

notes, etc. also? I chose to restrict to journal articles for two reasons: most journals indexed in *Medline* are refereed. Besides, bulk of new research is reported in journals. In any case, such a large volume of papers (even if I have not included non-journal items) should lead to statistically valid conclusions regarding the thrust areas of research, which was what I was trying to find out from the *Medline* data.

Ray feels that my study does not cover Indian medical research 'comprehensively', and implies that I should have collected information from individual institutions (such as his own) instead of relying on an international database. Horses for courses, they say. It was not my intention to inventory all Indian publications – good, bad, indifferent, etc. – in medicine and related areas. I had a specific question to answer and *Medline*, I thought, eminently served the purpose. Besides, 'comprehensiveness' is such an elusive thing, you can never achieve it. What constitutes a 'research publication'? Can we count the articles that D. Balasubramanian writes in the science and technology pages of *The Hindu* (which, incidentally, fetched him the Kalinga Prize of the UNESCO) as research publications? Certainly, they are always well written, always explain some useful and often current developments in science, and are widely read. On the contrary, medical researchers and editors like Samiran Nundy would not mind if some of what is normally considered as research journals published from India are not indexed in *Medline* or *SCI*. For my part, I have clearly defined what part of the literature originating from India I am covering in my paper; I have mentioned *Medline* right in the title of my paper. Agreed that by making this choice,

I lose papers published in journals like *Current Science* and *Journal of Biosciences*. But one has to pay a price as long as one lives in the real world and not in an ideal world! Even the *Publishing Directory of ICMR Institutes* is not exhaustive, as Ray admits. So, what is the problem if *Medline* is not exhaustive?

That leads me to two points. (1) *Medline* is not stepmotherly to India and Indian journals. It does not cover many journals published in the USA, UK and Europe as well. The same is the case with *SCI*. Please read Gene Garfield's note on the alleged bias of *SCI* against third world journals [*Curr. Sci.*, 1977, 73, 639–641]. (2) What have we (librarians like Ray and scientists and researchers like those at NICED) done to remedy the situation? Have we written to editors and publishers of international databases like *SCI* and *Medline* requesting them to cover more Indian journals?

Ray finds that there is a discrepancy between my number based on *Medline* and his meticulously-counted number of NICED publications. He is surprised that his laboratory is not included in the list of the top 40 Indian institutions publishing medical research papers. My number for NICED is 102 (and this places NICED in the 45th place). During the period covered (database years 1987 Nov.–1994 Dec., and not journal cover date years as presumed by Ray), there were only 102 papers credited to NICED. Surely, I agree with Ray, *Medline* is not at all 'comprehensive' in its coverage. Among those 102, a sizeable number would have been published in journals having a cover date of 1986, 1985 or even earlier. And most papers published by NICED scientists in 1994 would have been covered in *Medline* in 1995 or 1996! Most data-

bases, unlike *Current Contents* and *SCI*, do take considerable time to index published literature.

Another point on which Ray has to be careful is that impact factor is not the same as number of citations received by a paper published in a journal. For a correct definition of impact factor (as used in *Journal Citation Reports*) he may refer to Garfield's book on citation indexing or a recent issue of *SCI Guide*. His point on 'observed', 'expected' and 'relative' citation rates is not relevant in the context of my paper. I have used them meaningfully in another paper on medical research in India based on an analysis of *SCI* data, which I presented at an international conference in River Forest, IL, USA, in 1955 (ref. 4 in my paper). A modified (and expanded) version is now under consideration for publication in a medical journal. What Ray calls ARPC is known and is being routinely used by INSDOC in evaluating CSIR laboratories.

To conclude, Ray is free to think that the performance of NICED is excellent. Such positive feelings, psychologists say, help one perform better. (I have not attempted to look at individual laboratories in my macroscopic study.) And I do not think that my study suffers from any more shortcomings than I have pointed out in my paper.

I thank Ray once again for his interest in my paper and his willingness to state his point of view without any reservation.

S. ARUNACHALAM

*M.S. Swaminathan Research Foundation,
3rd Cross Street,
Taramani Institutional Area,
Chennai 600 113, India*

Ensuring global exposure

Where journals abound, little fruit of knowledge is found.

—Anon.

The recommendation of Eugene Garfield (*Curr. Sci.*, 1997, 73, 639–641) has come not a day sooner. However, with so many journals published by so many associations, societies and institutions, it may be impossible to compile local citation indexes and prepare a prioritized list of Indian journals. Instead, can we initiate and encourage printing of a journal in

India on the lines of *Nature* and *Science*, with rigorous norms, for publication of outstanding articles from India and other developing countries of the region?

I have always felt that *Current Science* adequately expanded to include all fields; physical, biological, geological and medical would be the ideal journal for this purpose. Suitable changes in the editorial policy with provision for quick submission, review and publication using electronic media must be made. A reasonable paper-handling charge (which can be

waived if the author issues a statement of lack of funds) should be levied to take care of the expenses.

I believe that this and this step alone will ensure the scientific articles from this part of world, a better exposure to the global scientific community.

J. PRAKASA RAO

*Department of Physiology,
Christian Medical College,
Vellore 632 002, India*