

From the Executive Editor

EVERY SCIENTIFIC JOURNAL WANTS TO MAKE AN impact on the thinking of the scientific community it serves. Once, this was a matter of reputation based upon subjective judgements. Scientists, of course, are never content with subjective assessments of anything. It was always inevitable, therefore, that they would seek to measure the impact of journals. So now we have analysis of the number of citations of articles published within each journal, producing the measure commonly known as the impact factor of the journal. The impact factor, specifically, is a measure of how often an “average article” in a journal has been cited by other researchers. Impact factors based on citation indexes are not unique to journals. They are also produced for individual papers, for authors, and for whole scientific institutions. They have become the currency with which we assess all scientific publication.

Measuring scientific importance with an impact factor for a given journal gives us a sense of security. A numerical measurement, based on a logical scientific principle, must be more valid than a judgement based upon personal prejudice. But things are not that simple. Impact factors are far from perfect. They tell you something about the journal, but nothing about the quality of any individual paper. For a start, they are not corrected for self-citation. Journals containing long review articles tend to attract higher levels of citation, and will therefore have higher impact factors, regardless of the quality of their research papers. The impact factor depends very greatly on the field of research covered by the journal. High factors are seen in journals that cover basic research for which the literature is rapidly expanding. Lower factors are seen in journals covering narrow areas, such as paediatric journals. And impact factors are biased towards journals published in the English language, particularly American ones.¹ For all these reasons, impact factors for individual journals need to be interpreted with caution.

It is against this background that we draw your attention to the current impact factor of this journal, namely 0.642. As regular readers will know, *Cardiology in the Young* was listed in Medline for the first time in 2000. This, therefore, is the first

time we have acquired an impact factor, and it is derived from years in which we were not listed in Medline. Now we are listed, the factor will inevitably rise over the next few years. Covering a very specialist area, we can never expect to have a very high impact factor, but we do expect it to settle at a higher level. Quite how high will depend upon the quality of scientific articles which you submit and we accept for publication. The current situation is most encouraging. We had record numbers of articles submitted over the last year and, despite this, we managed to maintain a rapid editorial process. Thus, authors can be confident that accepted articles will appear in print within a relatively few months, and will receive full editorial support, including conversion into the style of the Journal. In this respect, we can stress again that grammar and style are not criteria taken into account when judging whether an article is suitable for publication.

Rest assured, however, that we do not invite review articles for publication simply because of their potential effect on our impact factor. Rather, we seek to highlight topics which, in our opinion, will interest and stimulate you. For example, in this issue, we publish a review by Maurice Beghetti and Ian Adatia on the use of nitric oxide in the treatment of congenital cardiac malformations (see pages 142–152). This simple compound has had a profound effect on the treatment of pulmonary hypertension, particularly in the immediate post-operative period. Like prostaglandin E₁ in the 1980's, the introduction of nitric oxide in the 1990's was a major step forward in the treatment of congenital cardiac disease. A review is timely in bringing our understanding of its value up to date. The review covers the theoretical justification and indications for the therapeutic use of inhaled nitric oxide, and the technique of its administration. Nitric oxide has also become important in the diagnostic assessment of the reversibility of pulmonary vasoconstriction. The review prepared by Beghetti and Adatia brings together the latest work on its use and value in diagnostic catheterisation.

This issue, as is now customary, contains papers on a variety of other topics. In an important editorial (see page 139), Henri Verhaaren has highlighted the importance of moving beyond physical cure of congenital cardiac disease, and considering

¹ Seglen PO. Why the impact factors of journals should not be used for evaluating research. *British Medical Journal* 1998;

instead the psychosocial consequences of the disease and its treatment. As we get better at achieving high rates of survival for infants and children with even the most complex congenital cardiac malformations, we need increasingly to consider the more subtle aspects of the outcomes of our labours. Henri reminds us of the paucity of knowledge in this field, and commends our publication of the study by Lisbeth Utens and her colleagues concerning the behavioural and emotional effects exerted on young children awaiting cardiac surgery. Their conclusions are encouraging, but as Verhaaren stresses, there is still much work to be done in this area. He exhorts the journal to publish more articles covering psychosocial issues in children with cardiac disease. We share his belief in the importance of this area, and we would welcome the submission of more high quality papers on the subject.

For those with more of an interest in the physical treatment of congenital cardiac anomalies, there

are papers on implantation of aortic stents, and yet another consideration of transcatheter occlusion of atrial septal defects. There are related papers on venous congestion after the Fontan operation, and what sometimes seems the intractable problem of pleural effusions after construction of cavopulmonary anastomoses. This balance between the psychosocial and physical aspects of our work is one we want to maintain in the journal. We hope you enjoy reading it. For those of you who are going to the World Congress in Toronto in May, come and find our stand and tell us what you think. If you are going to be there, then let us know via our internet forum at www.greenwich-medical.co.uk, or write us a letter. Whichever way, we are always keen to hear your views.

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