and voting behavior.

Purpose of Disclosure

- The appearance of a COI, even when none actually exists, can erode trust in a journal and damage its reputation and credibility.

- Public trust in the peer-review process and the credibility of published articles depends, in part, on how well COIs are handled during the editorial process.
Disclosure of COIs is intended to provide readers with information important in their evaluation and interpretation of published research, helping readers decide how much credence to place on the data presented.
Purpose of Disclosure

Many scientists fail to recognize that they have competing interests so, unsurprisingly, do not declare them. Requiring authors to disclose COIs raising the level of awareness of potential concerns.
Purpose of Disclosure

- By taking a population, rather than an individual, approach, it may be possible to move the entire research community in one direction, with the result that the number of serious cases is reduced.
Shortcomings of Disclosure

- There is a lack of consensus on the optimal approach and even on the gravity of the problem.
  - A 2008 study of medical journals with high impact factors revealed substantial variation in how the journals defined COIs and in the policies they had for author disclosure of COIs.
Shortcomings of Disclosure

- Whether detailed COI policies and mandating signed disclosure from all authors increases the accuracy of reporting of author COIs is not certain.
It is not clear how much readers are helped by published disclosures of authors’ financial COIs or by post-publication corrections of authors’ failures to mention financial COIs.
Shortcomings of Disclosure

A survey of *BMJ* readers who rated 2 manuscripts with a statement of no financial COI, a statement of employment by or stock ownership in a commercial company, or a statement of grant support found that inclusion of the financial statement resulted in significantly lower ratings for importance, relevance, validity, and believability, compared with inclusion of a no-financial-conflict statement.

Shortcomings of Disclosure

In a study of the extent to which physicians discount for COIs when weighing evidence for prescribing a new drug, the authors found that physicians believed that they should discount the value of information from conflicted sources, but did not do so in the absence of a direct comparison between two studies, calling into question the effectiveness of merely disclosing the funding sources of published studies.

Shortcomings of Disclosure

- Disclosing financial COIs causes readers to focus on the authors’ credentials, shifts attention away from the substance of the study, and steers readers away from judging a work on its merits.

- Disclosure does not reveal whether there actually is a problem with the work, but can create an unstated presumption of guilt until proven innocent.
Shortcomings of Disclosure

- Disclosure will not eliminate fraud and misconduct, and fraud and misconduct can occur without overt financial COIs.
Use of Disclosed Information

ICMJE:
Editors may use information disclosed in conflict-of-interest and financial-interest statements as a basis for editorial decisions. Editors should publish financial COI information if they believe this information is important in judging the manuscript.
Use of Disclosed Information

- It remains unclear how COIs should be taken into account by editors, reviewers, or readers.
- There is no generally accepted standard, nor evidence-based consensus, for precisely defining the degree of financial COI or the timeframe that creates a substantial risk of bias or damage to the journal’s reputation.
Disclosure Policies

- Every peer-reviewed medical journal should have its own COI policies for authors, reviewers, and editors.
  - Definition of what constitutes a COI for authors and reviewers.
  - Kinds of competing interests they wish to have declared.
  - How to make declarations.
Disclosure Policies

- Consequences for failing to declare COI.
- Types of COIs that will result in a manuscript not being considered further.
- The procedure the journal uses to deal with COIs.
Disclosure Policies

- Declarations should require authors to explicitly state funding sources and whether the organization that funded the research participated in the collection and analyses of data and the interpretation and reporting of results.
In October 2009, the ICMJE developed an electronic disclosure form and placed it in the public domain (www.icmje.org).
Editors can have their own COIs beyond those identified for authors:

- Enhancing circulation
- Increasing impact factor
- Increasing income from reprints
Reviewer COIs

- Reviewers should also be required to disclose COIs:
  - Financial
  - Personal (friendship or enmity)
  - Religious
  - Nationalistic
  - Academic (enthusiasm for a topic or point of view)
  - Previous collaboration