

How Easy to Cheat? How Easy to Uncover Cheating?

Moderator:

Penny Hodgson
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Speakers:

Trish Groves
BMJ
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Thomas C Gerber
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Journal of the American Medical Association
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Scientific misconduct encompasses plagiarism; redundant publication; unearned authorship; conflict of interest; and data filtering, falsification, and fabrication, which include image manipulation (such as splicing or altering contrast).¹ Moderator Penny Hodgson noted that known misdeeds may be “the tip of the iceberg”. In his overview, Thomas C Gerber said that such cheating causes nearly irreparable damage. Retractions are not as retrievable as falsified papers, whose publication damages treatment advances and impedes research. Both Gerber and Trish Groves cited a *Nature* survey of US scientists receiving National Institutes of Health (NIH) funding²; 1.4% used others’ ideas without permission or credit, and 4.7% submitted duplicate publications.

The three speakers recommended that standards be established by stakeholders, including such entities as the US Office of Research Integrity (ORI) and the UK Committee on Publication Ethics (COPE). ORI investigations can lead to banning of

researchers from NIH-funded studies and to criminal prosecution. The speakers supported strong peer, statistical, and editorial review; clinical-trial registration; disclosure statements; and standards for reporting methods. Ideally, primary data should be accessible.

No speaker recommended that papers be rejected on the basis of suspicion without a request for an explanation. Unresolved matters should be referred to authors’ institutions, ORI, COPE, or licensing entities, such as the UK General Medical Council (GMC). Corrections should be linked to original articles and papers retracted and authors banned if necessary. Groves recommended a transparent editorial policy based on COPE’s flowcharts (www.publicationethics.org) and CSE’s “White Paper on Promoting Integrity in Scientific Journal Publications” (www.councilscienceeditors.org/editorial_policies/white-paper.cfm). Attendee and COPE Chair Harvey Marcovitch briefly summarized the case of a British physician who blamed his repeated plagiarism on a fictitious coauthor. The GMC Fitness to Practice Panel “erased” his name from the register, thereby banning him from practice.

Groves described a preemptive tool for identifying overlapping content, the plagiarism-detection software CrossCheck. Using the search engine iThenticate, it compares manuscripts with a large database compiled from CrossRef member publications and calculates the percentage of overlap. In a recent 6-month trial, the BMJ Group used CrossCheck to screen papers near acceptance against about 30,000 new submissions to four journals and to “crawl” the medical literature after publication. The system identified one plagiarized submission from an author in a developing country (100% match) and one postpublication violation on a Russian Web site (90% match).

Disadvantages were limited access, system slowness, and staff time. Advantages were reasonable cost (about \$0.75 per manuscript), ability to identify verbatim content (not paraphrased text, images, or formulas),

and applicability at various stages.

Thomson Reuters has announced that CrossRef will be offered through Manuscript Central. Such integration should automate searches, but Groves recommended setting the percentage threshold high. Early checking might reduce editorial investment but increase direct costs, whereas later checking might decrease deterrence.

Participants expressed concern about duplicated ideas, methods, and results. As with plagiarism, duplicate publication muddies the literature and undermines systematic reviews. Authors should be reprimanded and, if necessary, reported, banned, and exposed. Margaret Winker noted that the key to reducing duplicate publication and other misconduct may be better education for authors.

Winker encouraged consensus among authors and editors on what constitutes duplicate publication, which is reported more often than plagiarism,³ appears to be increasing,⁴ and is often justified by authors.⁵ She recommended a top-down decision tree for identifying duplicate publication.⁶ 

References

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