

## FEATURE



## CHRISTMAS 2015: THE PUBLICATION GAME

## Snowballing citations

Helen Handoll and Greg Atkinson describe how a published letter took on a surprising new life

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In August 2015, one of us (HHGH) received an unsolicited email from the publishing company Elsevier announcing a citation of her short letter published in 2006.<sup>1</sup> The letter had attempted to correct a considerable overestimate of the number of Cochrane reviews on rehabilitation interventions (figure 1).<sup>1</sup> Intrigued, she investigated further and found that, as of August 2015, this modest letter had had 62 citations, all of which related to meta-analyses of genetic risk factors. The first of these meta-analyses was published in 2009 and all the lead authors were based in China. Consistently, authors referenced the letter to support their use of the Cochran Q-statistic for exploring heterogeneity of effect sizes, rather than to highlight the need for Cochrane reviews on rehabilitation.

The dangers of imitating incorrect statistical approaches, resulting over time in the unquestioning use of incorrect methods, have been described previously.<sup>2</sup> Nevertheless, our example seems exceptional in that so many authors have cited a publication that is so irrelevant to the selected statistical approach.

Having identified a demand for the original letter, we are happy to cite it again here.<sup>1</sup> Additionally, we would like to highlight

an appropriate article in *The BMJ*<sup>3</sup> that describes the original work of William G Cochran.<sup>4</sup> Naturally, we hope that our attempt to correct these citation errors will generate us, and *The BMJ*, a good number of citations in the years to come; and not just at Christmas.

Competing interests: We have read and understood BMJ policy on declaration of interests and have no interests to declare.

Provenance and peer review: Not commissioned; not externally peer reviewed.

- 1 Handoll HH. Systematic reviews on rehabilitation interventions. *Arch Phys Med Rehabil* 2006;87:875.
- 2 Bland JM, Altman DG. Statistical methods for assessing agreement between two methods of measurement. *Lancet* 1986;1:307-10.
- 3 Higgins JPT, Thompson SG, Deeks JJ, Altman DG. Measuring inconsistency in meta-analyses. *BMJ* 2003;327:557-60.
- 4 Cochran WG. The combination of estimates from different experiments. *Biometrics* 1954;10:101-29.

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## Figure

### Systematic Reviews on Rehabilitation Interventions

I was impressed with the breadth of Tate's lecture<sup>1</sup> on the state of rehabilitation research, which provided evidence of encouraging progress in this area. However, the progress on the systematic reviewing of the rehabilitation interventions is sadly rather more modest than she has reported.<sup>1</sup> Specifically, her reported number of 5075 Cochrane reviews on rehabilitation for just 7 selected diagnostic groups in July 2005 exceeds the total of 2608 completed reviews in the Cochrane Database of Systematic Reviews (Issue 1, 2006). It may well be that her search results included "hits" from several of the other 7 databases also contained in the Cochrane Library. A search purely on *rehabilitation*, as probably used by Tate, yields 334 completed Cochrane reviews and 106 protocols for Cochrane reviews in the Cochrane Database of Systematic Reviews (Issue 1, 2006). This simple search strategy will, however, miss several relevant reviews and include other nonrehabilitation reviews.

Despite the far smaller number of Cochrane reviews, Cochrane and other systematic reviews of rehabilitation are still a growth area in terms of "number, scope, and quality" as concluded by Tate. By virtue of their being updated on a regular basis, Cochrane reviews are indeed particularly "valuable tools on which to continue to build a strong theoretical body of knowledge."<sup>1(p164)</sup> However, there is still considerably more to be done and, in particular, I urge rehabilitation specialists to contribute actively to this endeavor.

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#### Reference

1. Tate DG. The state of rehabilitation research: art or science? *Arch Phys Med Rehabil* 2006;87:160-6.

The miscited letter (reproduced with permission)<sup>1</sup>