

The Guardian view on the end of the peer review

Nature and the BMJ, like all serious scientific journals, rely on peer review to establish the authority of the papers they publish, and peer review, it appears, is less reliable than it sounds



Editorial

The Guardian, Sunday 6 July 2014 19:32 BST



In June, the BMJ was plunged into a public row over two papers it published last year questioning the benefits of prescribing statins. Photograph: Alamy

Nature, the pre-eminent journal for reporting scientific research, has had to retract two papers it published in January after mistakes were spotted in the figures, some of the methods descriptions were found to be plagiarised and early attempts to replicate the work failed. This is the second time in recent weeks that the God-like omniscience that non-scientists often attribute to scientific journals was found to be exaggerated.

In June, the BMJ was plunged into a public row over two papers it published last year questioning the benefits of prescribing statins and suggesting that the side effects could outweigh the health advantages. The papers have been under attack for a while, and the Oxford professor of medicine Sir Rory Collins now says the flawed research risks putting people off statins when they could be life-saving. He wants the BMJ not merely to put out a correction – as it did in May – but to withdraw the papers altogether so that they are not erroneously quoted in further research (as they have been already, according to the website Retraction Watch). The BMJ has instead instigated an investigation to adjudicate on the matter.

Nature and the BMJ, like all serious scientific journals, rely on peer review to establish the authority of the papers they publish, and peer review, it appears, is less reliable than it sounds. Some journals rely on too narrow a group of reviewers who are all too human. In highly specialised fields, self-interest may influence their review. Peer review anyway has limits. Reviewers are not expected to check the raw data, only the way it has been used. And then there is the conspiracy of hope. It is only human to want there to be, say, a way of stimulating ordinary cells so that they behave like stem cells (the research Nature has had to retract).

But in the face of the huge pressure on scientists to publish or perish, to produce sound, pioneering, important research and to have it published in the most highly regarded journal, peer review is facing unique pressures. One [recent inquiry recommended](#) more pre-publication reviewing focused on the technical side of the research, a practice adopted by physicists who expressly invite online peer review. Biotech researchers, on the other hand, tend to be concerned about the commercial implications.

Nature, which says it will keep the retracted papers on its website – clearly marked – so that people can learn from the episode, is commendably open about the stresses the system faces. It promises to do more to promote quality and professionalism. It now employs statisticians to spot bias in the analysis of data. As it says, scientific journals are guardians of the use of public money, the merit of research, and guarantors of the citizen's trust in science.



[Get the best of Comment is free](#)

The most shared comment, analysis and editorial articles delivered every weekday lunchtime.

[Sign up for the Comment is free email](#)

Ads by
Google

[Voli Low Cost da 9€](#)
Risparmi fino al 70%

sul tuo Volo. Confronta 500+ Offerte Voli Online!

offerte.low.cost.jetcost.it

[Prova Google AdWords](#)

Raggiungi i clienti giusti online. Inizia subito con un credito di €75

www.google.it/adwords

[Assicurazioni Linear](#)

Calcola il tuo Preventivo Gratuito. Assicurati on line con Linear!

adv.linear.it

© 2014 Guardian News and Media Limited or its affiliated companies. All rights reserved.