ICMJE recommendations replace “conflicts of interests” with “relations and activities”

Each December, the International Committee of Medical Journal Editors (ICMJE) updates its influential document “Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals”. The most recent changes to the document, available at www.icmje.org, are limited in number but nonetheless significant.

While the definition of conflicts of interest remains unchanged, the term “conflicts of interest” has now been replaced by “relationships and activities” throughout the document. The expression – “financial and non-financial relationships and activities” – has been introduced. The expression “disclosure of conflicts of interest” has been banned and replaced by “disclosure of relationships and activities”. We will see if journals change the wording accordingly in their instructions to authors and papers.

Additional information has been added to explain how to interpret the new phrase concerning relationships and activities:

- Individuals may disagree on whether an author’s relationships or activities represent conflicts. Although the presence of a relationship or activity does not always indicate a problematic influence on a paper’s content, perceptions of conflict may erode trust in science as much as actual conflicts of interest. Ultimately, readers must be able to make their own judgments regarding whether an author’s relationships and activities are pertinent to a paper’s content. These judgments require transparent disclosure. An author’s complete disclosure demonstrates a commitment to transparency and helps to maintain trust in the scientific process.

- In turn a new category of scientific misconduct is introduced: “purposeful failure to report those relationships and activities”. This is likely a reaction to the many scandals in recent years, such as the Jose Baselga case in which a much-published cancer researcher failed to disclose he had direct ties to medical industries.

A close reading of the document also brings to light these evolving principles:

- Editors have no role in the choice of author listing: “The criteria used to determine the order in which authors are listed on the byline may vary, and are to be decided collectively by the author group and not the editors.”
- Authors have sole responsibility for where to publish. “Policies that dictate where authors may publish their work violate this principle of academic freedom.” This arises because sponsors have been suspected of influencing the choice of which journal papers are submitted to.
- “Authors should avoid citing articles in predatory or pseudo-journals.”

The long section on trial registration has been completed by the idea that approval to conduct a study from a review body (ethics committee) does not fulfil the requirement for registration.

A new paragraph entitled “Diversity and Inclusion” has been added:

To improve academic culture, editors should seek to engage a broad and diverse array of authors, reviewers, editorial staff, editorial board members, and readers.

In previous versions, this concept was less explicit and was buried in the middle of a paragraph.

Concerning peer review, this statement appears:

Reviewers who seek assistance from a trainee or colleague in the performance of a review should acknowledge these individuals’ contributions in the written comments submitted to the editor. These individuals must maintain the confidentiality on the manuscript.
What did we learn about peer review in 2019?

The peer review process has been accused of being subjective, slow, expensive, biased, poor at detecting errors, etc. Nevertheless, we don’t yet have any better system to replace it with, and most researchers are generally confident in peer review, because it is shown to improve papers. On the whole, research on peer review made progress last year.

Hilda Bastian is a health care advocate, and had a professional career in Australia, Europe, and North America. She writes a blog hosted by PLOS, “Absolutely Maybe” with a subtitle “Evidence and Uncertainties about medicine and life” (https://blogs.plos.org/absolutely-maybe/about-hilda-bastian/). Some of her posts concern peer review. Here are her highlights for 2019 (https://blogs.plos.org/absolutely-maybe/2019/12/31/5-things-we-learned-about-peer-review-in-2019/) and five messages based on topics most covered by quality publications:

1. Peer review might sometimes be a kind of academic matchmaking, increasing the chances of future scientific collaboration.
2. Peer reviewers may provide no line of defense against authors’ conflicts of interest.
3. Peer reviewers sign their own names more often when they are recommending acceptance of an article.
4. Editorial peer review may be increasing the acknowledgement of study limitations – but without reducing study spin.
5. Peer review of scientific publications is not a fairly recent development – it’s even older than we realize.

These messages are the conclusions drawn from randomised trials or observational studies. All references are cited in the post. Bastian is also a cartoonist and adds amusing images in her posts.

Defining “predatory” journals

Finally, a definition of predatory journals has been prepared by a group of experts with good working methods. Predatory journals emerged in the early 2010’s, and it has always been difficult to define and identify them. We must learn to differentiate them from scholarly society or professional journals. The Ottawa Journalology Centre, headed by David Moher, has done a great deal of work on misleading or predatory journals (http://www.ohri.ca/journalology/).

On December 11, 2019, Nature published an article that included a definition of predatory journals. In April 2019, these researchers brought together a group of 35 experts to propose a definition of predatory journals using a structured Delphi-type method. There were 12 hours of discussion, and then two more rounds of review. In the end they decided to keep the term predatory journals, even though in previous publications, the Ottawa group was not a fan of the term and proposed “misleading journals” instead. Here is the definition finally agreed on:

Predatory journals and publishers are entities that prioritize self-interest at the expense of scholarship and are characterized by false or misleading information, deviation from best editorial and publication practices, a lack of transparency, and/or the use of aggressive and indiscriminate solicitation practices.

Researchers are still being trapped by predatory journals, which have become better and more sophisticated over time. For example, they use online submission systems by dropping the submission as an email attachment. In choosing a journal, authors must be careful and limit their search to journals indexed (Web of Science, Medline, Scopus, DOAJ), or to journals published by known learned societies and/or publishers. Additional guidance on how to choose the right journal is available on the website Think, Check, Submit (https://thinkchecksubmit.org/), or from one of the many journal selector sites available online. A word of caution, however: Be careful with journals you see in PubMed, because predatory journals can sometimes be found through PubMed searches that retrieve articles deposited in PubMed Central.

References

A preprint was posted online January 11, 2020, by a team of researchers from University of Pennsylvania Perelman School of Medicine.\(^1\) Looking just at citations, they have done some original research:

Utilizing data from five top neuroscience journals, we indeed find that reference lists tend to include more papers with men as first and last author than would be expected if gender was not a factor in referencing. Importantly, we show that this overcitation of men and undercitation of women is driven largely by the citation practices of men, and is increasing with time despite greater diversity in the academy. We develop a co-authorship network to determine the degree to which homophily in researchers’ social networks explains gendered citation practices and we find that men tend to overcite other men even when their social networks are representative of the field.

A paper presenting a curious finding was published in the 2019 BMJ Christmas issue. The study focused on how male and female scientists present the importance of their research:\(^4\) Articles in which the first and last authors were both women were, on average, 12.3% less likely to use positive terms to describe research findings compared with articles in which the first and/or last author was male. The gender difference in positive presentation was greatest in high impact clinical journals, with women being 21.4% less likely to present research positively. Positive presentation was, on average, associated with 9.4% higher subsequent citations.

Accompanying this is a nice editorial written by two women from Ann Arbor and Boston.\(^5\) The quote in the margin says: “We should consider the ways that women are told that their work is ‘not quite good enough’ as drafted.”

The editors of the Lancet Group are moving to address these issues, and most of the Lancet journal editorial boards have changed accordingly over the past years.\(^6\) Here is what they say about official journal policy:

The Diversity Pledge and No All-Male Panel Policy are displayed prominently on our website. Across all 18 journals published by the Lancet Group, all commissioning letters and instructions to authors now include our preference for diversity among author teams, and all peer-reviewer invitations request that alternative reviewer suggestions consider diverse groups of colleagues.

Other journals will undoubtedly follow this lead, but it could still be a steep hill to climb.

References