Editorial

Should editors be more involved in the development of reporting guidelines?

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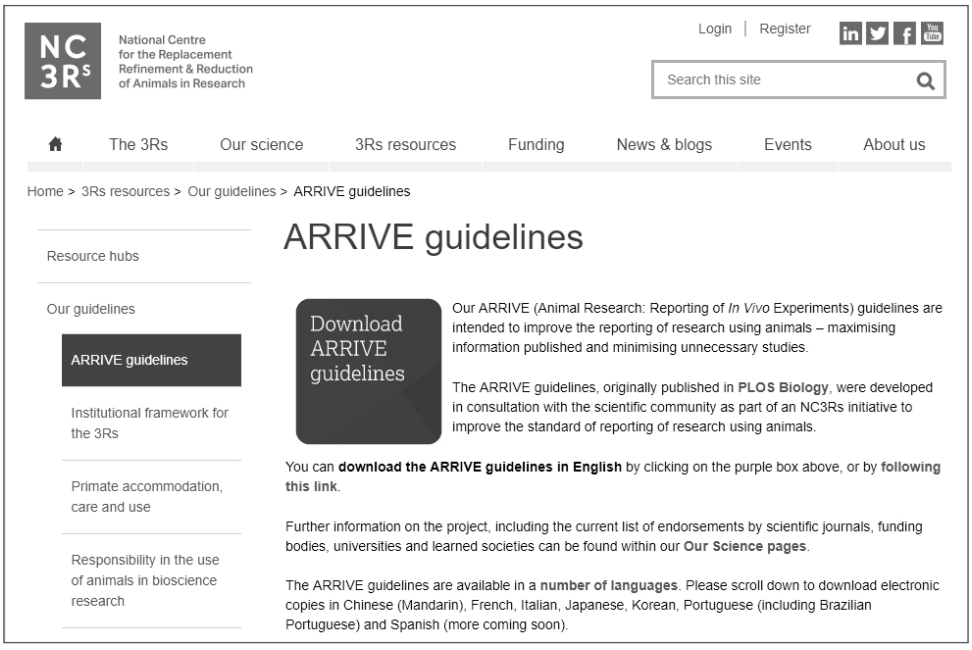
The past 20 years, and particularly the past decade, have seen an explosion in the availability of reporting guidelines for all sorts of scientific studies. Fortunately, the EQUATOR network (www.equator-network.org) gathers these in one place, to facilitate searching for the correct one, with a helpful classification by subject area. But with 385 present on its website at the beginning of November 2017, are new guidelines generating more heat than light? For example, in my field of psychiatry, there are six guidelines. The most recent are *Guidelines for Reporting Articles on Psychiatry and Heart rate variability*. (I wasn't aware that this was a burgeoning subfield.) These guidelines comprise four items, each of which has at least two components. The first is selection of participants: the component items include inclusion criteria but not exclusion criteria. Other items refer to data collection and analysis, some of which might be specific to this field but others are generic, such as hardware/software details. A different guideline covers treatment trials for alcohol use disorders. Why not just use CONSORT, I thought? The CONSORT Statement is an evidence-based, minimum set of recommendations for reporting randomized trials, widely endorsed by biomedical journals (www.consort-statement.org). The authors do acknowledge CONSORT but say that it does not satisfactorily address two features common in alcohol use disorders—non-pharmacological treatments and patient-reported outcomes—but they then mention the CONSORT extensions covering these items. The authors write: "To reduce overlap with prior reviews of reporting standards, we focus on the reporting of study features in four primary areas relevant to alcohol treatment studies." The first of these 'novel' items is trial pre-registration. The others are procedures for recruitment and retention, procedures for randomization and intervention design considerations, and statistical methods used to assess treatment efficacy.

By contrast, I recently attended, on behalf of EASE, two workshops of international groups focusing on much more broadly applicable guidelines. The first was a diverse group of journal editors, researchers, and funders who met in Edinburgh, UK, in September 2017 to discuss how the reporting of animal research could be improved, specifically through better compliance with the ARRIVE (Animal Research: Reporting of *In Vivo* Experiments) guidelines. These were first published in 2010[1] and comprise a checklist of 20 items describing the minimum information required in all scientific publications reporting research using animals. Several of them mirror those of CONSORT, on which ARRIVE was based, particularly regarding the experimental, statistical, and analytical methods.

Uptake of the ARRIVE guidelines by journals has been good, with over 600 journals now including the guidelines in their instructions for authors. Unfortunately, implementation of both CONSORT and ARRIVE lags their adoption (read more in the Correspondence section of this issue). A recent evaluation of trials in cataract surgery found a median 62% compliance with CONSORT criteria,[2] while an analysis by Malcolm Macleod *et al* found that a random sample of life science publications had limited reporting of measures to reduce the risk of bias, that papers in high impact journals had lower reporting of randomisation, and



that papers from leading UK institutions had very limited reporting of measures to reduce the risk of bias.[3] The good news is that editors can make a difference. A Cochrane review found that "endorsement of the CONSORT Statement by a journal was associated with an improvement in the quality of reporting of randomised trials".[4]

At the Edinburgh workshop, it was acknowledged that cultural change is required throughout the academic community and we discussed how editors can play a role in driving this change. As well as encouraging use of guidelines, editors can provide training for authors and peer reviewers (overlapping populations) in good reporting. For real effect, awareness has to be raised at the study planning stage, which shifts the responsibility towards academic institutions and funding bodies. This has been recognized by many of the healthcare research funders, and the UK's National Institute for Health Research won the 2017 Cochrane-REWARD prize for reducing waste in research for its activities in this area.

The second guidelines workshop concerned the Adaptive designs CONSORT Extension (ACE). The group working on this invited all interested parties to participate in two rounds of a Delphi exercise. EASE helped to recruit journal editors and their input was valued. The statisticians addressed the technical aspects but the editors made useful contributions regarding usability. At the workshop, particular care was taken not 'to reinvent the wheel': any item that was covered in CONSORT was removed so the extension checklist will be specifically for differences from standard clinical trials that should be reported for trials using adaptive designs. I found this an excellent example of how editors can contribute to the guideline development process.

What more can editors do to encourage compliance and therefore good reporting? First, editors should ensure their journal staff, academic editors, peer reviewers, and authors are all familiar with the guidelines relevant to their field. They should provide clear links from their journals' instructions for authors, especially to checklists. Then editors should look at the checklists when these are submitted with manuscripts: even if you don't have time to do a full check and rely on your peer reviewers for that, a random check of two or three items would give a rough indication of the quality of the reporting and thus help you to decide whether the manuscript should be sent for peer review at all. There is also now a tool to help both authors and editors with this process, the EQUATOR Wizard, developed by Penelope in collaboration with the EQUATOR network (https://www.penelope.ai/equatorwizard). Finally, editors should also be wary of publishing new 'guidelines' that are neither guidelines nor add anything worthwhile to already existing ones. Many guidelines are highly beneficial for their field and are helping to raise the standards of science publications. Poor guidelines are a waste of time and resources and reduce the impact of the good ones. Editors are gatekeepers for the scientific literature: this applies to papers about guidelines as well as to all other forms of research.

Joan Marsh
Deputy Editor, The Lancet Psychiatry
Past-President, European Association of Science Editors
joan.marsh@lancet.com

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