EDITORIAL

The true impact of a scientific paper

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Scientific work is being published to share the findings from research with a broad audience of colleague scientists, who can build on the new insights provided by the paper or use the results to formulate new hypotheses. Likewise, scientific findings can be used by practising physicians who are seeking to improve the management of their patients. Results from papers reporting groundbreaking new diagnostic strategies or therapeutic options may be readily adopted and may therefore have a very large impact on day-to-day medicine. Unfortunately, there is no 'impact factor' to measure the importance of such manuscripts. Instead, if we speak about the impact factor in relation to articles and journals, we refer to the number of citations that a paper has received in the first two years after its publication.[1] This may indeed reflect scientific impact as many readers and writers may be impressed by the results but similarly it could reflect ample opposition against the findings that may be thought to be flawed. Both situations will result in an identical 'impact', thus making it a weak parameter of esteem for an article.[2,3] Nevertheless, citation analyses, impact factors, and Hirsh factors (a score that is a composite of the number of papers an author has produced and the number of citations these papers have received) are with us to stay.[4] These parameters seem to fulfil our need to quantify not only the number of papers published but also the 'quality' of these articles and as long as one understands the shortcomings of these scoring tools, there is nothing wrong with that.

Keeping all this in mind, I am happy to report that the estimated impact factor of the Netherlands Journal of Medicine in 2012 has further increased. A preliminary analysis of citations in 2012 results in an impact factor of almost 2.5, a further increase compared with previous years (*figure 1*). This is relevant as this firmly positions the Netherlands Journal of Medicine in a group of periodicals that distinguish themselves from a very large number of journals with an impact factor lower than 2 (*figure 2*). An increasing impact factor leads to an increased number of submissions and therefore potentially more choice for the editors and a higher quality of the accepted papers (with eventually higher impact factors in coming years).

Figure 1. *Impact factor of the Netherlands Journal of Medicine in the last 15 years. In 2011 the impact factor rose above 2.0, which is often considered an important boundary that distinguishes better cited journals from the other journals*

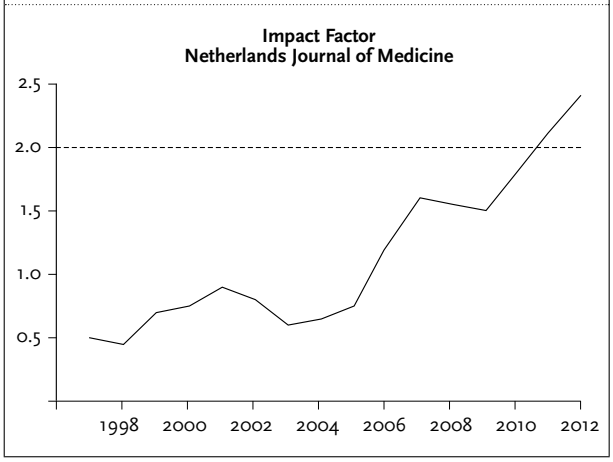
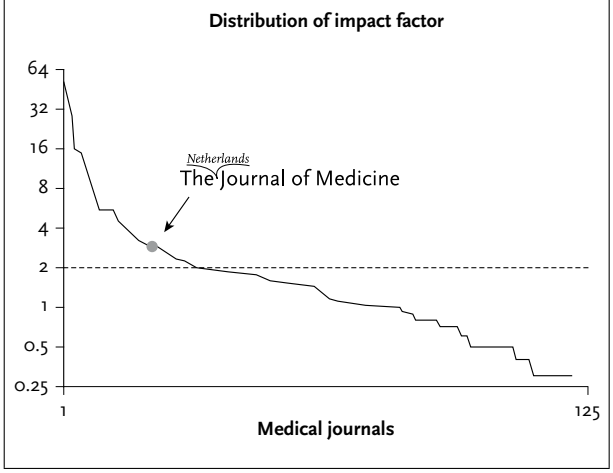


Figure 2. *Position of the Netherlands Journal of Medicine in the group of 125 general medical journals with the highest impact factors. The highest impact factors belong to the New England Journal of Medicine, the Lancet, and JAMA, respectively*



Indeed, the Netherlands Journal of Medicine has seen a larger number of submissions, in particular from other European countries and the US (*table 1*). However, since the number of pages of the journal is more or less fixed, more submissions will result in a lower acceptance rate of submitted papers.[4]. Traditionally, we are publishing the list of articles that have received the largest number of citations in recent years and thereby have contributed most to the impact factor of the Netherlands Journal of Medicine (*table 2*).

Table 1. *Submissions and acceptance rate of the Netherlands Journal of Medicine between 2008 and 2012*

	2012	2011	2010	2009	2008
Submissions	1012	890	555	328	245
Overall acceptance rate	11%	14%	23%	30%	42%
Origin of submissions					
Netherlands	32%	40%	47%	61%	70%
Other European	30%	25%	21%	16%	14%
North America	20%	14%	10%	7%	4%
Rest of the World	18%	21%	22%	16%	12%

Table 2. *Recent papers that contributed most to the impact factor of the Netherlands Journal of Medicine*

de Wijkerslooth T, et al. Strategies in screening for colon carcinoma[5]
Kuiper P, et al. An overview of the current diagnosis and recent developments in neuroendocrine tumours of the gastroenteropancreatic tract[6]
Levi M, et al. Periprocedural reversal and bridging of anticoagulant treatment[7]
Tromp M, et al. The effects of implementation of the Surviving Sepsis Campaign in the Netherlands[8]
Ubbink DT, et al. Implementation of evidence-based practice: outside the box, throughout the hospital[9]
Arends JE, et al. Treatment of acute hepatitis C virus infection in HIV+ patients: Dutch recommendations for management[10]
Gevers TJG, et al. Treatment extension benefits HCV genotype I patients without rapid virological response: a systematic review[11]
Pijl H. Obesity: evolution of a symptom of affluence. How food has shaped our existence[12]
Wouters MM, et al. Neuroimmune mechanisms in functional bowel disorders[13]
Szekanecz Z, et al. Chemokine and chemokine receptor blockade in arthritis: a prototype of immune-mediated inflammatory diseases[14]

We are pleased with the increasing impact of the Netherlands Journal of Medicine and with the increasing number of submissions the journal receives. It may be an illustration of the vitality of the journal and the type of general articles it publishes. The editorial board will do everything in its power to keep the journal in good shape in the years to come.

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