

Scientific journals show little enforcement of animal research reporting guidelines

9 January 2014, by Charli Scouller

New findings from Queen Mary University of London reveal experimental flaws and a lack of transparent reporting is compromising the quality of animal studies and their potential to translate into the clinic.

The research, published today in *PLOS Biology*, was based on a review of over 200 scientific papers reporting on animal studies in the field of neuroimmunology. All the journals who published the papers have endorsed the [ARRIVE \(Animal Research: Reporting of In Vivo Experiments\) guidelines](#).

Published in 2010 by the UK's National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs), the ARRIVE guidelines set out the minimum information required to maximise the results obtained from animal studies and avoid unnecessary animal use and are endorsed by [scientific journals](#), major funding bodies, learned societies and universities

Only 4% of top-tier journals were found to report the appropriate use of statistics in [animal research](#) and fewer than one in 10 studies reported methods which avoid experimental bias, such as randomisation. The survey investigated the statistical methods used and the depth of reporting across ethical review, study design, details of the [animals](#) used and sample size estimation.

David Baker, Professor of Neuroimmunology at Queen Mary University of London, comments: "Our research indicates the credibility of animal research is being threatened by inappropriate study design and a severe lack of balanced reporting in animal research studies. Failing to report the fundamental basics can result in unusable and is ultimately a sad waste of animal life."

"It is clear from these findings that authors, reviewers and journal editors are failing to

implement the ARRIVE guidelines and failing to report animal research adequately. This has negative effects on the potential of research to inform future scientific studies and translate into meaningful therapies for patients. Only by implementing these guidelines fully can journals ensure they publish research that meets these standards and lead to patient benefits."

Provided by Queen Mary, University of London

APA citation: Scientific journals show little enforcement of animal research reporting guidelines (2014, January 9) retrieved 18 June 2019 from <https://phys.org/news/2014-01-scientific-journals-animal-guidelines.html>

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