Beyond the impact factor: The example of neuroscience journals ?

Seena Fazel

wellcome trust
Fellow

Overview – measures of impact

- Individual
- Institutional
- Journal

Why it matters

- Judgements made on individuals and institutions
- BRC application and theme leaders
- h-index used for grant applications
- REF requires 4 papers since January 2008

Individual measures

- Total citations
- Citations/paper
- h-index = a scientist has an index h if his or her Np papers have at least h citations each and the other (Np-h) papers have ≤h citations each
- But favours seniority, research field sensitive, no consideration of extent of your contribution
- m-index = h/n, where n is the academic age (number of years since first paper)
- v-index is the m index divided by p(m/p) where p is the percentage time spent on research

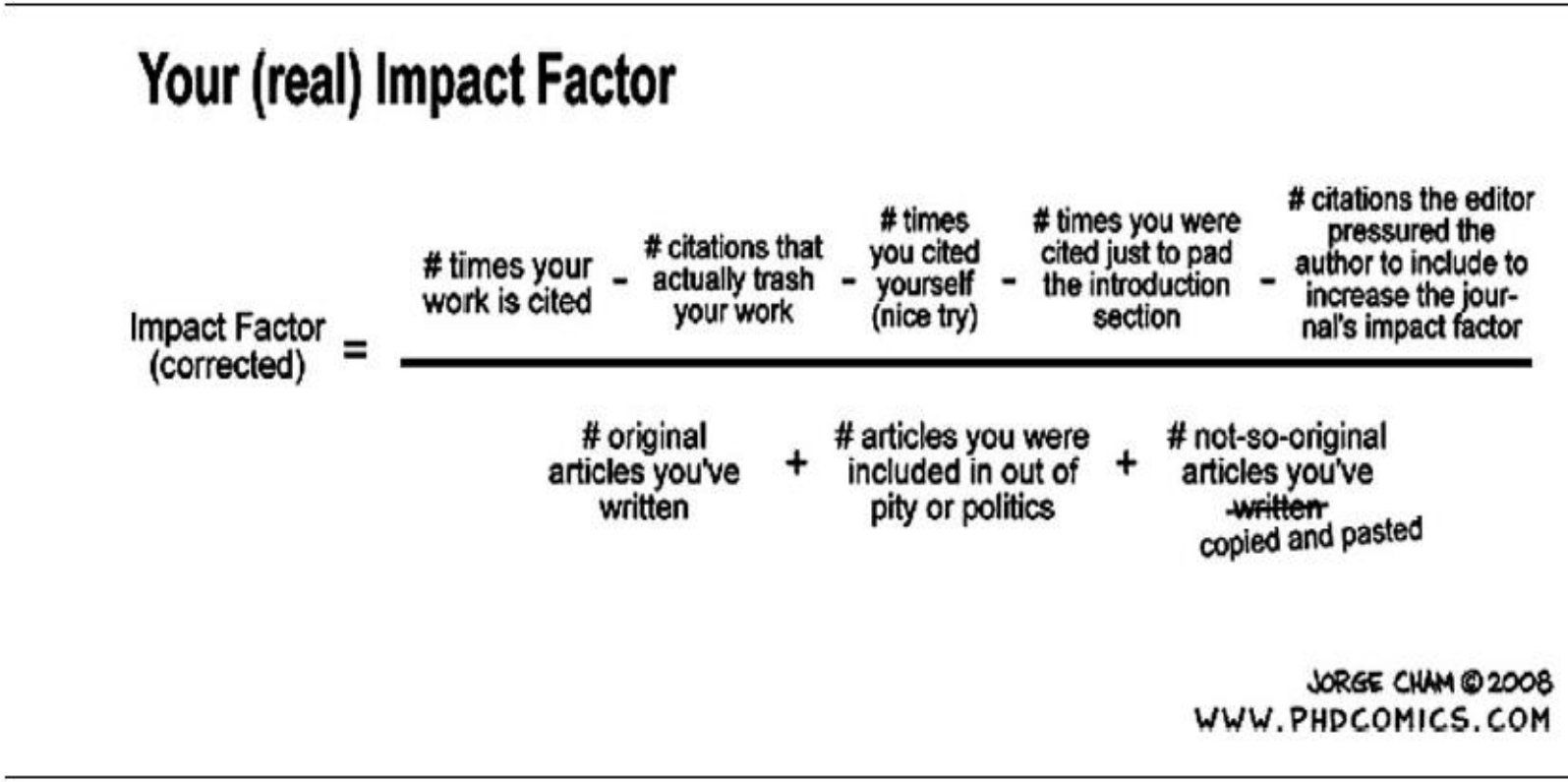
Other individual measures

- g-index – credit for highly cited articles
- Contemporary h-index (cf. Google scholar over last 5 years)
- Individual h-index (h-index divided by the mean number of researchers in the h publications)
- i10-index – number of papers with >10 citations

Abuses

- Inflated self-citation
- Citation amnesia
- Unholy alliances
- Salami slicing

But…


Your (real) Impact Factor
Impact Factor (corrected) =
times your work is cited
- # citations that actually trash your work
- # times you cited yourself (nice try)
- # times you were cited just to pad the introduction section
- # citations the editor pressured the author to include to increase the journal's impact factor
original articles you've written
+ # articles you were included in out of pity or politics
+ # not-so-original articles you've ~~written~~ copied and pasted
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WORKING
PAPER

Bibliometric analysis of highly cited publications of health research in England, 2002-2006

Thed van Leeuwen, Jonathan Grant and
Siobhán Ní Chonaill

WR-829-DH

February 2011

Prepared for the Department of Health

Table 7 Cross-tabulation of share of HCPs by field and universities (top 20 cells are highlighted)

	ALLERGY	ANATOMY & MORPHOLOGY	ANDROLOGY	ANESTHESIOLOGY	BIOCHEMICAL RESEARCH METHODS	BIOCHEMISTRY & MOLECULAR BIOLOGY	BIOPHYSICS	BIOTECHNOLOGY & APPLIED MICROBIOLOGY	CARDIAC & CARDIOVASCULAR SYSTEMS	CELL & TISSUE ENGINEERING	CELL BIOLOGY	CHEMISTRY, MEDICINAL	CLINICAL NEUROLOGY	CRITICAL CARE MEDICINE	DENTISTRY, ORAL SURGERY & MEDICINE	DERMATOLOGY	DEVELOPMENTAL BIOLOGY	EMERGENCY MEDICINE	ENDOCRINOLOGY & METABOLISM	ENGINEERING, BIOMEDICAL	FOOD SCIENCE & TECHNOLOGY	GASTROENTEROLOGY & HEPATOLOGY	GENETICS & HEREDITY	GERIATRICS & GERONTOLOGY	GERONTOLOGY	HEALTH CARE SCIENCES & SERVICES	HEALTH POLICY & SERVICES	HEMATOLOGY	IMMUNOLOGY	INFECTIOUS DISEASES	INTEGRATIVE & COMPLEMENTARY MEDICINE	MATERIALS SCIENCE, BIOMATERIALS	MEDICAL INFORMATICS	MEDICAL LABORATORY TECHNOLOGY	MEDICINE, GENERAL & INTERNAL	MEDICINE, RESEARCH & EXPERIMENTAL	MICROBIOLOGY	MULTIDISCIPLINARY SCIENCES	NEUROIMAGING	NEUROSCIENCES	NURSING	NUTRITION & DIETETICS	OBSTETRICS & GYNECOLOGY	ONCOLOGY	OPHTHALMOLOGY	ORTHOPEDICS	OTORHINOLARYNGOLOGY	PARASITOLOGY	PATHOLOGY	PEDIATRICS	PERIPHERAL VASCULAR DISEASE	PHARMACOLOGY & PHARMACY	PHYSIOLOGY	PSYCHIATRY	PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH	RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING
Birckbeck College London					1	1	1	1			1		0	0			0			0			0			0		0	0	0		1			0		0	0	1	1	0			0						0		0	1	0		0
Brunel University		1			1	0	0	0	0		0		0							0		0	0	0		2	4		0				2		0	0		0		0	1		0	0		0		0		0		0	1	0	1	0
Imperial College London Science, Technology & Medic	18	6	11	3	12	10	11	11	11	13	11	12	6	16	4	3	2	1	8	10	4	6	7	3	3	5	2	9	12	10	9	11	8	4	7	14	8	11	3	4	0	6	5	5	3	8	2	10	5	5	9	10	6	6	7	6
Institute for Cancer Research		1			1	2	1	1		2	4	4	0		1	1	1		1	3		1	2			0		1	0					1	1	1	0	1		0	0		0	7	0				3	0	0	1	0	0	0	3
Kings College London	4	10		2	3	3	3	2	2		3	4	6	2	9	2	7		3	4	1	2	4	9	12	3	1	2	2	0	4	3	1	3	3	3	1	1	8	7	7	3	3	1	1	1	1		2	3	3	6	3	20	3	5
London School of Hygiene & Tropical Medicine	3		11	0		1	0	0	2		0	4	1	3		1		1	0		1	1	1	2	2	6	15	1	4	9	4		3		8	3	4	1		0	2	5	2	1	3	0	0	18		2	1	1	0	1	14	0
Oxford Brookes University						0		0			0		0				1		1							0	1						1		0		0	0		0	0	0	1	0	0	0			0	0		0		0	0	
University College London	3	17		9	7	9	7	9	8		10	6	18	4	18	2	13	1	5	13	2	4	10	9	10	4	3	7	6	6	2	13	5	1	7	8	2	10	34	24	1	9	4	4	18	1	6	1	9	10	8	6	13	8	10	15
University of Bath	0	1		4	2	1	1	1	0		1	4	1		1	1	2	2	0	1	0	0	1	1		1	1	0	1	1	2	2	2		0	0	2	2	0	1	2	0		0	0	1		1	0	1	0	2	1	0	1	0
University of Birmingham	1			1	2	3	1	4	3		3	2	1	1	5	0	2	2	4	3	2	3	3	1		4	3	4	5	4	2	5	3	3	3	4	6	2	1	2	5	1	3	3	2	1	1	0	3	2	3	3	5	2	2	1
University of Bradford					1	0	1	0			0	3				3	0		0	0	0	0	0	0							7			1	0		0			0	1		0	0	2	1			0		0	1	0	0	0	
University of Bristol	1	3	11	1	1	2	2	3	3	4	2	3	2	1	7	0	1	3	5	1	8	1	2	3	4	3	2	3	2	3	9	2	5		4	2	5	3	0	3	0	4	2	1	2	4	1	5	2	4	3	4	5	4	7	0
University of Cambridge	3	6		2	8	12	13	10	3	11	14	6	5	4		1	19	3	9	6	2	2	11	6	5	2	1	5	5	1		8	5		3	6	3	15	5	11	0	7	4	5	2	3	3	5	5	4	7	6	8	9	4	3
University of Durham		1			2	1	1	1	0	13	1	0	0			1				1	0	1	0			0		0	0			1			0	0		1	0	0	1		0	0	0			0	0	0	0	0	1	0	1	0
University of East Anglia		2		0	1	2	2	1	0		1	1	0		0	0	1		0		3	0	0	1		1	2	0	0	0					0	0	2	1		0	1	2	0	0	1	1	0	0		0	0	0	0	0	1	
University of Exeter		1		1	1	0	0	0	0		0	0	0						0	1		0	0			2					11		1		0		0	1		0		0	1			0	0	1		0		0	0	0	0	0
University of Hull					1	0	0		3		0	0	0						0			0	0	0	1	0			0		2		1		0		0	0		0	6		1	0		1	0			0	0	0		0	0	0
University of Keele	1			2		0	1	0				0	0		0	1			0	1	0	0	0			1		0	0				5		1	0	0	0		0	1	0	1	0	0	3		2		1		0	1	0	1	0
University of Kent	0			0	0	0	0	1			0	1	0			0			0	0	0		0	1	2	0	1		0				1		0		1	0		0	0	0		0	0		0		0		0	0	0	0	0	0
University of Leeds		4		2	2	3	3	4	1	2	2		1	2	1	3	1	2	1	4	8	1	2	1		3	2	2	1	2		3	1	1	1	1	2	2		1	5	2	2	2	0	3	0	4	2	1	2	2	5	1	2	0
University of Leicester	1	1		2	0	3	1	1	2	2	3	1	1	1		2	2	1	0		2	1	3	1	1	2	1	2	1	0			4	2	1	2	2	2	1	1	0		2	3	1	1	2		2	2	4	3	1	1	1	1
University of Liverpool	1	4		2	3	2	1	2	1	2	2	7	2	1	4	0	1		1	4	2	3	1	1	2	2	4	1	2	6		7	5	5	2	3	3	2	2	1	5	5	2	1	1	1	3	15	2	3	1	4	4	2	4	1
University of London Institute for Education													0																	0					0																			0	0	
University of London Queen Mary						0	1	0	0		0		0		1	1			0	1			0	0	1			0	0	0		1			0	0	0		0	0			0	0			0	0	0	0	0	0	0	0	0	0
University of London School of Pharmacy						0						0	0		0								0								2									0			0	0								0			0	
University of Manchester	2	6	11	3	7	5	4	6	2	2	5	5	3	3	9	9	4	7	4	6	2	3	3	5	4	7	5	2	2	2	2	10	5	2	3	2	4	4	4	3	6	1	2	2	4	3	5	3	4	2	3	5	5	5	3	4
University of Newcastle upon Tyne		5		0	2	2	3	4	1	15	3	7	3	1	9	3	2		3	1	3	4	3	8	8	3	3	2	1	0	4	1	3		2	2	3	2	2	2		2	1	2	1	1	8	0	1	2	1	3	3	3	3	1
University of Nottingham	5	2		1	1	2	3	2	0		2	6	2	3		3	4	2	1	3	10	3	1	1	3	2	1	1	1	2		5	1		2	1	4	2	3	2	3	3	2	1	3	2	5	4	2	2	1	4	3	2	2	2
University of Oxford	1	6	11	5	11	11	14	10	5	7	8	8	7	2	1	2	6	2	6	7	1	3	12	4	4	6	7	5	13	7	2	4	7	7	7	10	11	15	13	11	2	7	4	5	4	16		10	4	5	6	5	9	8	7	7
University of Plymouth				1		0		0	0		0		0	0				1	0		3	0	0			2			0	0	11		1		0		0	0		0	6	0	1	0	0			0		0		0	0	0	0	0
University of Reading					1	1	1	2	0	2	0	1	0				2		1		19	0	1	1	2	0		1	0	0	2		1		0	0	2	1	0	0	0	9	0	0	0	0	0	1		0	0	1	0	0	0	0
University of Salford Manchester					0	0	0	0				1									1					0					4		1		0		0			0	2					1	0	6							1	
University of Sheffield	1	2	22	2	3	3	3	2	1	9	2	1	1	2	5	2	4	7	5	2	1	2	2	2	1	8	11	1	2	1	4	5	2	1	2	2	3	3	3	2	10	2	2	2	1	1		1	3	1	1	2	2	1	2	2
University of Southampton	10	1		1	3	2	3	2	0		1	4	2	3		0	0	1	4	3	3	3	1	3	3	2	1	2	3	1	2	2	3	1	2	2	1	2	1	2	6	11	1	1	0	1	1		3	3	2	2	1	3	2	0
University of Surrey	0				1	0	1	1	0		0	2	1	1	0			2	1	1	7		0	1		0	1	0	0	0		1	2	5	0	0	1			0	1	5	1	0					1	0	0	1	1	1	1	0
University of Sussex		3		0	1	2	1	1	0		2	0	0	1		0	2		0	0			2	1		1	2	0	0	0		1	1		0	0	1	1		1	1	1	0	1	1	0					0	1	2	1	1	1
University of Warwick					1	1	2	1	0		1	0	0			0	1	1	1		3	0	0	1	2	1	1	0	0	0			2		0	0	3	1	0	0	1		1	0		1	0	0	0	1	0	0	0	0	1	0
University of York		1			7	2	4	3	0	4	2	1	0		0	0	2		1	1	10	0	1	2		9	19	0	0	0	7	1	7		2	1	1	1	1	1	5	0	1	1	0		1	4	0	0	0	1	1	1	2	0

Journal IPs

- Thomson Reuters JIP
- Google h5-index
- Elsevier Impact per Publication (IPP)
- Source Normalised Impact per Paper (SNIP)
- SCImago Journal Rank (SJR)

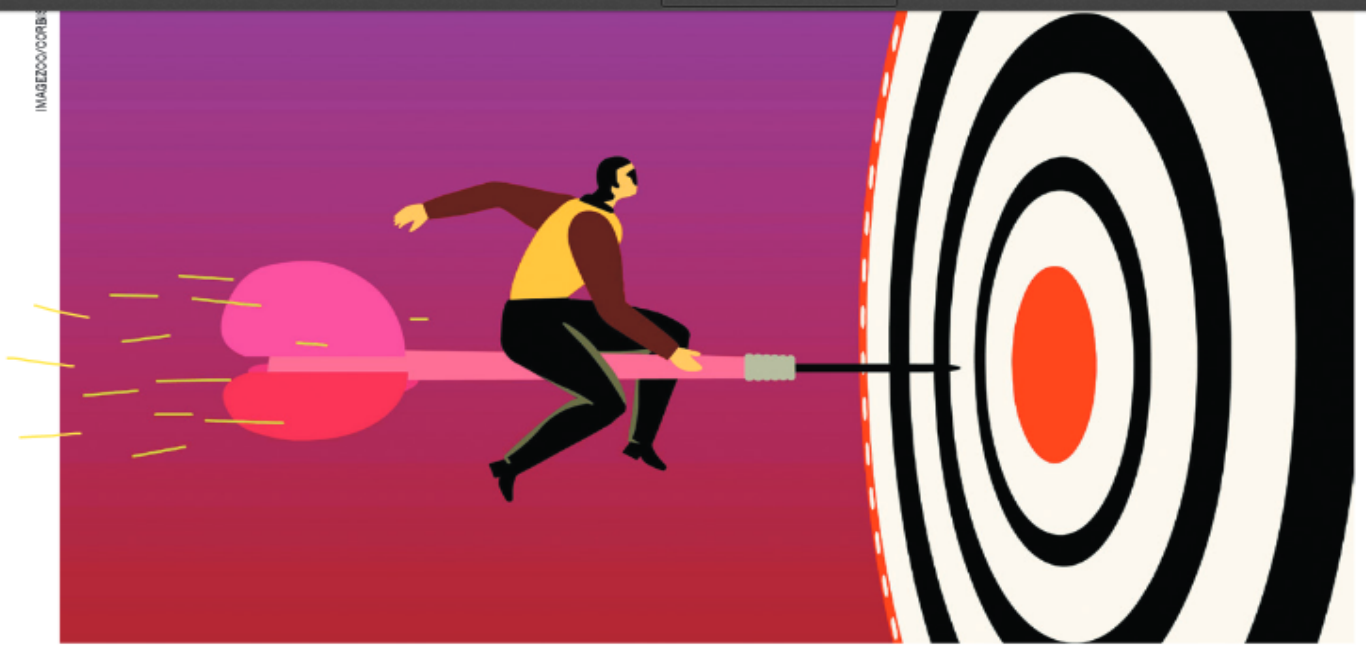
False idol?

Impact factor is influenced by:

- Citation behaviour of researchers
- Length of article (longer the better)
- Accessibility of articles (open access)
- Errors in citation counting
- Publication frequency
- Research field
- Publication lag (submission to publication)
- Limitations of SCI database
- Fashions, language

Other ways to judge an paper

- Total citations
- Citations/year
- (Citations/year)/author
- Downloads/reads/most viewed lists
- Editorials/commentaries/press releases



IMAGEZOO/CORBIS

RESEARCH IMPACT

Altmetrics make their mark

Alternative measures can yield useful data on achievement — but must be used cautiously.

BY ROBERTA KWOK

Steve Pettifer and his colleagues did not heavily promote their 2008 paper on digital library tools. So it came as a surprise when, in August 2012, Pettifer got an e-mail from the Public Library of Science (PLOS), based in San Francisco, California. A PLOS representative told him that people had viewed or downloaded the article (D. Hull *et al. PLoS Comput. Biol.* **4**, e1000204; 2008) more than 53,000 times. It was the most-accessed review ever to be published in any of the seven PLOS journals. The paper had come out just as biologists' interest in digital publishing was building and the number of tools was exploding, says Pettifer, a computer scientist at the University of Manchester, UK. "It hit the right note at the right time," he says.

At one time, Pettifer would have listed the paper on his CV accompanied by the journal's impact factor and the article's number of citations — in this case, about 80. But when he came up for promotion this year, he realized that tracking citations was not going to tell the whole story about the paper's influence. Impact factor is a crude measure that applies only to the journal, not to specific articles, he says; citations take a long time to accumulate, and people may not cite a paper even if it influences their thinking. So he added the number of views to the CV entry. And he did not stop there.

Next to many of the papers listed, Pettifer added labels indicating scholarly and public engagement. The labels were generated by ImpactStory in Carrboro, North Carolina, one of several services that gauges research impact using a combination of metrics — in this case, a wide range of data sources, including the number of times a paper has been shared on social-media websites or saved using online research tools.

When Pettifer submitted his annotated CV for the first round of promotion review, his mentor expressed confusion. He took a look and said, "What the hell are these badges doing in your CV?" recalls Pettifer. "But once I explained them, he said, 'Well, give it a go.'" Pettifer submitted his CV for the second round — and got his promotion. He does not know for sure whether the metrics helped, but he plans to use them on future grant applications. "I'm definitely a convert," he says.

OUTSIDE THE BOX

'Altmetrics', a term coined in 2010 by ImpactStory co-founder Jason Priem, refers to a range of measures of research impact that go beyond citations. Several altmetrics services have ▶

Editorial

Folia Phoniatrica et Logopaedica

Folia Phoniatr Logop 2007;59:281–285
DOI: 10.1159/000108334

Reaction of *Folia Phoniatrica et Logopaedica* on the Current Trend of Impact Factor Measures

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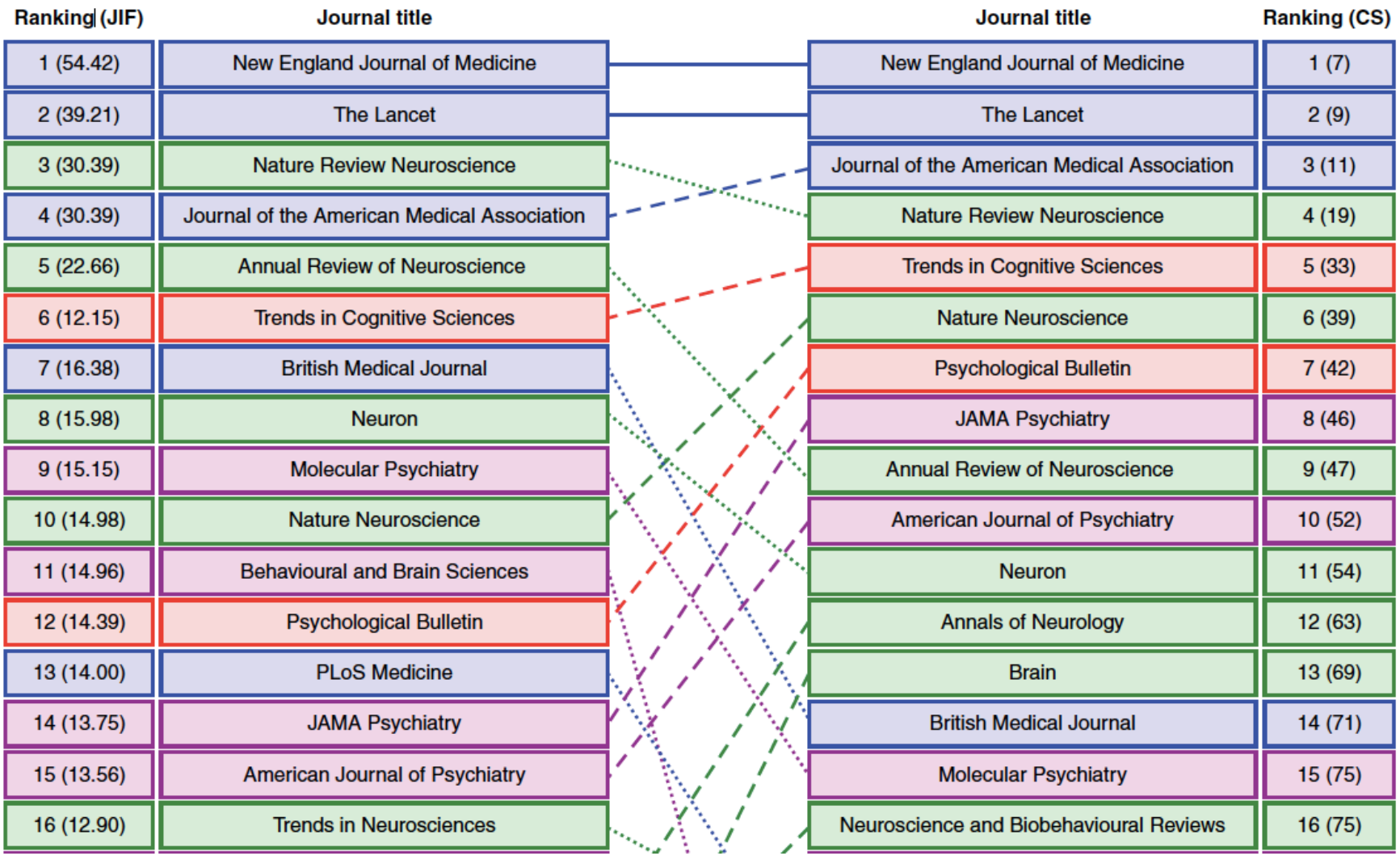
It has become the current trend to measure the status of a scientific journal by its impact factor and to measure a scientist by the impact factor of journals in which he/she publishes. While the underlying idea is good, applying the measure universally leads to highly disturbing trends. Based on country policies, some universities and their departments, especially in Europe, have started to distribute finances based on the average impact factor and average 'relative impact factor' (i.e., journal ranking based on impact factor within a subject category recognized by the Thomson Scientific Institute for Scientific Information, ISI) calculated from all the publications published and phoniatrics. For instance, in the ISI category of otorhinolaryngology, the journals devoted to otology have generally a higher impact factor than journals in laryngology and a much higher impact factor than a journal devoted specially to phoniatrics. Based on this, the 'importance' of phoniatricians is considered to be lower than that of laryngologists and much lower than that of otologists. Consequently, phoniatricians are judged as less 'scientifically valuable' than otologists and laryngologists. To defend their scientific value, the phoniatricians are forced to avoid their special journal, i.e., our journal *Folia Phoniatrica and Logopaedica* (FPL), and publish in other

As a reaction to this disturbing trend, the authors have decided to put together this review, which cites all the articles published in FPL within the last 2 years. This article is thus expected to considerably increase the impact factor of this journal and its ranking. While we realize that this initiative is absurd, we feel it adequately reflects the current absurd scientific situation in some countries. We honestly believe that the fields of logopedics and phoniatrics are not of less importance than other fields, but rather are under-researched, i.e., there are a relatively small number of scientists for a large number of scientific problems within these fields. This results in a relatively small number of citations to the papers belonging to these fields, and the overall number of citations of these papers cannot simply be increased by publishing in journals with a high impact factor, simply because there are not enough scientists working in logopedics and phoniatrics.

While the primary goal of this article is to increase the impact factor of the journal, it also provides potentially useful information on the distribution of the articles pub-

Advice to an editor

The most reliable way of increasing the number of citations is to do it yourself. It's easy to find ways of citing papers in your own journal. You can, for example, write an introductory article, under a title such as Editor's Choice, for each issue. It's not much effort to make a few banal remarks about the papers published that month and, if you flag the articles you mention with superscripts and a list of references underneath, Thompson Scientific's search engine will pick them up and count them as citations. Commissioning commentaries on papers and encouraging correspondence also helps because this too provides an opportunity for self citation. Some editors have gone so far as to ask authors of papers that they are about to accept to add papers previously published in their journal to the list of references. But I don't recommend this; it's just too obvious.

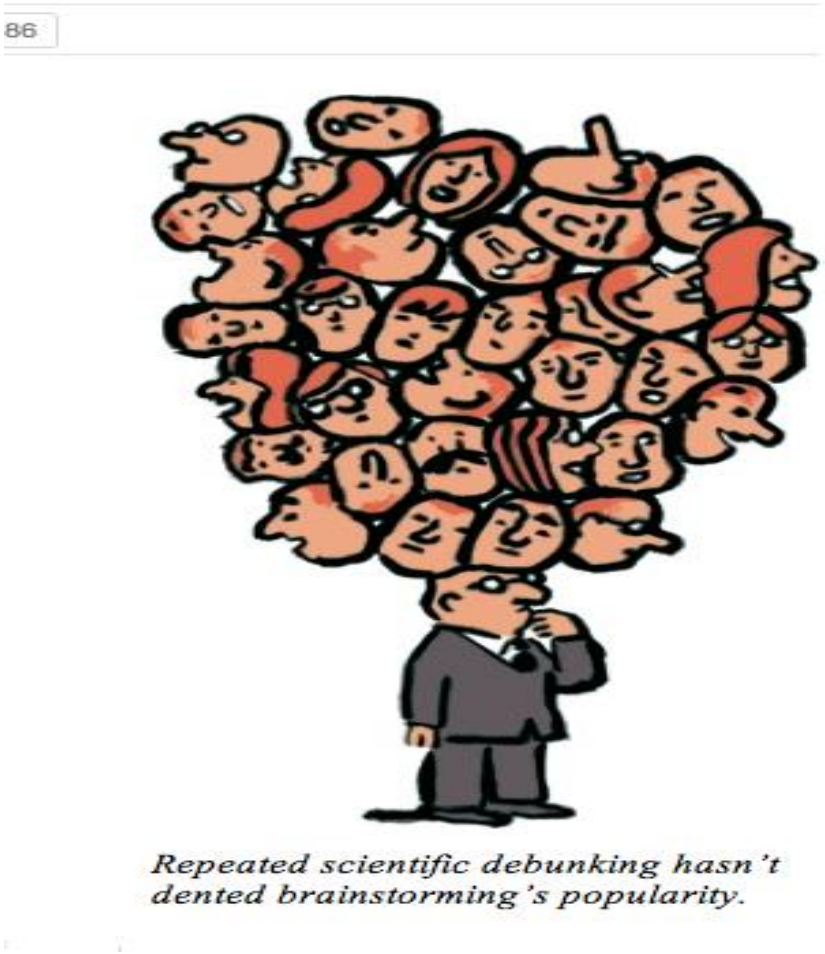


Fazel, EBMH 2015

How to improve your impact?

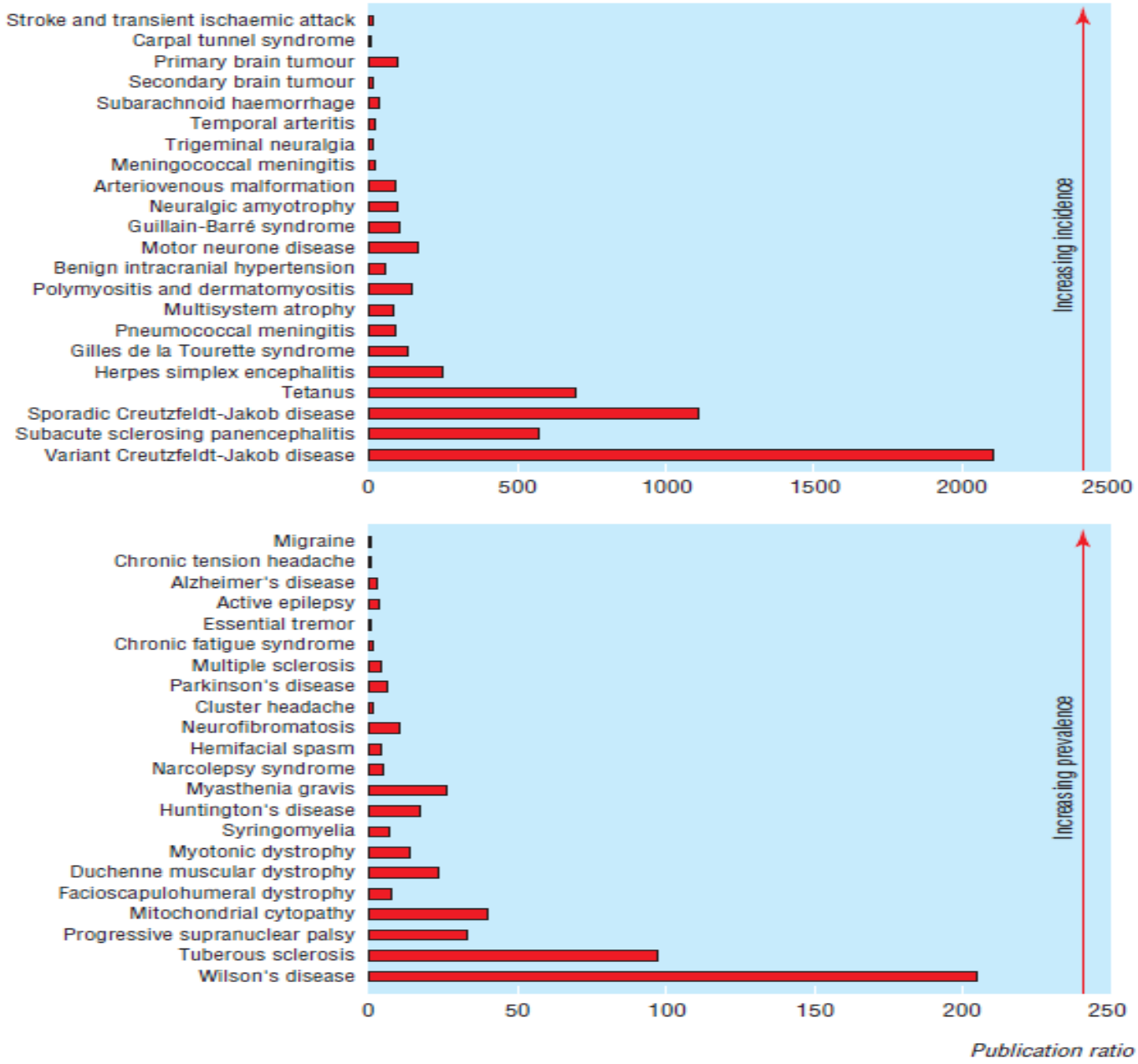
- General journals?
- Niche fields
- Buildings
- Atypical combinations

What doesn't work?



General journals

- General interest
- Public health angle
- Simple message
- Potential to change practice
- From PLoS Medicine: “We publish important studies across all medical disciplines that are of wide general interest. Hence, we are looking for papers that will provide a substantial new insight into the pathogenesis of disease, with a clear path to clinical application, or a substantial advance in management or public health policy.”



Publication ratios for 44 neurological conditions ordered by their incidence (top) and prevalence (bottom)

OPEN ACCESS Freely available online

PLoS one

Does Collocation Inform the Impact of Collaboration?

Kyungjoon Lee[1], John S. Brownstein[2], Richard G. Mills[3], Isaac S. Kohane[1,2]*

1 Center for Biomedical Informatics, Harvard Medical School, Boston, Massachusetts, United States of America, **2** Children's Hospital Informatics Program at the Harvard-MIT Division of Health Sciences and Technology, Boston, Massachusetts, United States of America, **3** Operations and Business Affairs, Harvard Medical School, Boston, Massachusetts, United States of America

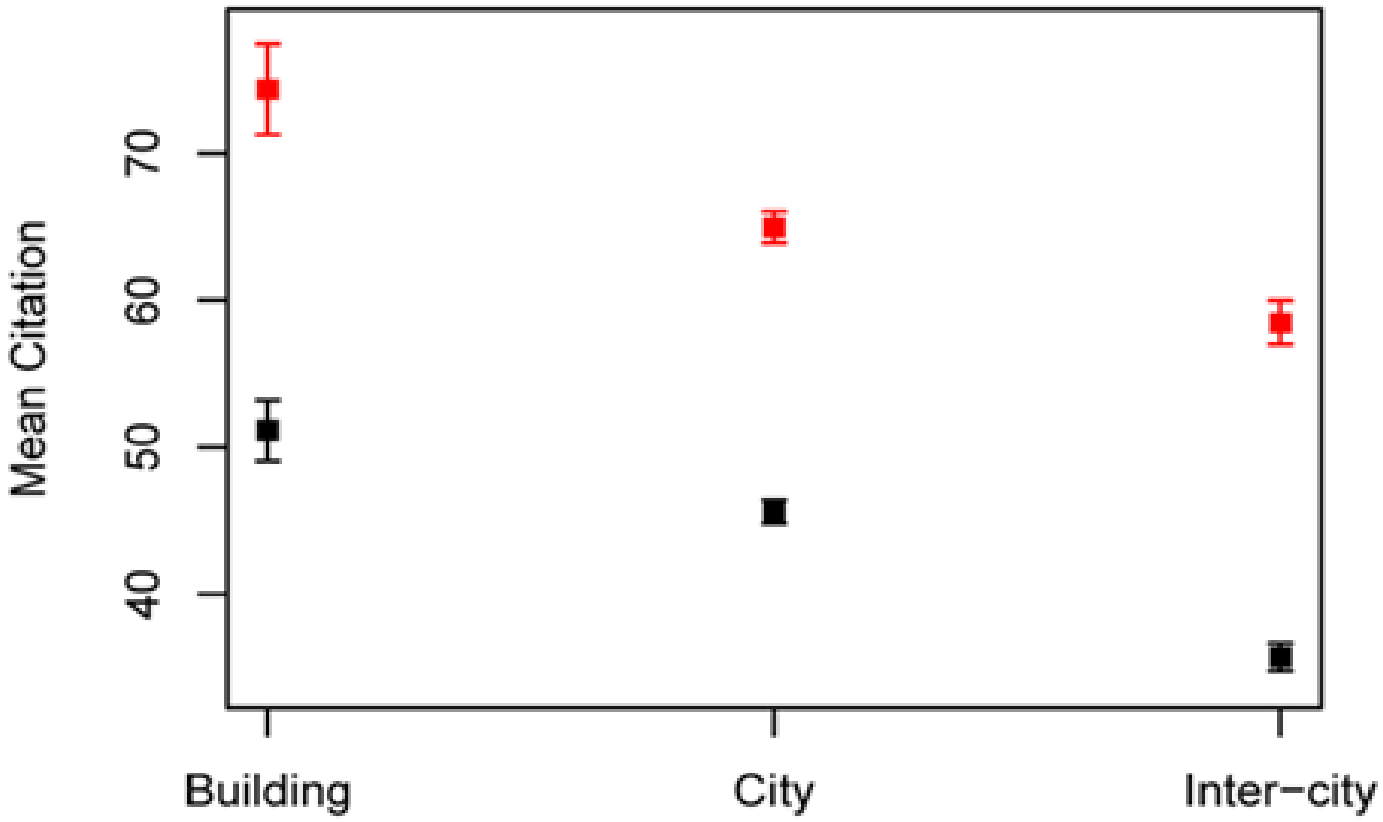
Abstract

Background: It has been shown that large interdisciplinary teams working across geography are more likely to be impactful. We asked whether the physical proximity of collaborators remained a strong predictor of the scientific impact of their research as measured by citations of the resulting publications.

Methodology/Principal Findings: Articles published by Harvard investigators from 1993 to 2003 with at least two authors were identified in the domain of biomedical science. Each collaboration was geocoded to the precise three-dimensional location of its authors. Physical distances between any two coauthors were calculated and associated with corresponding citations. Relationship between distance of coauthors and citations for four author relationships (first-last, first-middle, last-middle, and middle-middle) were investigated at different spatial scales. At all sizes of collaborations (from two authors to dozens of authors), geographical proximity between first and last author is highly informative of impact at the microscale (i.e. within building) and beyond. The mean citation for first-last author relationship decreased as the distance between them increased in less than one km range as well as in the three categorized ranges (in the same building, same city, or different city). Such a trend was not seen in other three author relationships.

Conclusions/Significance: Despite the positive impact of emerging communication technologies on scientific research, our results provide striking evidence for the role of physical proximity as a predictor of the impact of collaborations.

Figure 7. Mean citation for first-last authors in the same building, same city, or different city.



Lee K, Brownstein JS, Mills RG, Kohane IS (2010) Does Collocation Inform the Impact of Collaboration?. PLoS ONE 5(12): e14279. doi:10.1371/journal.pone.0014279
http://www.plosone.org/article/info:doi/10.1371/journal.pone.0014279

Atypical Combinations and Scientific Impact

Brian Uzzi,[1,2] Satyam Mukherjee,[1,2] Michael Stringer,[2,3] Ben Jones[1,4]*

Novelty is an essential feature of creative ideas, yet the building blocks of new ideas are often embodied in existing knowledge. From this perspective, balancing atypical knowledge with conventional knowledge may be critical to the link between innovativeness and impact. Our analysis of 17.9 million papers spanning all scientific fields suggests that science follows a nearly universal pattern: The highest-impact science is primarily grounded in exceptionally conventional combinations of prior work yet simultaneously features an intrusion of unusual combinations. Papers of this type were twice as likely to be highly cited works. Novel combinations of prior work are rare, yet teams are 37.7% more likely than solo authors to insert novel combinations into familiar knowledge domains.

Scientific enterprises are increasingly concerned that research within narrow boundaries is unlikely to be the source of the most fruitful ideas (*1*). Models of creativity emphasize that innovation is spurred through original combinations that spark new insights (*2*–*10*). Current interest in team science and how scientists search for ideas is premised in part on the idea that teams can span scientific specialties, effectively combining knowledge that prompts scientific breakthroughs (*11*–*15*).

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Yet the production and consumption of boundary-spanning ideas can also raise well-known challenges (*16*–*21*). If, as Einstein believed (*21*), individual scientists inevitably become narrower in their expertise as the body of scientific knowledge expands, then reaching effectively across boundaries may be increasingly challenging (*4*), especially given the difficulty of searching unfamiliar domains (*17*, *18*). Moreover, novel ideas can be difficult to absorb (*19*) and communicate, leading scientists to intentionally display conventionality. In his *Principia*, Newton presented his laws of gravitation using accepted geometry rather than his newly developed calculus, despite the latter's importance in developing his insights (*22*). Similarly, Darwin devoted the first part of the *Origin of Species* to conventional, well-accepted knowledge about the selective breeding of dogs, cattle, and birds. From this viewpoint, the balance

Atypical antipsychotics in the treatment of schizophrenia: systematic overview and meta-regression analysis

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Abstract

Objective To develop an evidence base for recommendations on the use of atypical antipsychotics for patients with schizophrenia.
Design Systematic overview and meta-regression analyses of randomised controlled trials, as a basis for formal development of guidelines.
Subjects 12 649 patients in 52 randomised trials comparing atypical antipsychotics (amisulpride, clozapine, olanzapine, quetiapine, risperidone, and sertindole) with conventional antipsychotics (usually haloperidol or chlorpromazine) or alternative atypical antipsychotics.
Main outcome measures Overall symptom scores. Rate of drop out (as a proxy for tolerability) and of side effects, notably extrapyramidal side effects.
Results For both symptom reduction and drop out, there was substantial heterogeneity between the results of trials, including those evaluating the same atypical antipsychotic and comparator drugs. Meta-regression suggested that dose of conventional antipsychotic explained the heterogeneity. When the dose was ≤12 mg/day of haloperidol (or equivalent), atypical antipsychotics had no benefits in terms of efficacy or overall tolerability, but they still caused fewer extrapyramidal side effects.
Conclusions There is no clear evidence that atypical antipsychotics are more effective or are better tolerated than conventional antipsychotics. Conventional antipsychotics should usually be used in the initial treatment of an episode of schizophrenia unless the patient has previously not responded to these drugs or has unacceptable extrapyramidal side effects.

(such as blockade of serotonin 5-HT$_2$ receptors). No definition is wholly satisfactory, partly because the term atypical is relative rather than absolute. We use the term simply to refer to clozapine and all the novel antipsychotics introduced in the past decade.

We conducted a systematic review of the effectiveness and tolerability of atypical versus conventional antipsychotics in the treatment of schizophrenia to inform the development of a clinical practice guideline. The primary outcomes we investigated were control of psychotic symptoms and overall acceptability, although we also looked at the possibility of studying outcomes such as quality of life and rates of specific adverse effects. We decided beforehand to examine the influence of the dose of the conventional drug, because common side effects (such as extrapyramidal side effects and sedation) are dose related, whereas efficacy reaches a plateau.[2] The recommended optimal dose is 6-12 mg/day haloperidol or its equivalent,[3] although higher doses are still commonly used.[4] Evaluation of the relative efficacy and tolerability of conventional and atypical antipsychotics must, therefore, take into account the comparator dose.

Systematic reviews of individual atypical antipsychotic drugs (clozapine,[5] olanzapine,[6 7] quetiapine,[7 8] risperidone,[7 9 10] and sertindole[7]) exist but were either unavailable or out of date at the time we were developing the guideline. Furthermore, they do not formally assess the effect of dose or allow evaluation of atypical antipsychotics as a group.

Methods

Inclusion criteria

Editorial by Kapur and Remington

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Comparative efficacy and acceptability of 12 new-generation antidepressants: a multiple-treatments meta-analysis

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Summary

Background Conventional meta-analyses have shown inconsistent results for efficacy of second-generation antidepressants. We therefore did a multiple-treatments meta-analysis, which accounts for both direct and indirect comparisons, to assess the effects of 12 new-generation antidepressants on major depression.

Methods We systematically reviewed 117 randomised controlled trials (25 928 participants) from 1991 up to Nov 30, 2007, which compared any of the following antidepressants at therapeutic dose range for the acute treatment of unipolar major depression in adults: bupropion, citalopram, duloxetine, escitalopram, fluoxetine, fluvoxamine, milnacipran, mirtazapine, paroxetine, reboxetine, sertraline, and venlafaxine. The main outcomes were the proportion of patients who responded to or dropped out of the allocated treatment. Analysis was done on an intention-to-treat basis.

Findings Mirtazapine, escitalopram, venlafaxine, and sertraline were significantly more efficacious than duloxetine (odds ratios [OR] 1·39, 1·33, 1·30 and 1·27, respectively), fluoxetine (1·37, 1·32, 1·28, and 1·25, respectively), fluvoxamine (1·41, 1·35, 1·30, and 1·27, respectively), paroxetine (1·35, 1·30, 1·27, and 1·22, respectively), and reboxetine (2·03, 1·95, 1·89, and 1·85, respectively). Reboxetine was significantly less efficacious than all the other antidepressants tested. Escitalopram and sertraline showed the best profile of acceptability, leading to significantly fewer discontinuations than did duloxetine, fluvoxamine, paroxetine, reboxetine, and venlafaxine.

Interpretation Clinically important differences exist between commonly prescribed antidepressants for both efficacy and acceptability in favour of escitalopram and sertraline. Sertraline might be the best choice when starting treatment for moderate to severe major depression in adults because it has the most favourable balance between benefits, acceptability, and acquisition cost.

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EU Survey of 11,000 academics

- Although time spent working on research was unsurprisingly linked with research productivity, "teaching or administrative workloads were not found to be predictors across any of the 12 countries,”

- Job satisfaction and institutional factors such as "managerial support, managerial style (communication and collegiality) and infrastructural support related to research" seemed to matter only in a small minority of countries, while both age and gender were dwarfed by other factors.

- Far more significant in predicting whether someone was likely to generate a steady stream of papers were "a stated preference for research over teaching and involvement in the wider research community.”
- Such involvement, as witnessed by "peer reviewing, membership of scientific committees and editorial positions," turned out to be "the only predictor evident across all countries and the strongest predictor for publication productivity in eight countries." National or international collaborations were also important factors in most countries.

Ref: EURODOC survey, 2012

Summary

- Consider multiple measures of impact
- Work in atypical combinations in buildings that promote frequent spontaneous interactions
- Publish in journals that reduce research waste
- Collaborations comfortable but not too comfortable