The Beer Index for scientific publishing

Peter C. Gøtzsche, professor and director
Institute for Scientific Freedom, Copenhagen

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The H-index is the number of scientific articles H a researcher has published that have been cited at least H times. Thus, if the H-index is 60, the researcher has published 60 articles that have all been cited at least 60 times.

What about the opposite end of the spectrum? Most scientific articles are hopelessly flawed and should never have been published. However, there are tens of thousands of journals publishing healthcare research, and many of them may ask you, pretty desperately, if you would be willing to submit a paper, as they are short of submissions for their upcoming issue. In addition, there are many predatory journals that will publish virtually anything for a fee.

In his announcement for the first peer review congress, which was held in 1989, Drummond Rennie, editor of JAMA, stated: "There seems to be no study too fragmented, no hypothesis too trivial, no literature citation too biased or too egoistical, no design too warped, no methodology too bungled, no presentation of results too inaccurate, too obscure, and too contradictory, no analysis too self-serving, no argument too circular, no conclusions too trifling or too unjustified, and no grammar and syntax too offensive for a paper to end up in print."[1]

We clearly need an index for hopelessly flawed papers. A US colleague, Professor Dennis M. Bier from Houston, has invented one and gave me permission to tell you about it.

The Bier Index, or B-Index for short, will be understood immediately by Germans, as it sounds like a Beer Index. It is the number of an author's papers requiring the consumption of the same number of beers while trying to work one's way through the paper to figure out what the author actually did and why. In other words, if an author has 6 publications that each require drinking 6 beers to understand the machinations the author went through to try to disguise study design flaws, inadequate methods, creative data transformations, post-hoc P-hacking, implied causality, and conclusions extended beyond the limits of the data, then the author's B-Index is 6.

If an author has a B-index exceeding 6, it might be prudent to try to find out what the flaws are over several days.

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[1] Rennie D. Guarding the guardians: a conference on editorial peer review. JAMA 1986;256:2391-2.